Chapter 17
Patients

This chapter—

- Provides an overview of the list of patients
- Familiarizes the user with how to—
  - Add, amend, view, and delete details of a patient
  - Print a list of patients
- Explains how the system can be used to manage patients
- Explains how to view Graphic representation of Laboratory tests
- Explains how to capture an Adherence support measure screen
- Explains how to fill in an Adverse reaction and product quality discrepancy

Working with Patient Data

What Is a Patient?

A patient is any person registered in the system to receive medication at an institution.

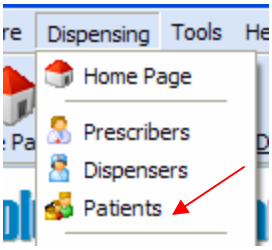
How Do I Get to the Patient Data Screen?

1. Click on the **Patients** icon 

on the toolbar.

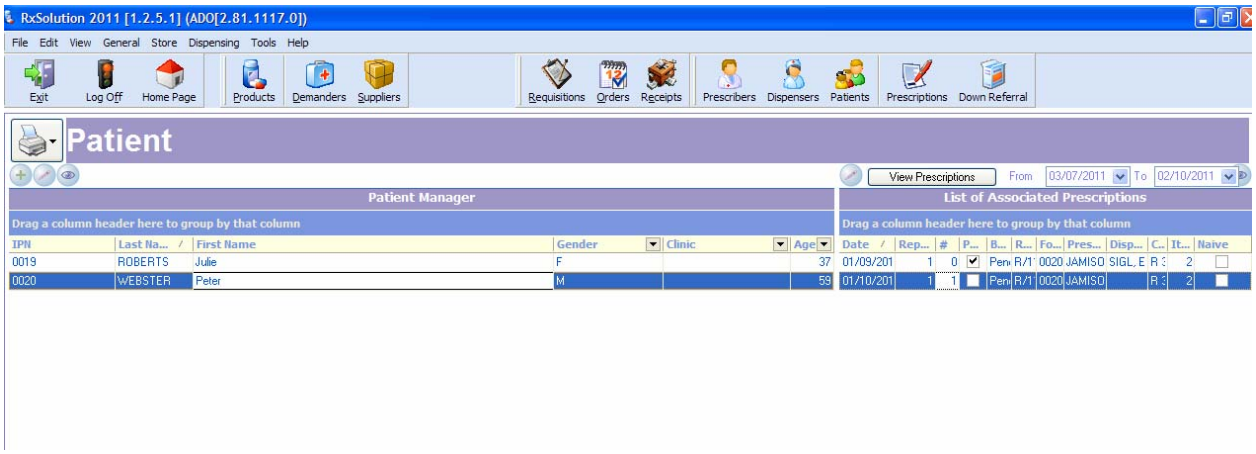
2. Alternatively, click on **Dispensing** on the menu bar.

3. Choose **Patients** from the drop-down list.



What Does the Patient Data Screen Look Like?

The **Patient** screen will display a list of patients on the system, along with their associated prescriptions—



The list can be sorted and searched by **IPN** (internal patient number), PAS # (Patient Administration/Admission System Number), first name, last name, gender, clinic, ID number , classification or the patient's age.

The patient screen is divided into two sections: the patient list and the list of prescriptions associated with the selected patient.

Using RxSolution to Manage Patient Data

How Do I Search for a Patient?

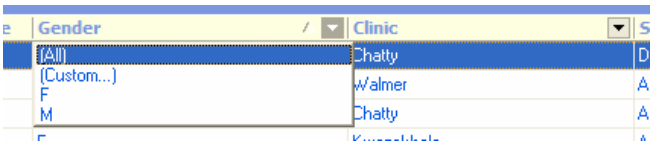
1. Choose a column by which to search.

2. Click in the data area of the field to search by and type in the search criteria. The cursor will automatically jump to the first matching record in the list.

Using Patient List Filters

You can apply filters to specify what kind of patients to display. Filters can be applied on the gender, clinic, classification, active and age headers.

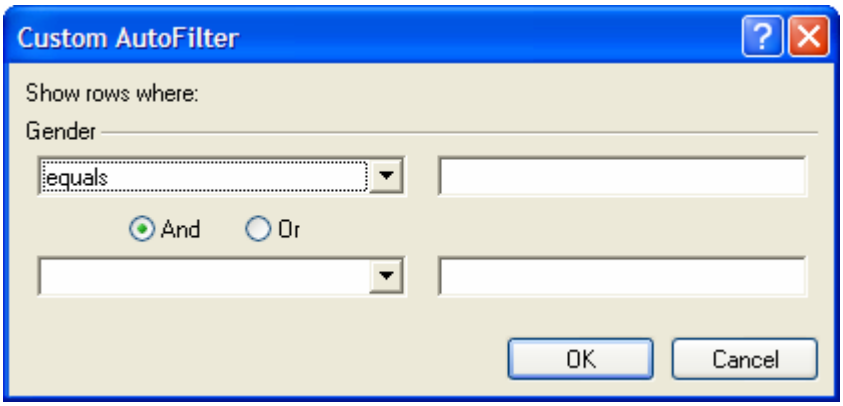
1. Click on the black arrow of the desired column header. The example below illustrates applying a filter on the **Gender** column.



2. Select the filter option from the drop-down list.

3. From the example, we have the options **[All]**, **[Custom…]**, **F** (gender female), and **M** (gender male). The **[All]** option will display all the patients on the system with any status value for the gender column type.

4. **[Custom…]** will allow you to specify more precisely how to filter the list based on the column header.



Searching for a Patient on a PAAB System

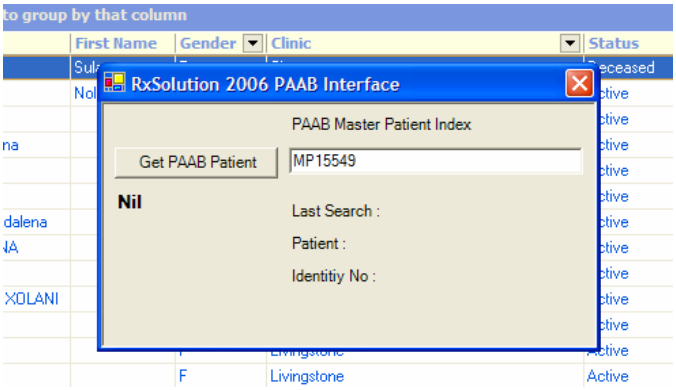
> *Note:* This type of search is applicable only to selected institutions where an interface has been written.

In some provinces, RxSolution has been integrated with other patient administration and billing (PAAB) systems. If this has been done in your area, then **Search Paab** and **Refresh** buttons should appear next to the navigation buttons on the patient screen.

1. Click on the **Search Paab** button.

2. Enter the **PAAB Master Patient Index code**.

3. Click on the **Get PAAB Patient** button.



4. If the patient record is found on the PAAB system, then it will automatically be added to the RxSolution patient list.

