Release1.1b
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Topaz Medical EMR

Official Users Guide

Introduction

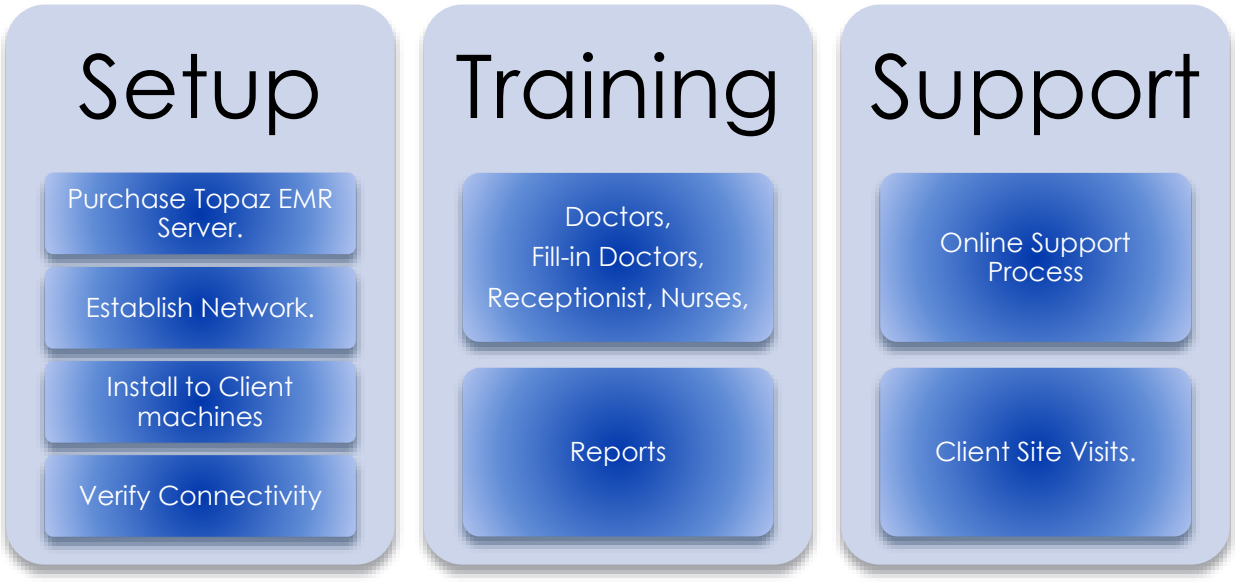
Topaz EMR [Electronic Medical Records] System is an innovative and streamlined process to allow medical practices to run more effectively and efficiently in a paperless environment. Built with cutting edge technology, HIPAA compliant on a modular framework the Topaz EMR will immediately bring value to your practice.

A successful implementation will include the following stages:

Process

Topaz EMR Server	Client will purchase a Topaz EMR Server which will be configured to run on an existing network or a network we will setup at the location.
Client Station Setup	Topaz clients will be installed to individual machines approved to connect to the Topaz EMR Server.
Employee Training	Training Doctors and staff on how to use the system.
Support	On call online support for trouble shooting and answering questions about the Topaz EMR.

This manual is presented based upon three (3) fundamental areas "Setup," "Training," and "Support." Upon completion the user will better understand how the Topaz EMR works and the requirements to successfully implement.



Why Topaz EMR [Electronic Medical Records] System?

As a person who has small kids and have no choice but to visit the doctor's office on a regular basis to get them immunized, checked out for fever, cold etc. I found it odd that in this day and age of technological advance there were no readily available systems for the doctors to use...well at least the ones I knew in my town. I spoke with the doctor on one occasion and asked why he was still doing all this by hand and his response sparked the flame which resulted in the creation of the Topaz EMR.

1. Pricing – "Something like that would cost too much". And so we created a model that will allow every doctor to have the ability to easily acquire the system without the upfront cost. Through a subsidy the medical practice simply purchases the Topaz Server upfront and pay a yearly maintenance fee.

2. Value – "Will I get value from this tool?" The Topaz EMR promotes a paperless environment and as such is able to provide the doctor with information at the click of a mouse. The Topaz EMR stores all the medical records including lab reports and other documents on the patient's record which can be accessed by authorized users based on the applications user level security. At the rates we offer you gain all the value as it should be. All we ask is that you allow us to maintain the system and provide the relevant updates to keep the process efficient going forward.

3. Support – "If something happens do we have support for this". While we were able to waive the initial upfront cost of the application, we cannot compromise on the systems maintenance. As such, a yearly maintenance fee ensures that we have the expertise ready and available to get you back up and running quickly in the event that this is needed. Let's face it, things happen…but we are there for you and we stand by our product.

Ensuring that the user understands the Topaz EMR process is key to its success.

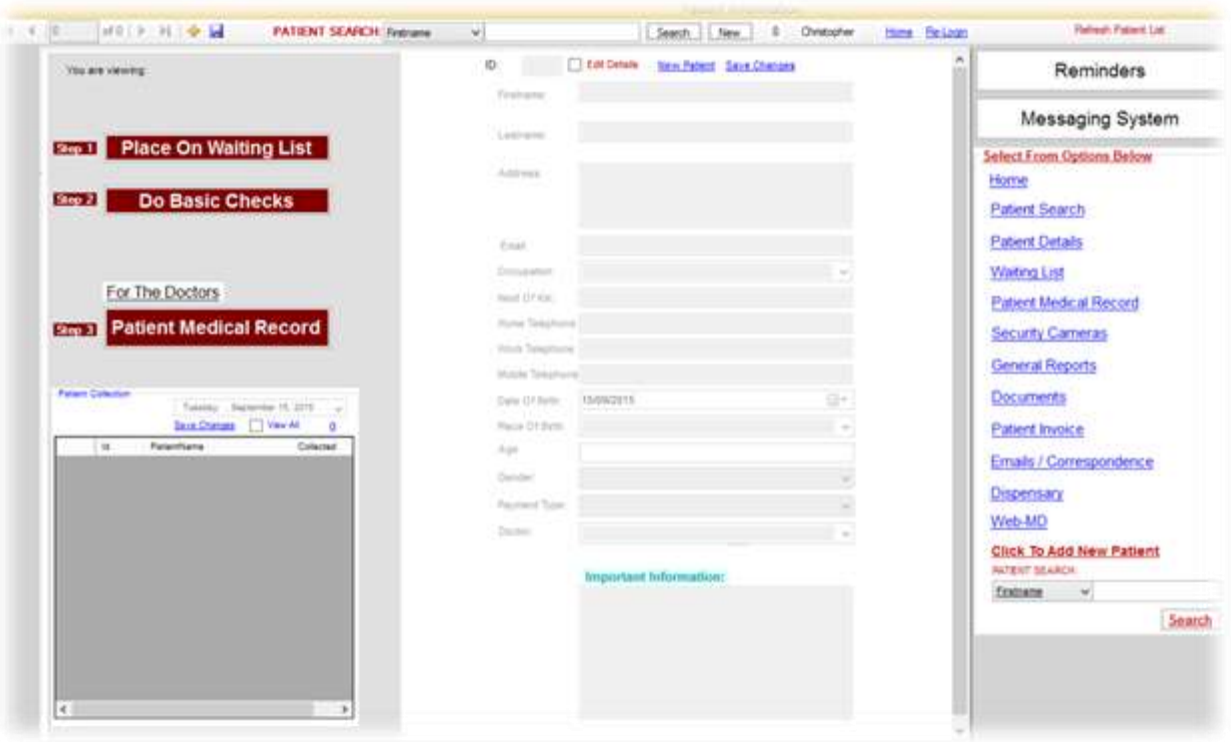
Setup

Login

After the Topaz EMR Server has been setup and client installations are setup. The user will be required to log into the Topaz EMR with credentials provided.