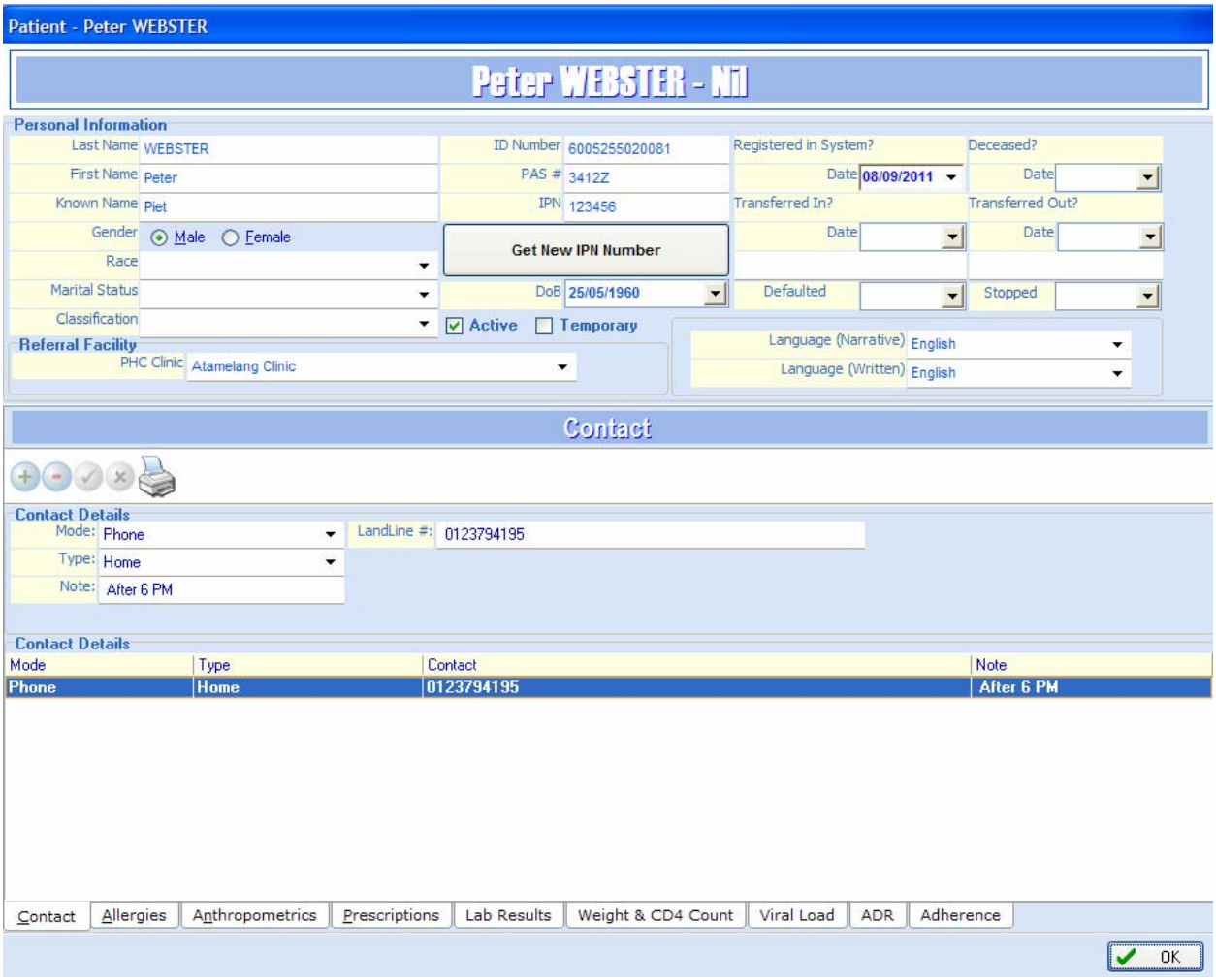
5. Click on **Refresh** to see the new patient who has been added.

How Do I Open the Patient Detail Screen?

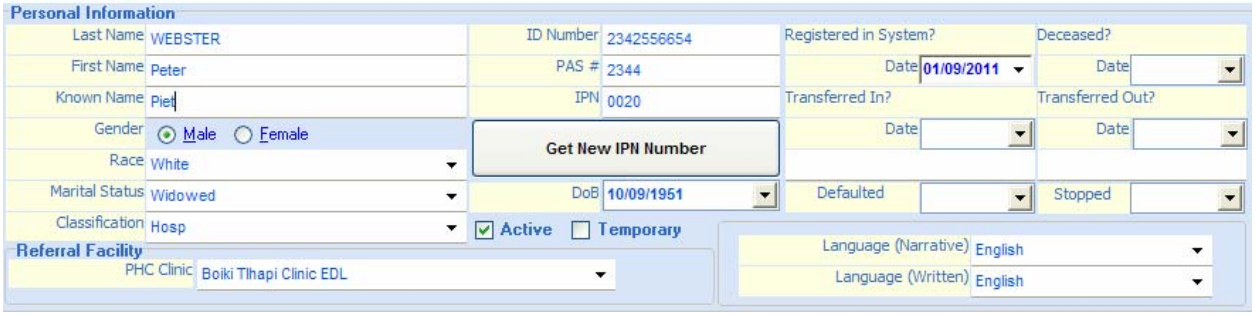
Double click on a patient record and the relevant details and information about that patient will be displayed. Alternatively, select the patient from the list, and then click the edit button .

How Do I Use Patient Detail Screen Information?

This screen is divided into two sections. The top part is where personal information is entered and displayed. Below, screen sections provide the user with the ability to record a patient's personal details, such as contact information, allergies, laboratory results, and anthropometric history, as well as prescription history details. Navigation through the various screens is done through the tabs at the bottom. Simply click on the tab title to view details of that tab.



Personal Information



The primary identifying information for the patient is recorded here. Drop-down lists for **Race,** language (**Communication Preferences**), and **Classification** can be managed under **Tools, System Settings**.