A user number and password is required to login:

Provided you have valid and approved credentials to access the Topaz EMR you will be directed to the following screen.



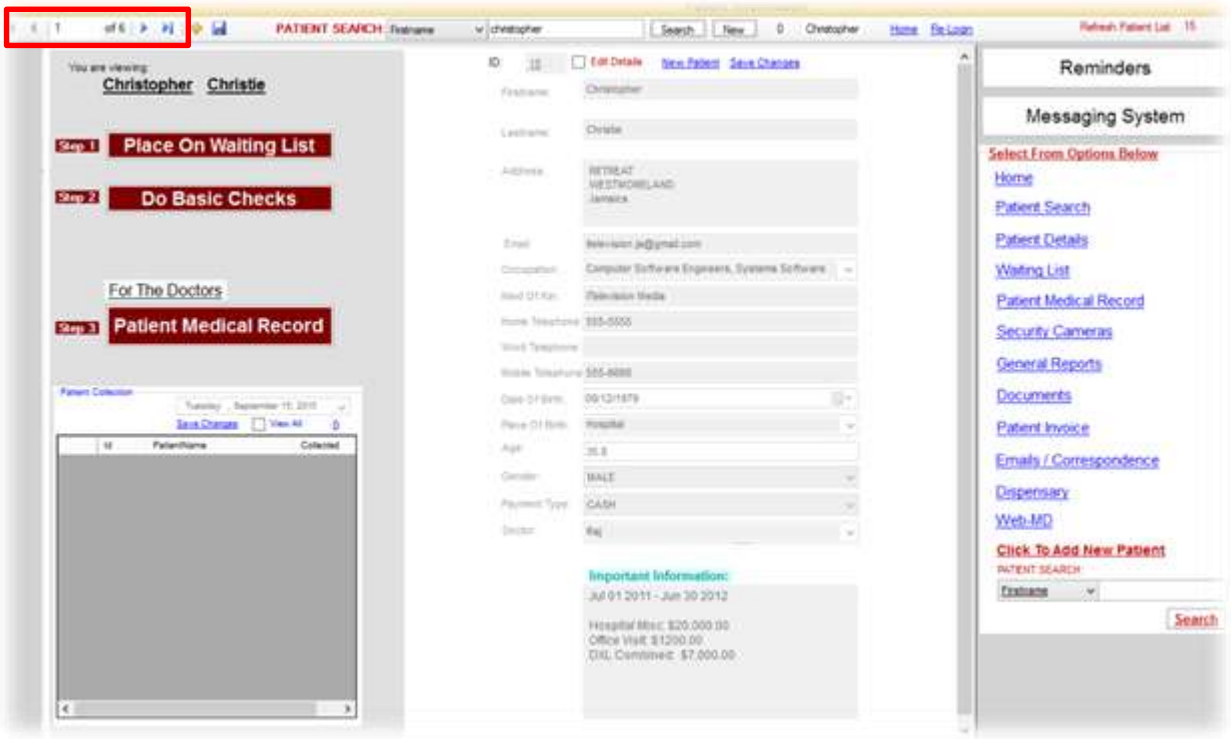
Receptionist:

One of the primary questions that the receptionist would ask a person who walked through the door is "Are you here to see the doctor, and if so is this your first time?"

If the patient has been here before the receptionist would search for the patient's record already in the system as indicated below. If the answer is "no" the patient would at that point be added new into the system:

Patient Search: Drop down combo box with various criteria on how the user desires to search for the patient record such as by First name, Last name, Address, Occupation, etc. The user may type any part of the name they wish to search for example: Searching for a patient named Christopher Christie the user may opt to use First name as the criteria and type "chris" in the field then click "Search".

Depending on the number of persons in the system with "chris" as a part of their first name all those individuals will be pulled as indicated below: Top Left shows the number of records matching the search criteria as well as an indication that you are viewing 1 of 6 and allows you to use the arrows to scroll through the retrieved records.



After verification with the patient that the record is correct including current telephone number, next of kin etc. The receptionist will proceed to add the patient to the waiting list. This will register the patient to see the doctor.

Adding the Patient to the Waiting List is the most critical part of the process

1. A record is taken of the date and time the patient was registered and an automatic number assigned to the patient in the order of registration.
2. On the patient record there is a field for [doctor], which at the point of adding the patient to the waiting list allows the doctor assigned to have visibility as to all patients that are currently waiting to see him and the length of time they have been waiting.

After the patient has successfully been added to the waiting list the user can "double click" the mouse on the "Waiting Number" to return to the main screen.

At this point if there is a nurse on staff, that user can do the basic checks for the patient before the doctor sees the patient.

The nurse or receptionist user at this point will fill in the relevant information that will provide value to the doctor who will see the patient. This information gets added to the Patient Medical Record which is fully accessible only to users with a Doctor privilege.

1. Height
2. Body Weight
3. Head Crown
4. Blood Pressure
5. Urine
6. Temperature
7. Notes [additional information]

Upon completion the user will click the button at the bottom of the screen

It is only after this button is clicked that a Permanent Patient Medical Record for that visit on that day is created. We chose to do this in the event that after registration the patient decided to leave without seeing the doctor for whatever reason. This ensures that we remain efficient and store only relevant data pertaining to the visit on the actual medical record for the patient.

Collecting Payments for a Patient Visit

The receptionist will notice on the main screen that each time a patient is added to the waiting list to see a doctor the patient shows up in a window at the bottom left of the screen as indicated below:

This window is there to assist the receptionist in knowing who they have not collected fees from as yet. When fees are collected they would check the box "Collected" for the patient and "Save Changed".

The doctor is the person who will assign fees for the visit while the receptionist can do the collecting when the doctor is finished with the patient visit.

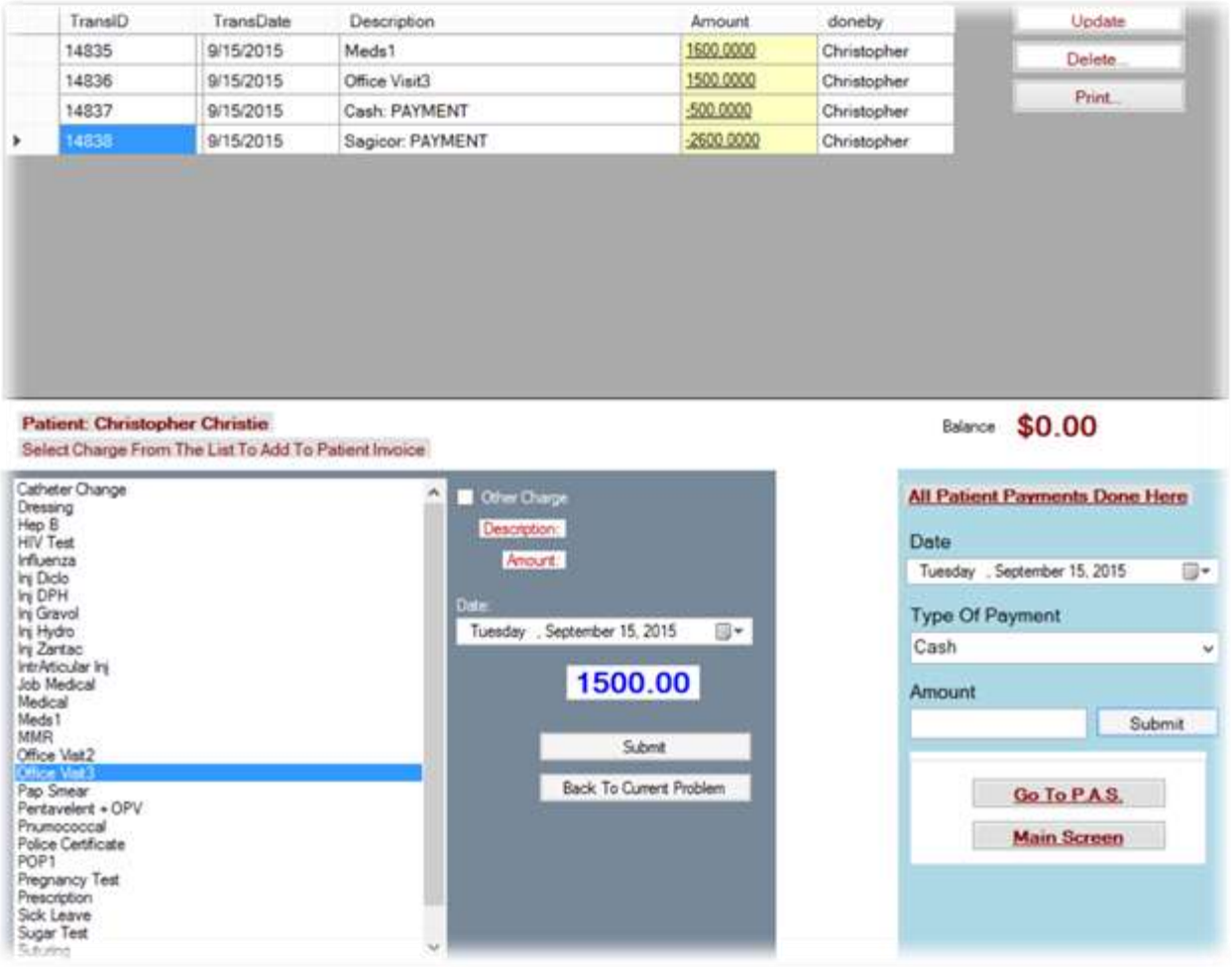
By "Double Clicking" the patient in the window the receptionist will open the following screen from which they can collect the fees and assign to the appropriate collection type.

Patient Invoice Screen

Payments can be taken based upon what the facility can accept. For example, if the patient is using cash to pay for the visit the receptionist can select cash as the payment type, enter the amount and submit the payment. A part of the payment can also be done using another payment type for the visit. Payment Types:

1. Cash
2. Cash Insurance
3. Couple Insurance
4. Credit Card
5. Debit Card
6. Medecus
7. Sagicor

In this example we are going to pay for the visit using Sagicor insurance and cash. It would look like this:



The system allows the user to print a receipt for the patient for each payment received. This detail in how the fees are collected will prove critical in the reporting at the end of the day which the doctor will use to check off each employee who collects funds. It also serves as a key indicator for the doctor to know how much fees are to be expected from medical insurance entities and can verify the medical offices numbers with that of the provider.

When the user is finished with the employee record they can proceed to the main screen by click the button at the bottom right.

Communication with staff

The receptionist can communicate with the doctor at any time by using the integrated Topaz Messenger. Top right, second button:

This button will open or close the Topaz Messenger window from which a message can be sent to anyone with a login into the Topaz. If the user is logged in they will receive the message right away, if the user is logged out they will receive the message as soon as they log into the system.

All that is required to use the Topaz Messenger is for the user to:

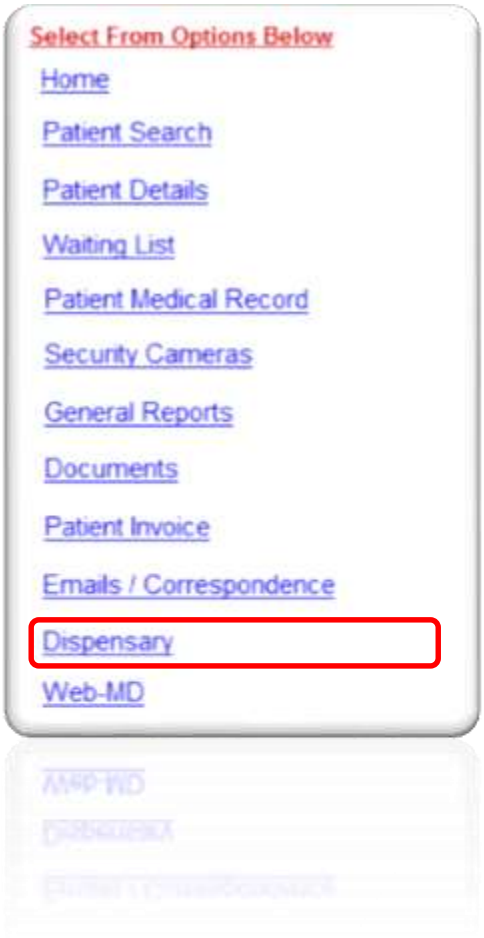
1. Select from the drop down list who they want to send to message to
2. Type the message, long or short
3. "Click To Send Message"

When a message comes in simply

1. click the link "Reply"
2. Type the response
3. "Click To Send Message"

In Office Medication Dispensary

While the receptionist cannot view the patients medical record, they do have the ability to dispense medication prescribed by the doctor from the supplies kept at the facility.