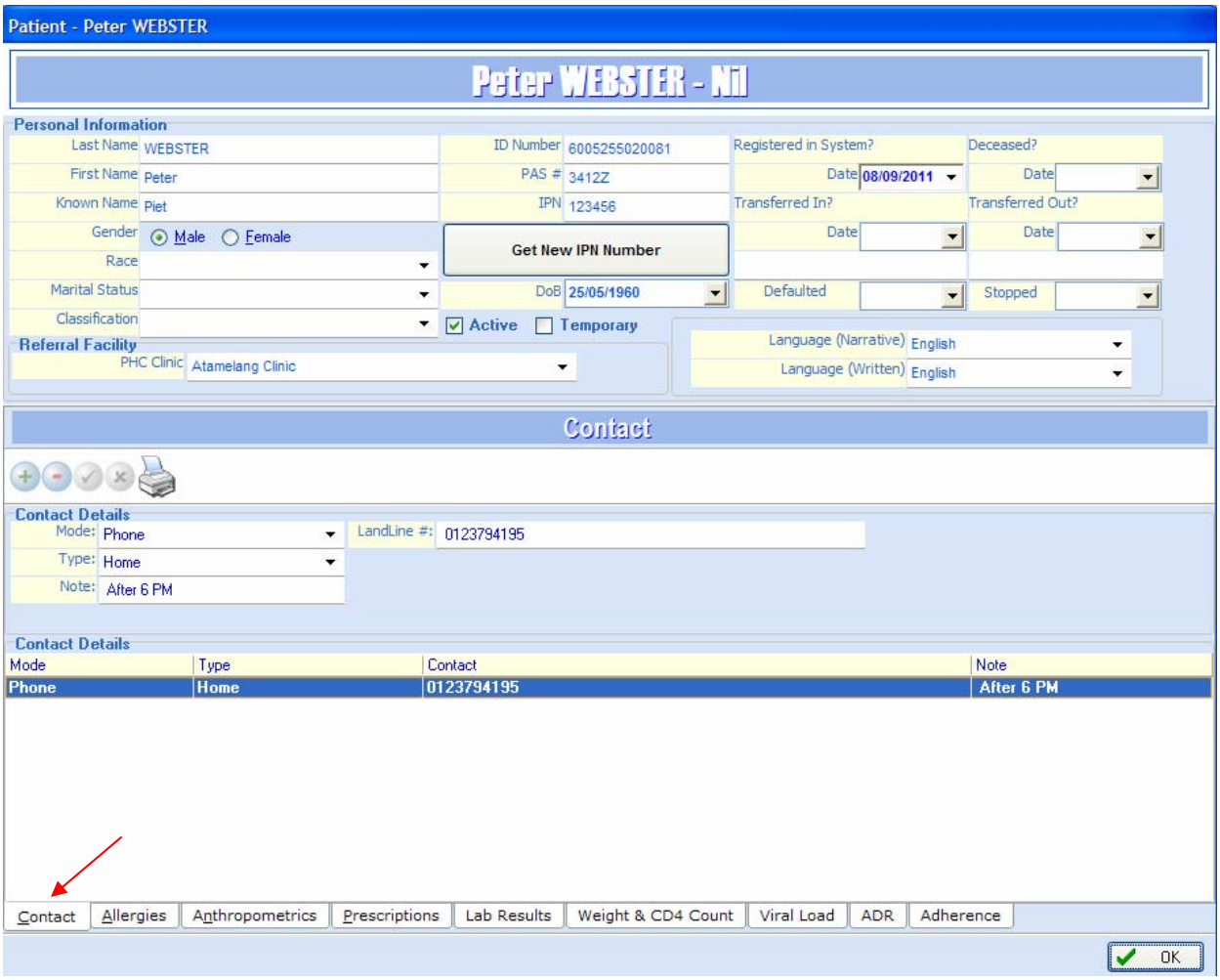
The **PHC Clinic** drop-down list comes from the clinics module, which is found under the main menu by clicking **General**, and choosing **Clinics** (see chapter 18, "Clinics").

The **ID Number** is an identity number, normally assigned by the country in which the person is a citizen. The **PAS #** is the patient admission number. The **IPN** is a unique number assigned by RxSolution and may consists of a prefix (P for patient) and a sequential number suffix.

The **Active** check box denotes whether the patient is active at your facility. In the case where a patient is transferred out or is deceased, the active mark must be removed. The **Temporary Patient** check box is used if the patient is not an active patient from your facility but occasionally collects medicines at your facility, even though he or she is registered as an active patient elsewhere.

Contact Tab

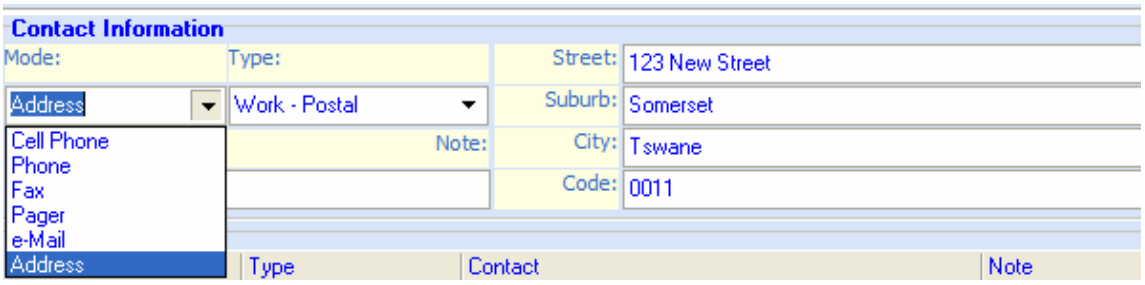
The **Contact** tab contains the patient's contact details, as shown in the screen below. Click on the **Contact** tab to view a patient's **Contact Details** screen.



Adding a New Contact Detail

1. Click on the plus sign  in the navigation buttons.

2. Select the contact **Mode**. Options for the contact mode are cell phone, phone, fax, pager, e-mail, or address.



3. Select the type of contact appropriate for the contact mode selected, and then enter the contact detail.

4. Click on the check mark sign in the navigation buttons to save.

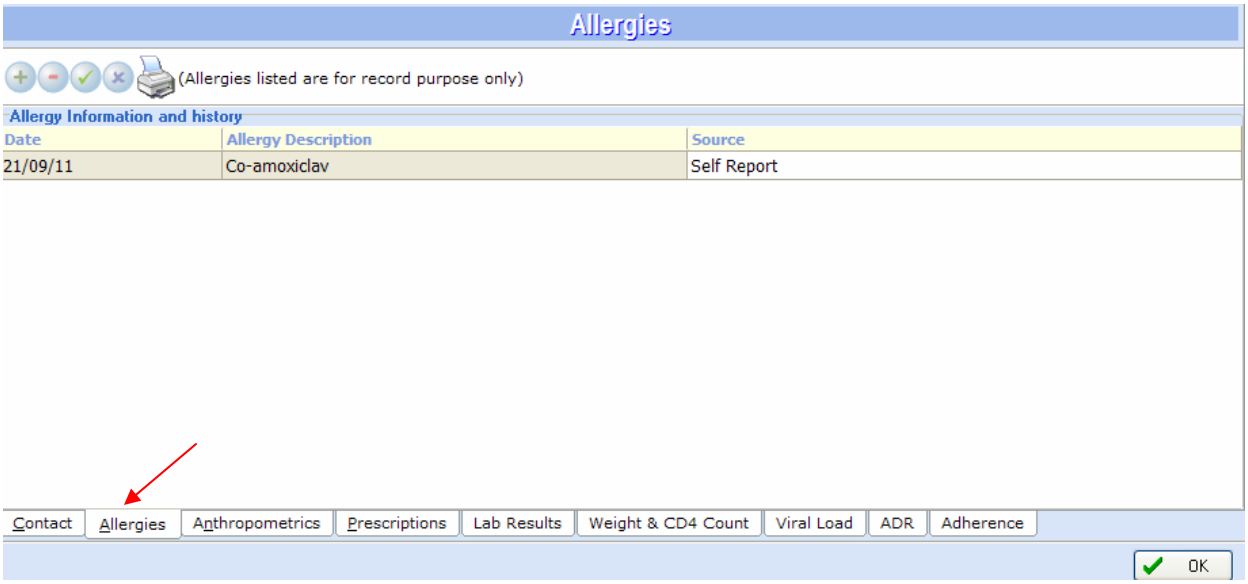
Deleting a Contact Detail

1. Select the contact detail from the **Contact Details** list, and then click the minus sign in the navigation buttons to delete the patient contact detail.