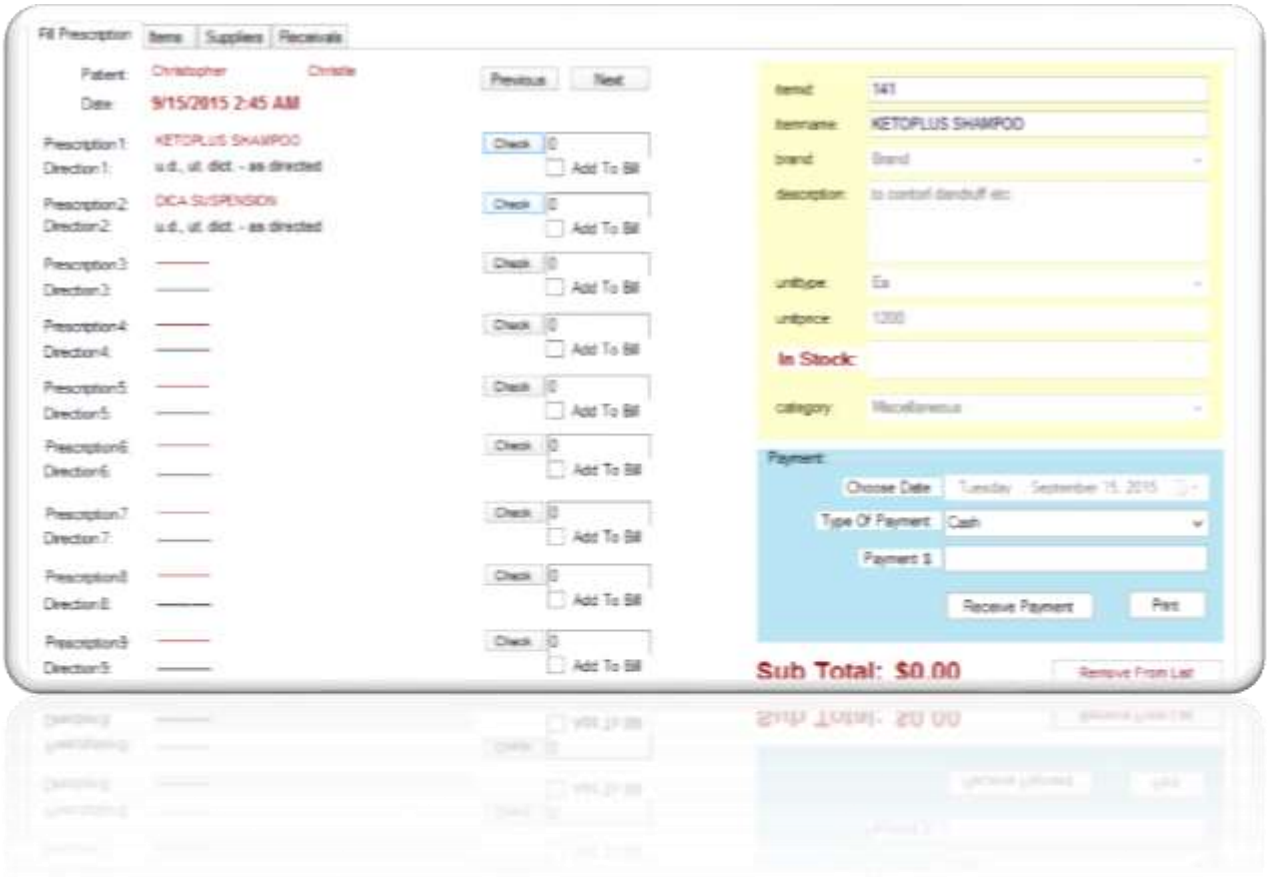


The user will have to opportunity to check if they have the medication in the inventory, and also issue the item to the patient.

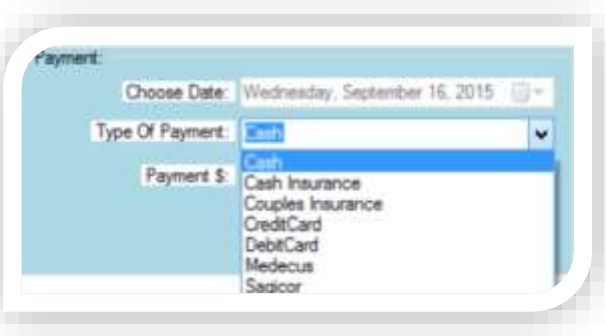
The dispensary is a separate module and is only installed as an option for the facility.

The user is able to check the inventory for each prescribed medicine from the doctor to see volume in stock and then "add" to the patient's bill.

It is important to note that the Dispensary module is a standalone module, meaning that transactions completed there are tracked separate and apart from the General collections on patient visits.



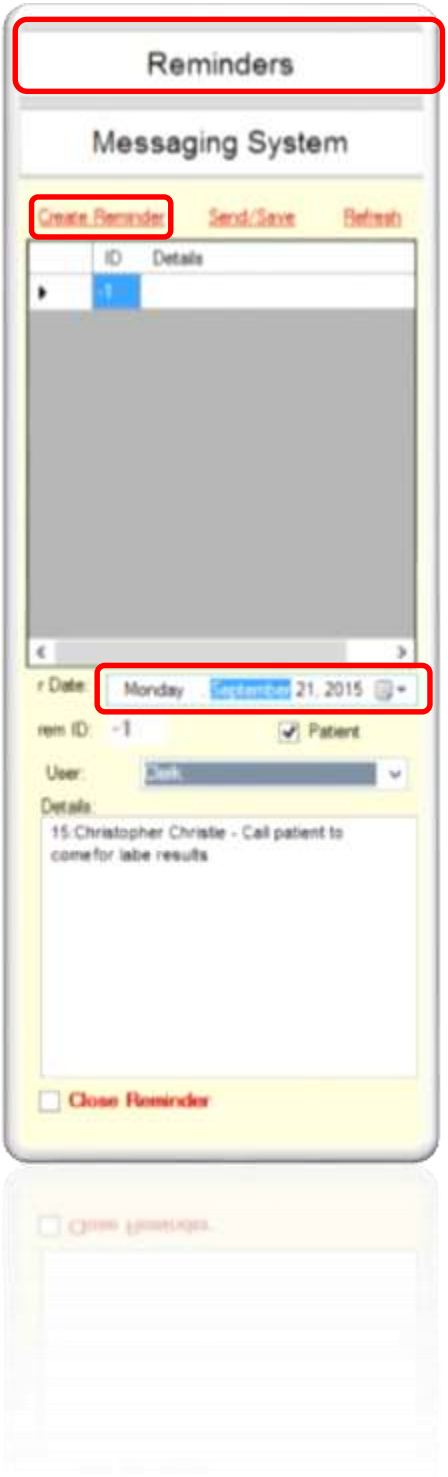
The user operating the dispensary has the ability to charge if necessary for the prescription items that are issued to the patient.



1. Cash
2. Cash Insurance
3. Couple Insurance
4. Credit Card
5. Debit Card
6. Medecus
7. Sagicor

Creating Reminders for Staff

There are times when the medical office needs to make contact with a patient in the future for medical reasons. The Topaz EMR has a built in Reminder module which can be used to set reminders for active users in the system.



When the reminder button is clicked, a window will be displayed as indicated. To create a new reminder the user will proceed to:

1. Click "Create Reminder" link
2. Choose a date for the reminder to appear
3. Choose the user from the drop down combo box who should receive the reminder
4. Enter the details of what the reminder is about

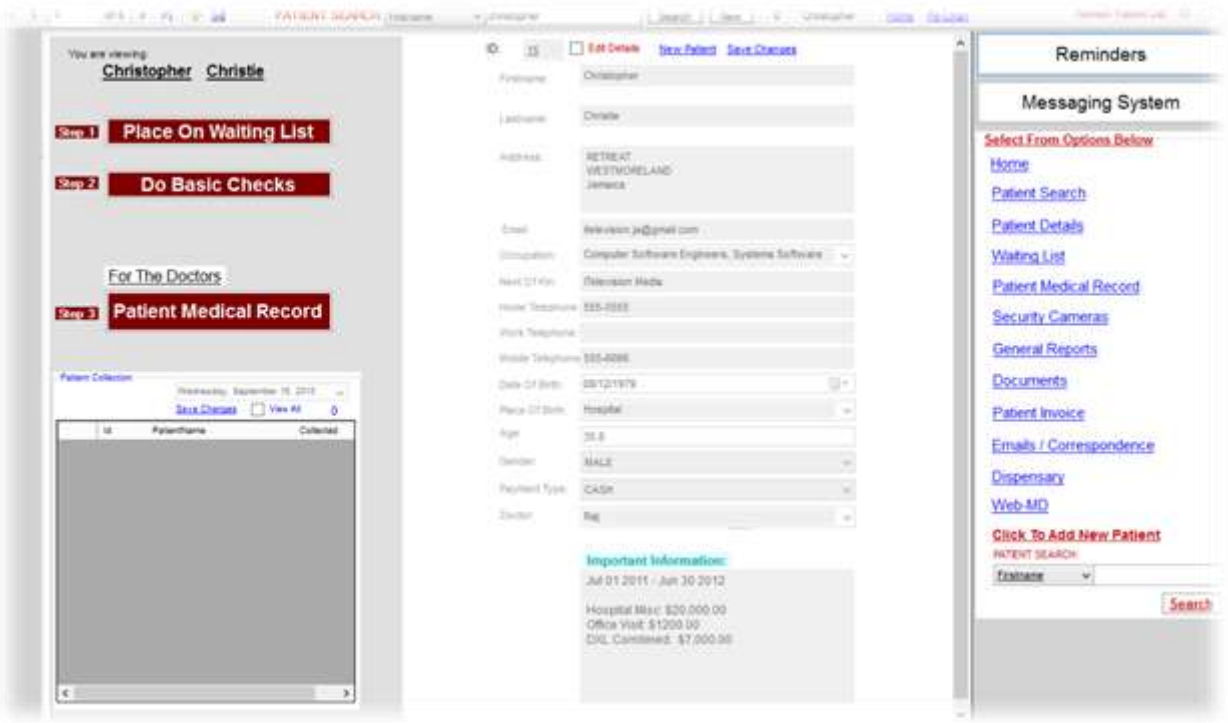
When the date of the reminder comes, then the user after taking action on the reminder can opt to close the reminder then click "Send/Save"

It is important to note that is the reminder is not closed then it will continue to pop up on the screen for the user.

Doctor:

Provided that the receptionist is actively performing their tasks then the doctor after logging into the Topaz EMR starts off by checking his waiting list to begin seeing patients.

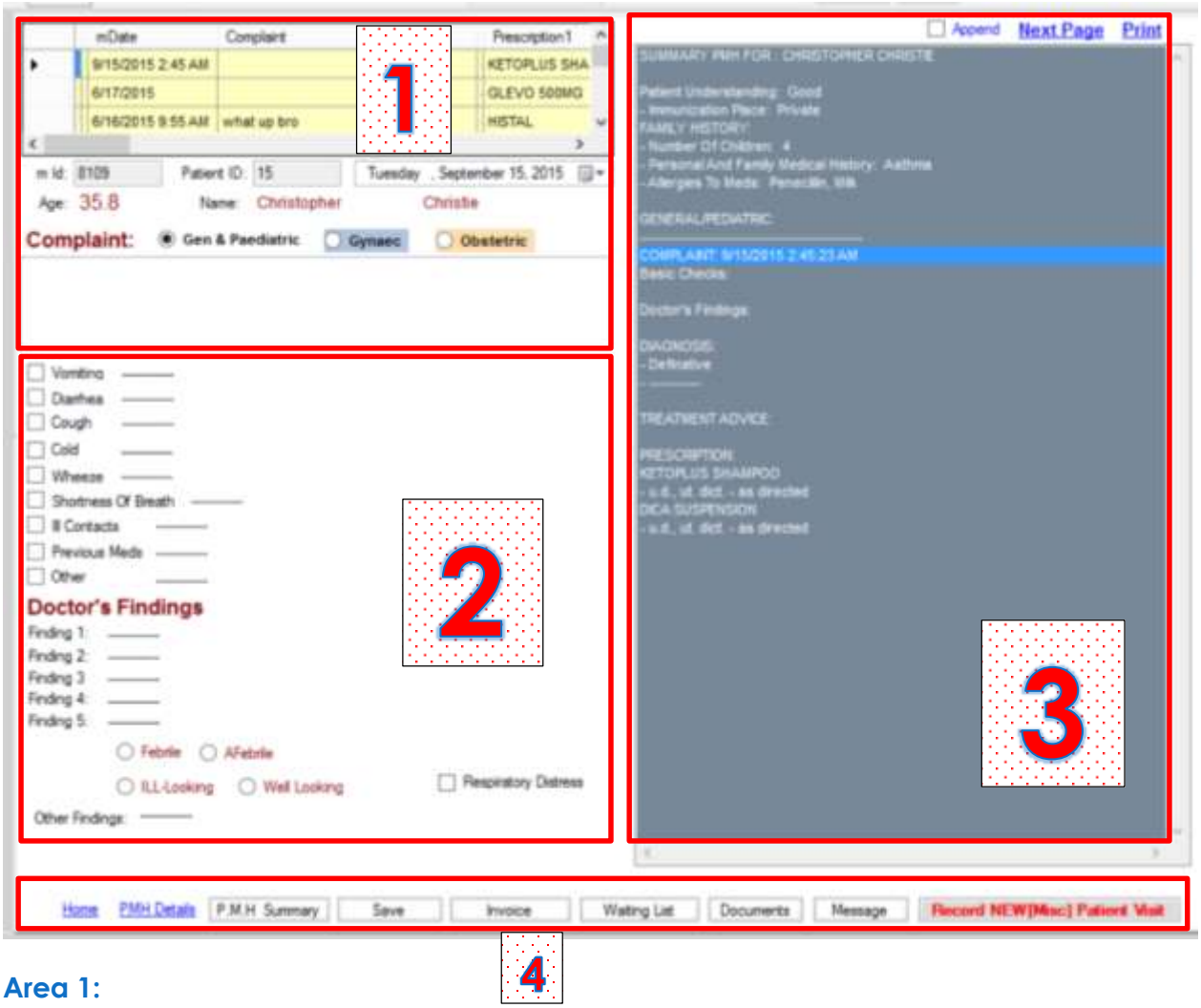
After selecting a patient he will be taken back to the main screen with the patient initial record being the currently selected record as indicated below:



The focus for the doctor now becomes: Step 3 which will take the doctor into the private and confidential patient medical history file.

When this button is clicked a window will be opened as indicated below.

Patient Medical History Screen



Area 1:

This grid contains all the visits recorded for the patient. The last visit is displayed at the top while previous visits are listed in descending order. The doctor can click on each row in the grid to see what was done for each visit if he chooses to do so. This is very important as a doctor may be filling in and needs to check on background information before making a diagnosis.

1. M Id – Auto generated for the visit and can uniquely identify the visit
2. Patient ID – The ID generated for the patient at the time of the Receptionist entering them into the system
3. Date – The date of the visit recorded from the receptionist placing the patient on the waiting list.
4. Age – Automatically calculated by the system based upon the date of birth entered by the receptionist upon creating the patient profile on the main screen.

5. Name – The patient's name from the main screen profile.
6. By default the Topaz EMR will select Gen & Paediatric. The other profiles being

Gynaec and Obstetric. Each complaint must be assigned a profile and a doctor makes the decision as to which profile they will use for the visit based upon the issues of the patient. It is important to note, that each profile has its own unique parameters that is specific to the profile. Therefore, if Gynaec is selected the profile parameters will be as indicated below:

Area 2:

Gives some basic symptoms experienced by patients and allows the doctor to simply check the boxes that apply. There is also additional textboxes which will allow the doctor to type notes which they deem necessary to further explain the checkboxes that were selected.

In this area the doctor will record their findings based upon interaction with the patient.

Area 3:

Gives the doctor a summary of the visit in a quick snapshot. The doctor can choose to select a patient visit in the grid from Area 1 and view everything that was done in that visit right here in a single itemized screen. Should the doctor need to

view all visits by the patient in a chronological order they can choose to do so by click

the "Append" checkbox.