2. A confirmation message will appear. You can click on **OK** to continue deleting the record or on **Cancel** to cancel the deletion.

Allergies Tab

Click on the **Allergies** tab to view the patient's allergy list.



Adding an Allergy

1. Click the plus sign in the navigation buttons.

2. Select the allergy from the drop-down list either by clicking on the down-facing arrow or by typing in the first few letters of the allergy to find the desired allergy.

3. Select the **Source** in a similar way.

4. Click on the check mark sign in the navigation buttons to save the allergy in the list. The recorded **Date** field is entered automatically, but it can be changed.

Deleting an Allergy

1. Select the allergy to delete from the list.
2. Click the minus sign in the navigation buttons.
3. A confirmation message will appear. You can click on **OK** to continue deleting the record or on **Cancel** to cancel the deletion.
4. The allergy drop-down list can be managed under the **Tools, System Settings** option.

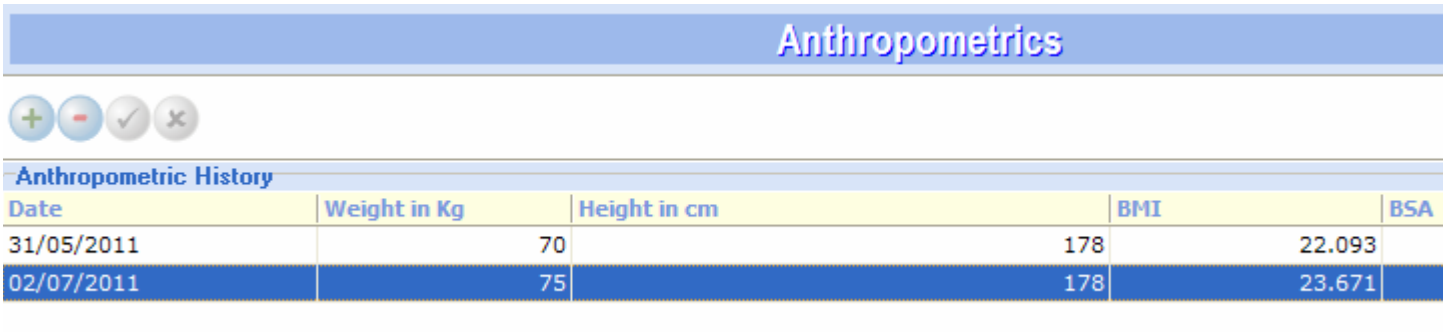
Anthropometries Tab

The **Anthropometries** tab allows you to record the patient's weight and height readings over time. RxSolution will calculate the body mass index (BMI) and body surface area (BSA) for the patient based on the weight and height entered. The BMI formula applies to *adult* men and women.

$$BMI = \text{weight (kg)} / [\text{height (m)}]^2.$$

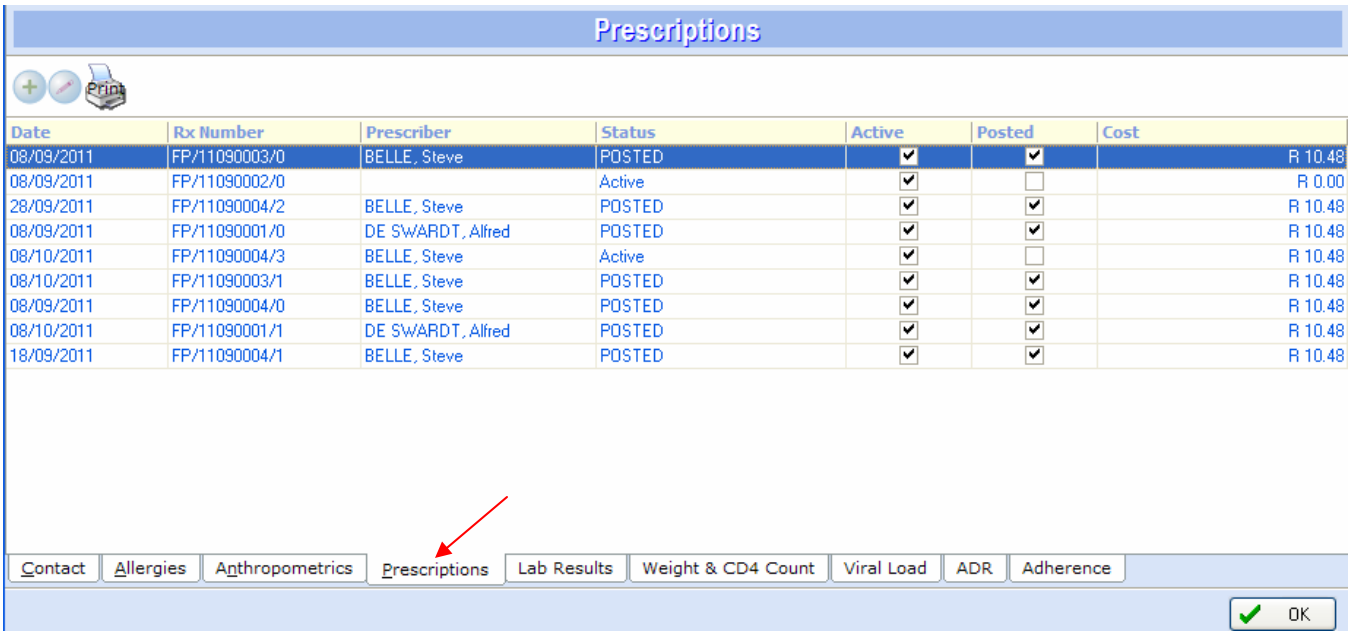
$$BSA \text{ in } m^2 = 0.007184 \times (\text{patient height in cm})^{0.725} \times (\text{patient weight in kg})^{0.425}.$$

The Blood pressure can recorded as Systolic /Diastolic



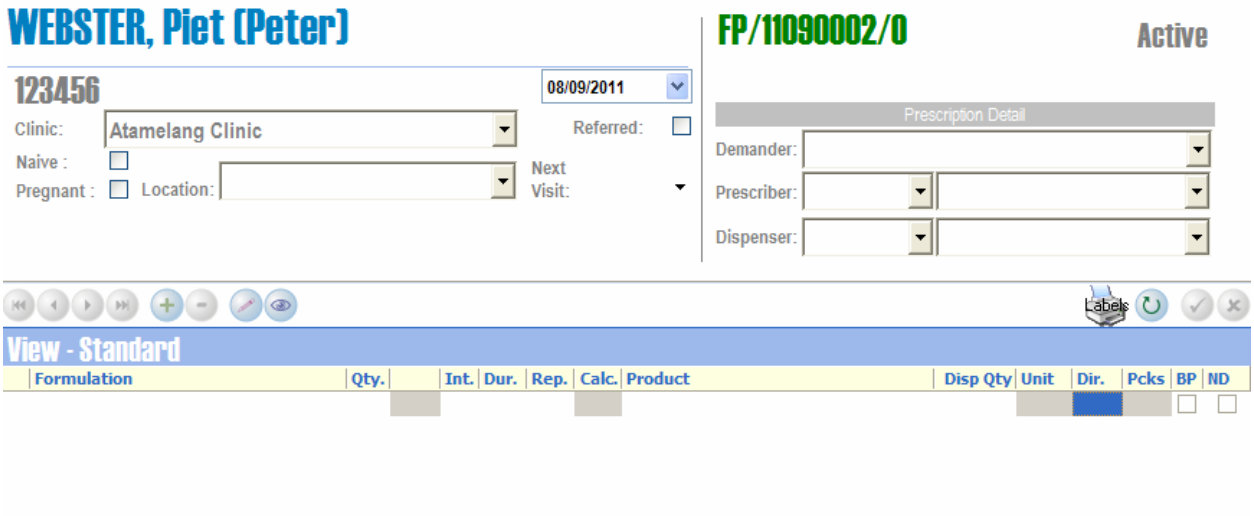
Prescriptions Tab

Click on the **Prescriptions** tab to view the list of the patient's prescriptions, as shown on the following screen.



Adding a Prescription

1. Click the plus sign  to add a new prescription.
2. A new prescription screen will appear as follows. The details of the prescription screen are explained in chapter 21, “Prescriptions.” Prescriptions are normally entered through the PRESCRIPTION menu option

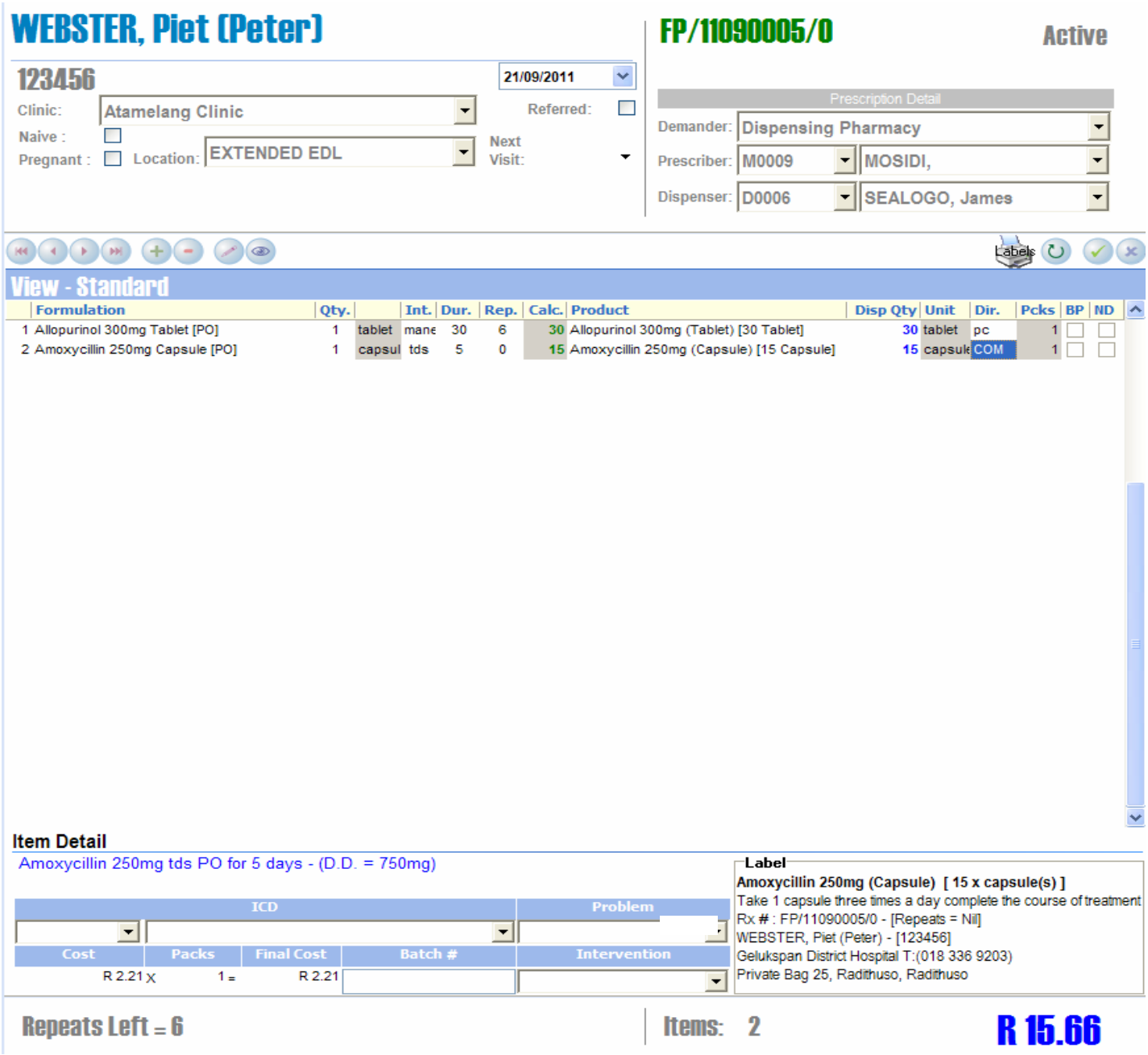


The location is set up In System settings and can be used to record where the prescription originated. The Clinic is where the patient was referred from and the Referred box is to be checked if the prescription is to be down referred to a clinic.

Editing a Prescription

1. Select the prescription from the list by clicking on it to highlight it.
2. Click the edit button  .
3. Alternatively, double click on the prescription you wish to edit.
4. Make any changes needed to the prescription.