This information can be printed if there is a need to do so.

Next Page:

When this is click the following window is opened:

1. Diagnosis – if the doctor makes a definitive diagnosis about the patient complaints they would check the box for definitive.
2. Should the doctor need additional information before making a diagnosis they would select "Investigation" then check the boxes for the various test that they need the patient to do.
3. Whenever the investigation is completed the results can be entered into the "Investigation Results" field
4. Treatment Advice – Based upon a diagnosis which is the end result of the visit the doctor may choose to advise the patient on how to go about resolving the issues. The advice given to the patient should be recorded in the 3 slots provided.
5. Most doctor visits end with the patient receiving a prescription of some kind and these prescriptions must be recorded. Prescriptions are entered in the following way:

There is a Prescription Assistant which guides the doctor when prescribing medication. If the patient has allergies to certain medicine or foods that information will immediately become visible to the doctor and prevent unnecessary risk to the patient and possible legal issues for the doctor.

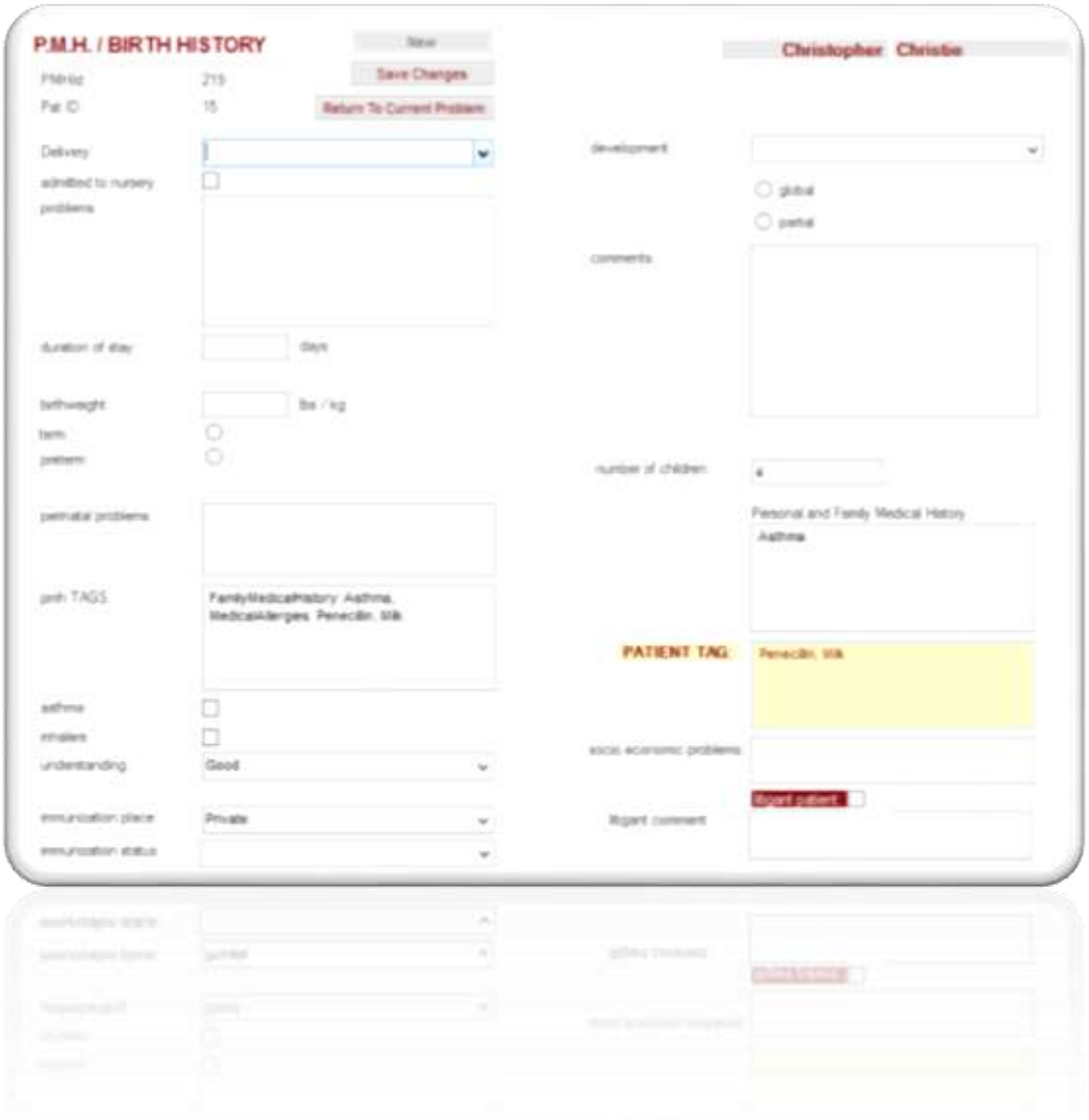
The prescriptions from the Dispensary's inventory will be available to be selected by the doctor, after which they will give instructions for the patient taking the medication

The shorthand directions are also listed to assist the doctor in giving instructions for the application of the prescribed medication.

Area 4:

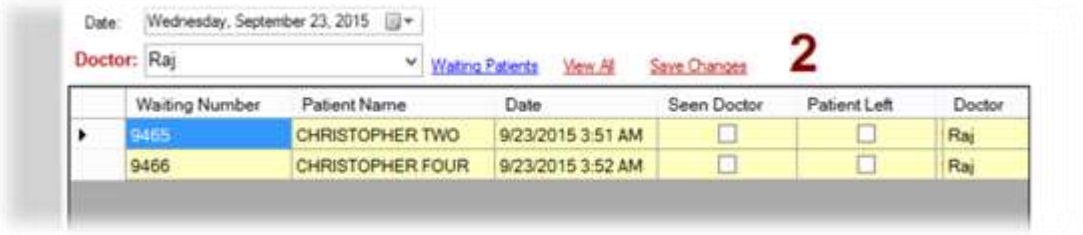
1. Home – when the doctor is finished updating the patient medical details they can return at any time to the main screen
2. PMH Details – This is the screen which allows the doctor at any time to record additional details on the patient such as birth records, allergies to medication

etc. A window will be displayed as indicted below and the doctor can enter any information they deem relevant to the patient.

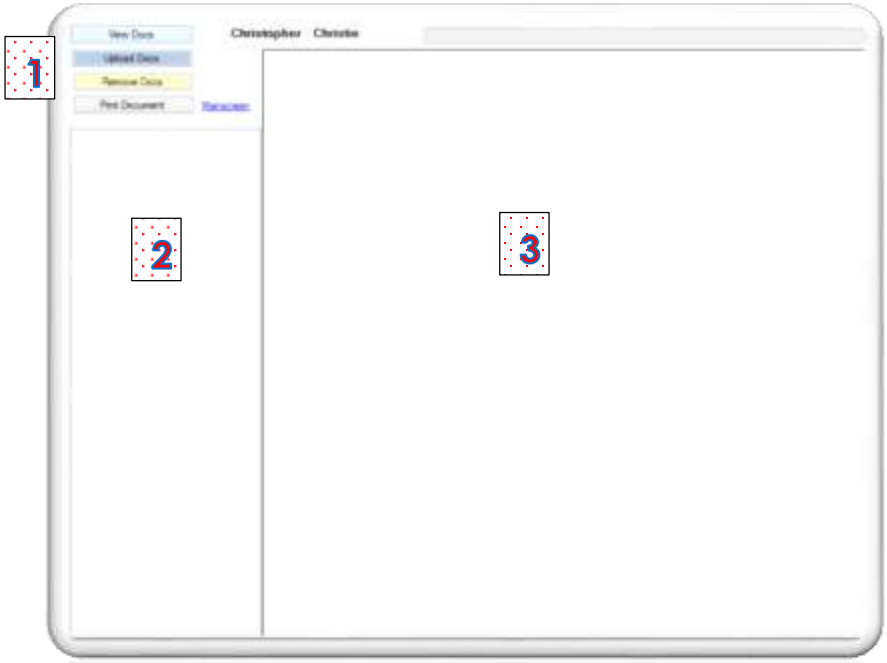


3. P.M.H. Summary – when clicked will give a summary of the current visit in Area 3.
4. Save – You must click the Save button to capture and store the current record. Doctors should make it a habit to save as they go to ensure all data is captured and saved to the Topaz EMR server
5. Invoice – The doctor will assign the charges to the patient's invoice which the receptionist will see and collect from the patient at the end of the visit. When the invoice button is pressed the doctor will be taken to the invoice screen to add the charges.

6. Waiting List – This will take the doctors waiting list. From which another patient can be selected.



7. Documents – The Topaz EMR has the ability to store electronic documents on the patients record. When the documents button is clicked the following screen will be opened from which the doctor may ADD or VIEW an electronic record. This screen is also accessible for the Nurse and Receptionist, however, they are limited to adding documents in support of the Doctor.
Outline:



Area 1:

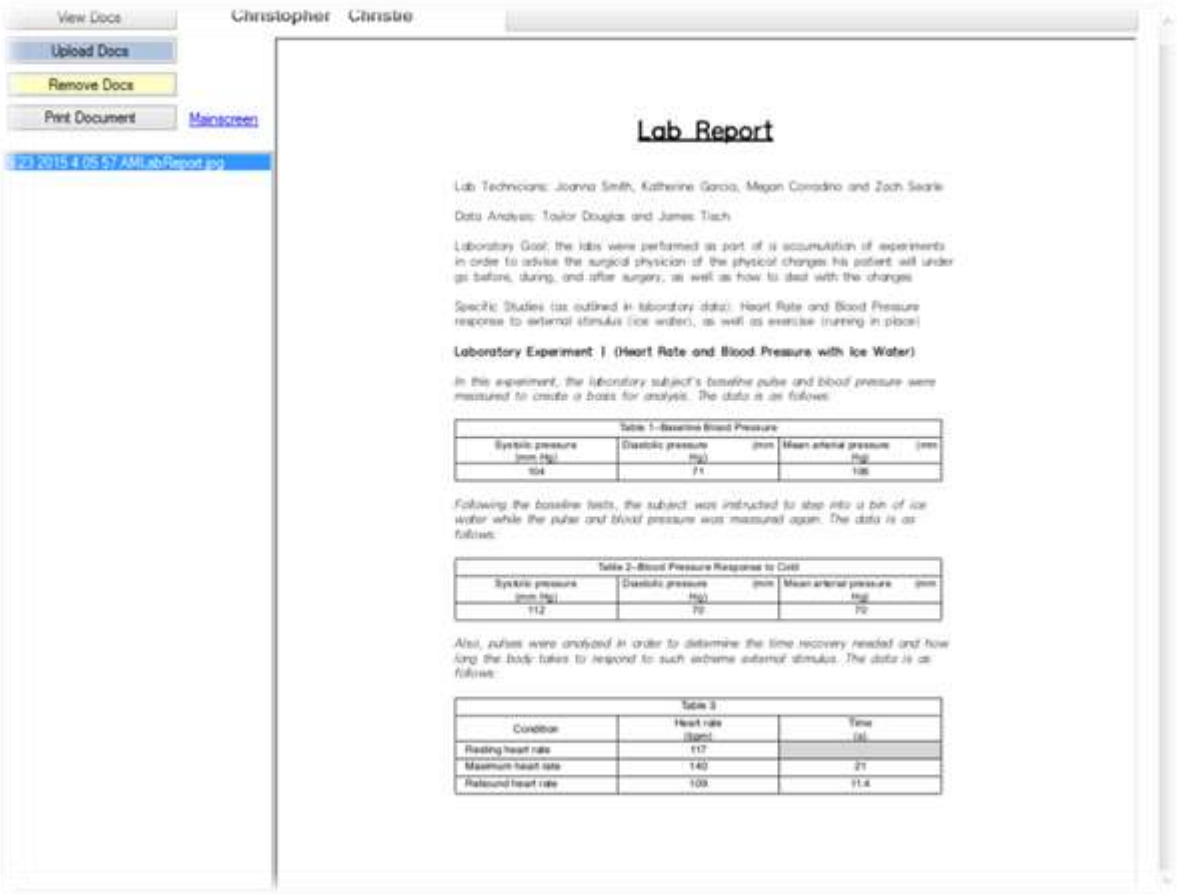
View Docs – will display all previously attached documents to the patient profile.

Upload Docs – gives the user the ability to add new documents to profile

Remove Docs – in the case of an error a document can be deleted from profile

Print Document – if needed the doctor can print a copy of the document.

It is important to note that documents are listed in the order it was attached with the latest document showing first on the list. To view a document the doctor will simply click the document with the mouse in Area 2.



8. Message – The doctor can communicate with staff via the Topaz Messaging System.
9. Record New (Misc) Patient Visit – In the event that the doctor needs to record a patient visit independent of the Receptionist without going through the Waiting List and other established protocols, then they are able to do so here. When clicked the following window will be opened in the Top Left of the screen:

From this window the doctor has the ability To manually select the date of the visit. This can be very useful in the event of the Doctor not being able to process in there Topaz EMR at the

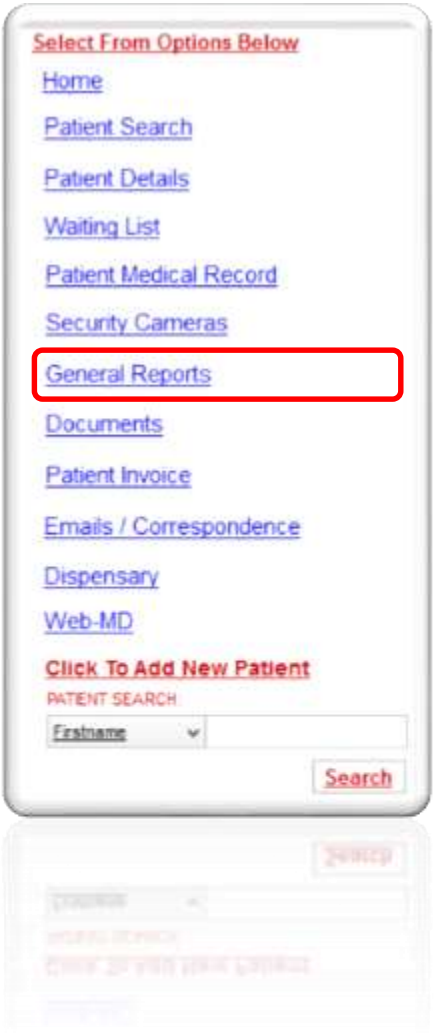
time of the visit, or the system not being available at the time for the Doctor to use. Because we know that in the real world anything can happen, this feature facilitates the Doctor's ability to ensure that all medical records are maintained properley and at all times for the patient.