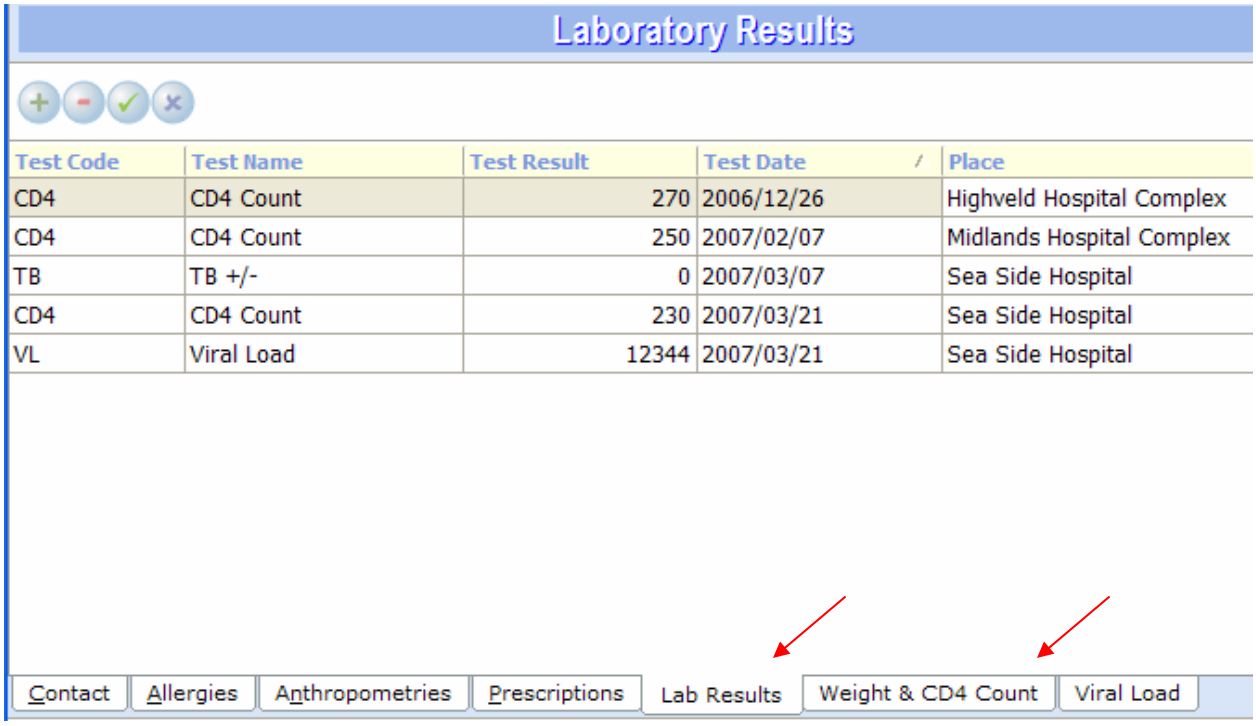
Note: Only unposted prescriptions may be edited.



Printing a Prescription

Click the printer icon to print a prescription with the items picking list. This will show a preview printout that can then be printed as a hard copy on a printer or saved as a file. (See chapter 23, “Reports,” for a detailed description of printing to a file.)

Laboratory Results Tab



The **Lab Results** tab shows the patient’s laboratory test result history that has been entered in the software. The example above shows the patient’s CD4 count history results, TB test result, and viral load reading. Various tests can be captured on this screen.

The different types of laboratory tests must be set up in **Tools, System Settings**. Please make certain that the CD4 count test code is entered as “CD4” under system settings. This step ensures that it will be displayed in the graph on the **Weight & CD4 Count** tab.

Adding a New Test Reading

1. Click on the plus sign in the navigation buttons to add a new test result. A drop-down list will appear for the test code.

Test Code	Test Name	Test Result	Test Date	Place
CD4	CD4 Count	270	2006/12/26	Highveld Hospital Complex
CD4	CD4 Count	250	2007/02/07	Midlands Hospital Complex
TB	TB +/-	0	2007/03/07	Sea Side Hospital
CD4	CD4 Count	230	2007/03/21	Sea Side Hospital
VL	Viral Load	12344	2007/03/21	Sea Side Hospital
CD4	CD4 Count	0	2007/03/21	<Not Recorded>

CD4
TB
VL

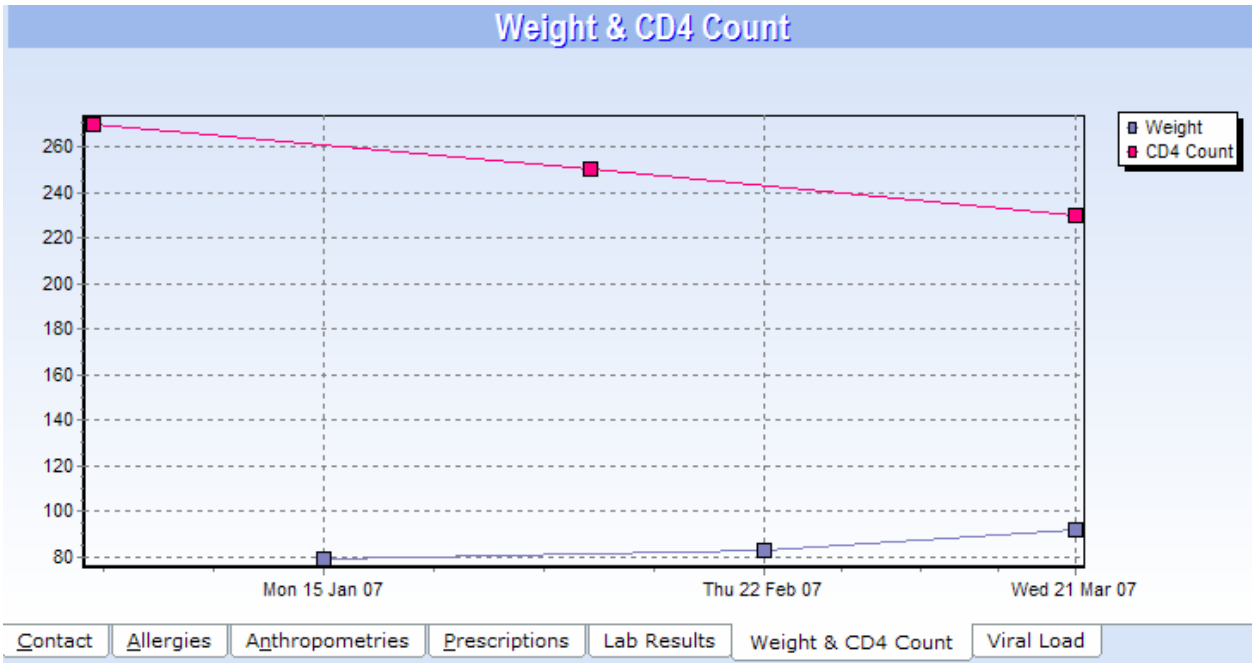
2. Select the **Test Code** from the drop-down list.

3. Select the test conducted from the **Test Name** column.

4. Enter the **Test Result** reading, the date when the test was done (**Test Date**), and the **Place** where the test was performed.

5. Click on the check mark sign in the navigation buttons to save the new test result record.

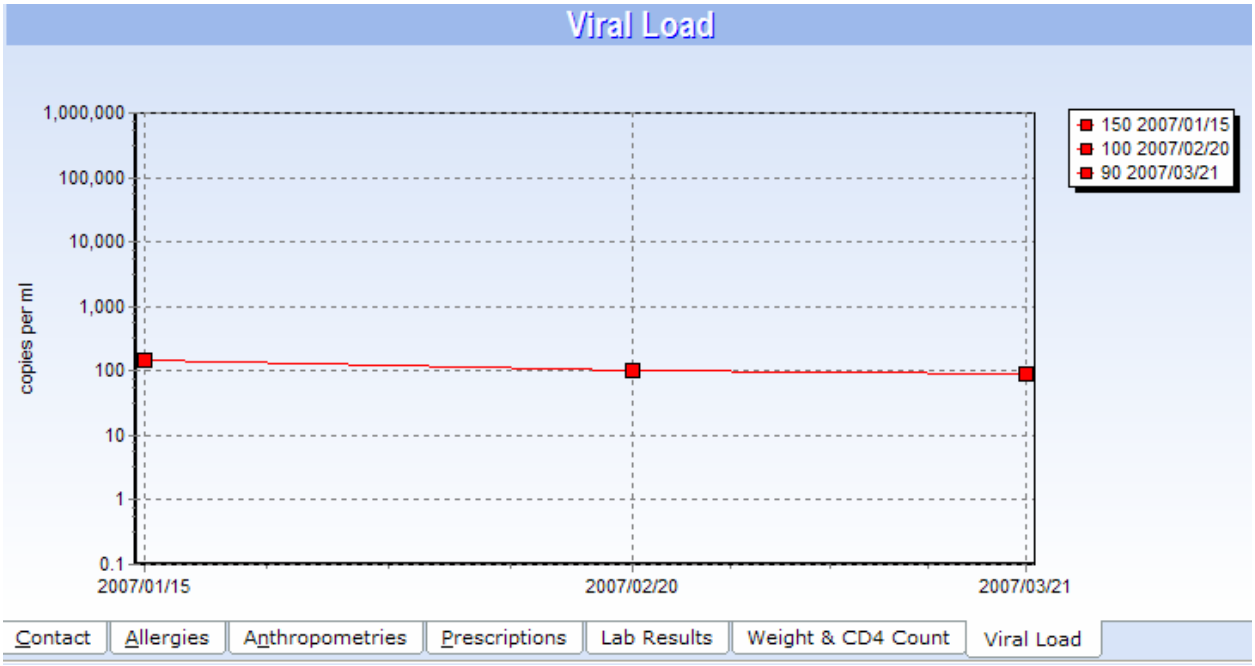
Weight and CD4 Count Tab



The **Weight & CD4 Count** tab shows a graphical representation of the patient's weight readings and CD4 count test results over a period of time. The graph shows only the test results for the CD4 count. Other test results are not shown on the graph.

Viral Load Tab

The viral load (in copies per milliliter) is presented graphically against the date the test was done.

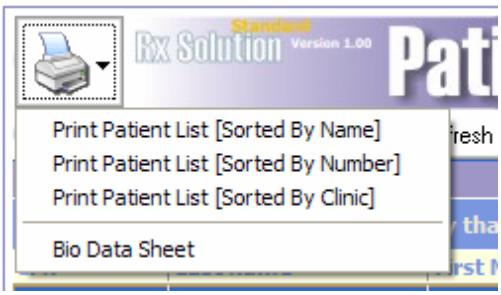


How Do I Close the Patient Detail Screen?

Click on the **OK** button at the bottom of the patient screen to close. Any changes that have been made to the patient details will be saved automatically when you close the patient screen.

How Do I Create Patient List Printouts?

Various lists and reports can be printed by clicking on the printer icon from the main **Patient** screen. The printouts may be previewed before printing on paper. Click on the printer icon on the left-hand side to get a list of available prescriber printouts.

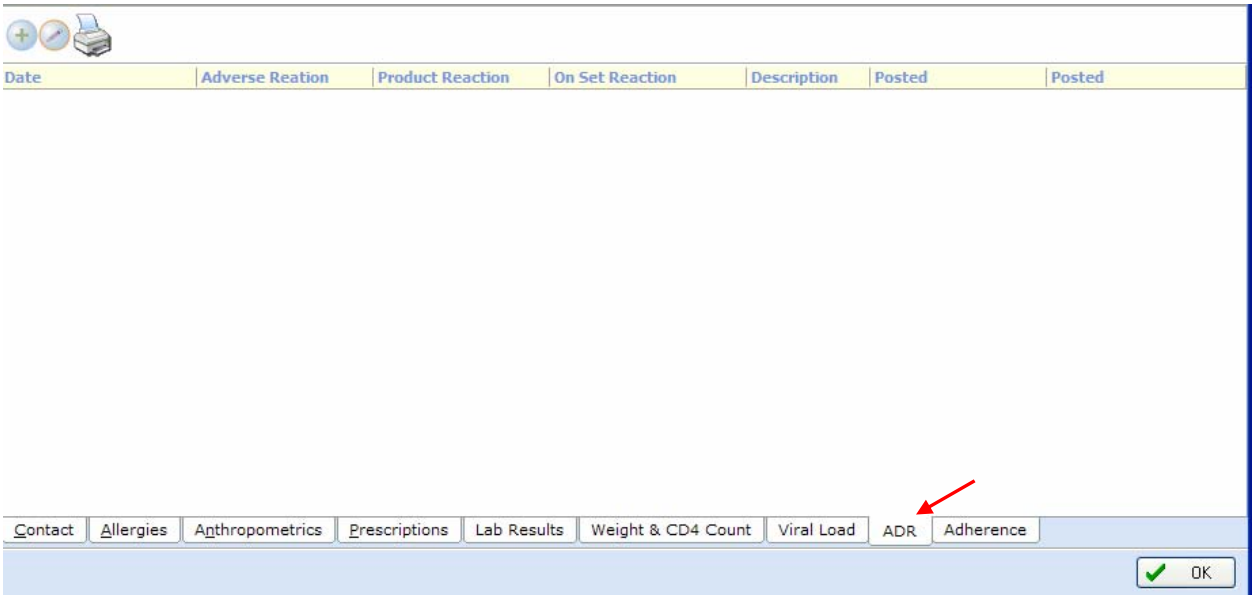


Create the desired patient printout by clicking on an entry from this list—

- **Print Patient List [Sorted By Name]**—to print a list of patients ordered by name
- **Print Patient List [Sorted By Number]**—to print a list of patients ordered by number
- **Print Patient List [Sorted By Clinic]**—to print a list of patients ordered by clinic name
- **BioData Sheet**—to view and print the selected patient's biodata information

How Do I record an Adverse reaction or/and product quality discrepancy?