When the Date of the New Patient record is confirmed a Patient Medical Record is generated for the Doctor to begin entering the relevant information, after the Doctor confirms "Yes" in this dialog box that this is what they want to do. After a Medical Record is generated in Topaz EMR it cannot be deleted !

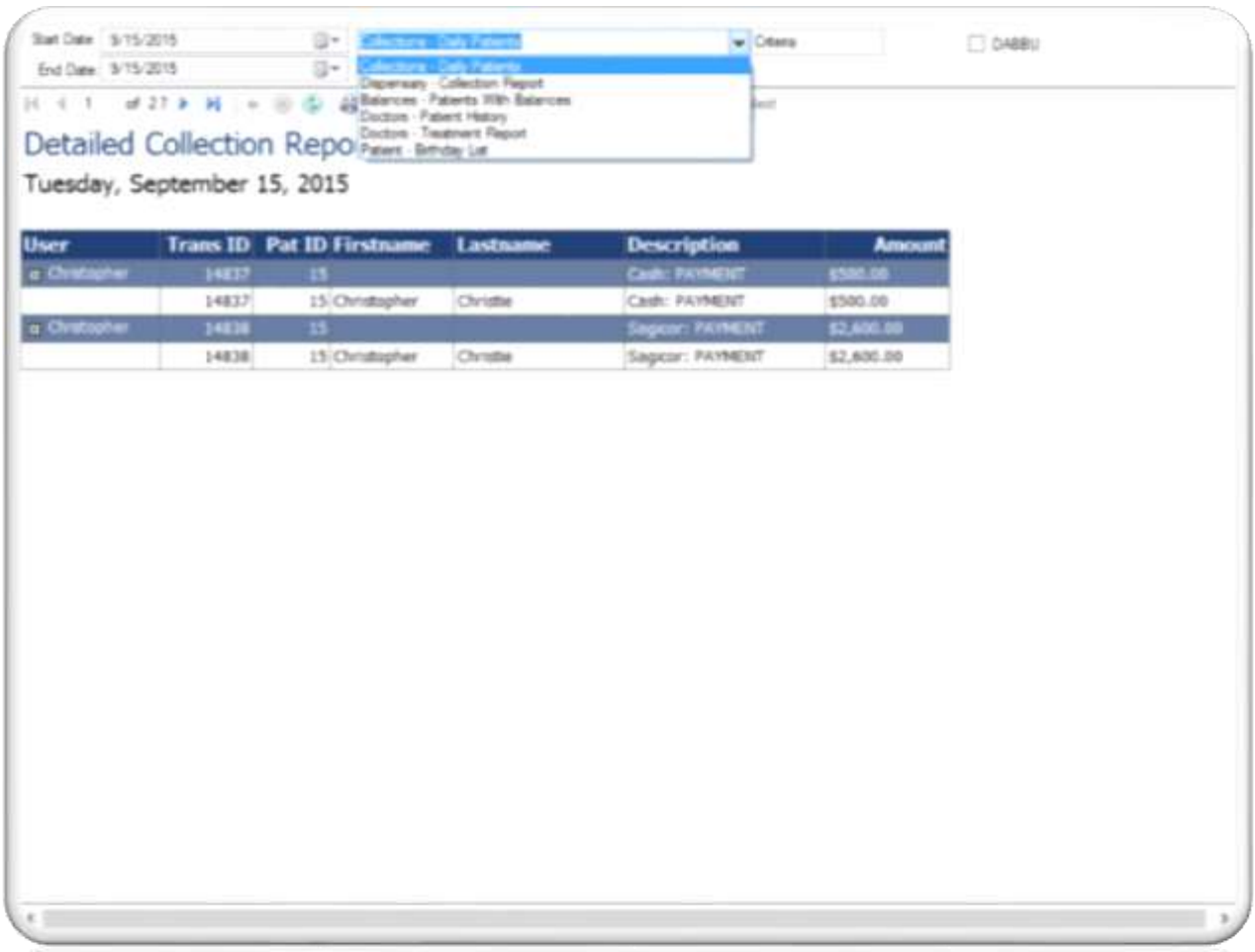
Reports:

The Topaz EMR has a simple reporting engine built into the system which is able to give at any time to the Doctor the following reports.

You access the report module form the Main Screen:



1. Collections Daily Report – This will show the amounts collected per user in the various payment types which would include Cash, Insurance etc.
2. Dispensary Collection Report – Any amounts collected in the dispensary per user will be shown in this report.
3. Balances [Patients] – Any patient seen by a doctor in the selected period that has a balance on their account will be displayed in this report.
4. Doctors Patient History – Allows a doctor to view basic information about all the patient visits in the period selected.
5. Doctors Treatment Report – allows a doctor to look for key words used in the visits over a specified period to detect trends in patient complaints etc.
6. Patient Birthday List – Lets the doctor know the patients with a birthday I the period selected for the report.
7. Additional reports are created and updated during the maintenance process of the Topaz EMR. As we move forward more reports will become available to the Doctor.


Start Date 9/15/2015
End Date 9/15/2015
Criteria
DABBU
Collections - Daily Patients
Dispensary - Collection Report
Balances - Patients With Balances
Doctors - Patient History
Doctors - Treatment Report
Patient - Birthday List
of 27
Detailed Collection Repo
Tuesday, September 15, 2015
User
Trans ID
Pat ID
Firstname
Lastname
Description
Amount
Christopher
14837
15
Cash: PAYMENT
$500.00
14837
15
Christopher
Christie
Cash: PAYMENT
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Christopher
14838
15
Sagicor: PAYMENT
$2,600.00
14838
15
Christopher
Christie
Sagicor: PAYMENT
$2,600.00

Other Features:

As we created the Topaz EMR from the ground up we incorporated other useful features into the application which includes the following:

Security Cameras:

Most medical practices have security cameras in the waiting area, outside the bulding etc. Instead of moving away from the application to view these cameras, we have created a modulee that can incorporate the cameras into the Topaz EMR. Therefore, the doctor does not need to leave the aplication at all, but just simply needs to click the link on the Main Screen "Security Cameras"

Emails/Correspondence

There are times when a doctor may need to send out a correspondence to all there patients who has an email address on their patient record. This module allows for bulk correspondence in announcing for example discounts on Flu Shots, and epidemic etc.

Web MD:

From time to time the doctor may need to just do a quick lookup online to verify his findings. To facilitate this we incorporated the Web MD website into the application to support the doctor.

Online Support:

We live in the age of technology and as such we leverage this technology to ensure that the Topaz EMR process is efficient and effective.

We provide a comprehensive support package for all users of the Topaz EMR which requires a yearly support fee.

Should we be required to make a visit to your location then additional fees will be assessed, however, 98% of all issues that we have resolved over the past seven (7) years can be resolved fully online.

There is no need to keep processing medical records manually, let us help you with our safe and secure Topaz EMR which is the first innovation of its kind in Jamaica.

Time tested, currently in operation, value for money!

Development Team:

The architect of the Topaz EMR has over 15years experience in Systems Development and programming. Over the years he has engineered systems for cable, franchises, inventory and payroll which are in operation today and in multiple countries throughout the globe. As an innovator, he provides consultancy for Fortune 500 companies and specializes in Systems Integration.

The use of current cutting edge technology to achieve "innovation via simplicity" is the underline principle which guides each design.