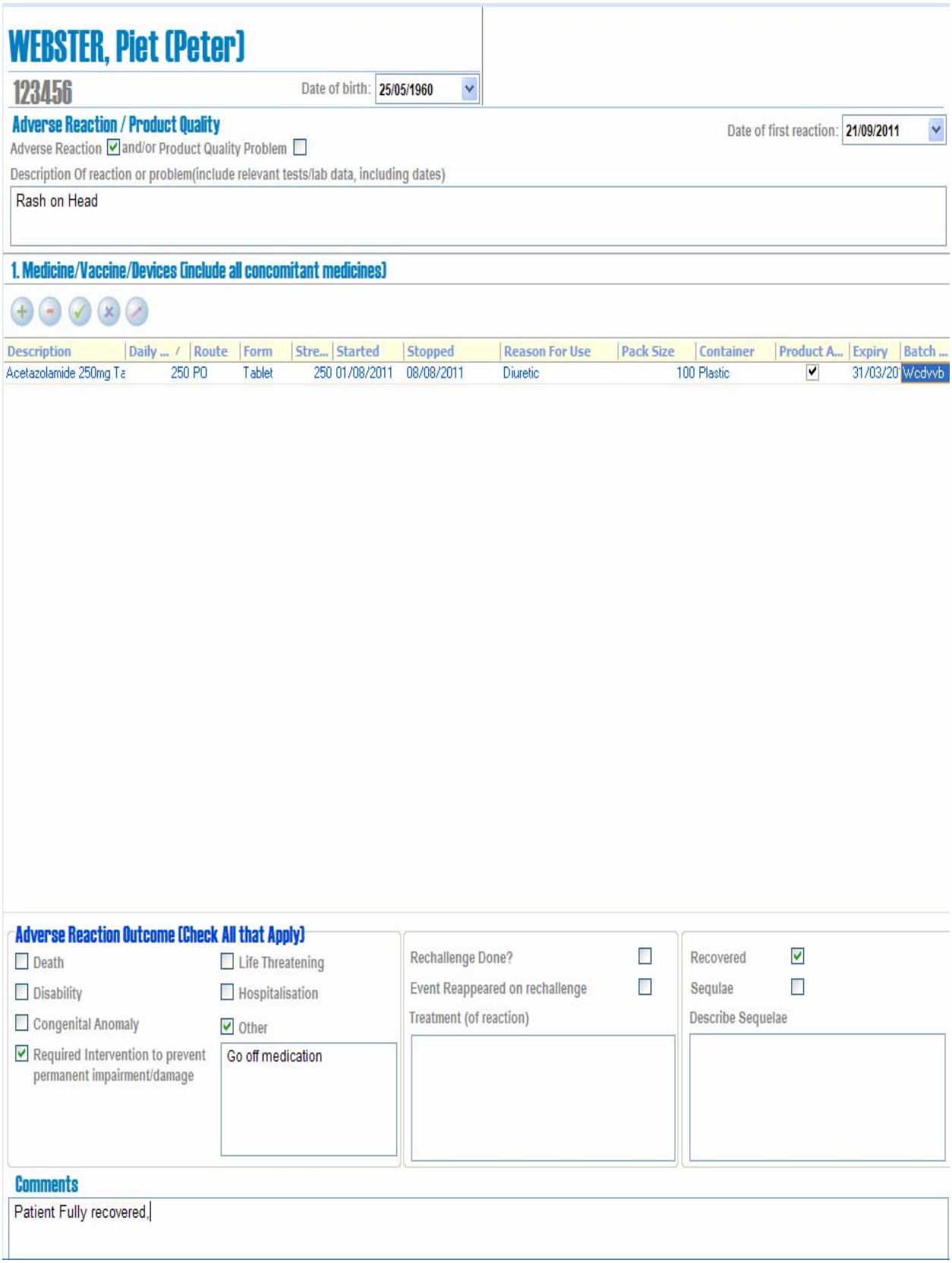
1, Click on the ADR Tab



2.. Click on the Plus Sign 

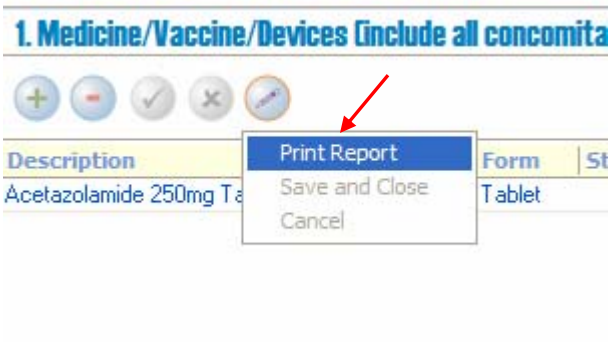
3. Fill in all required information.

See Example below.



How do I print the report

Click on the Edit Button and select Print

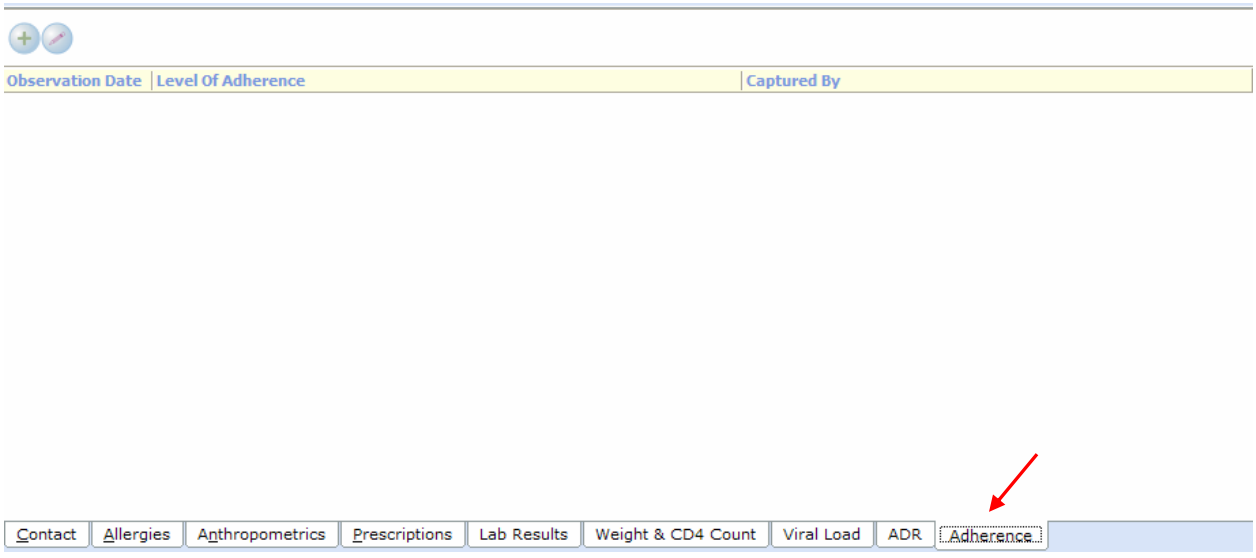


How Do I record Adherence support measures?

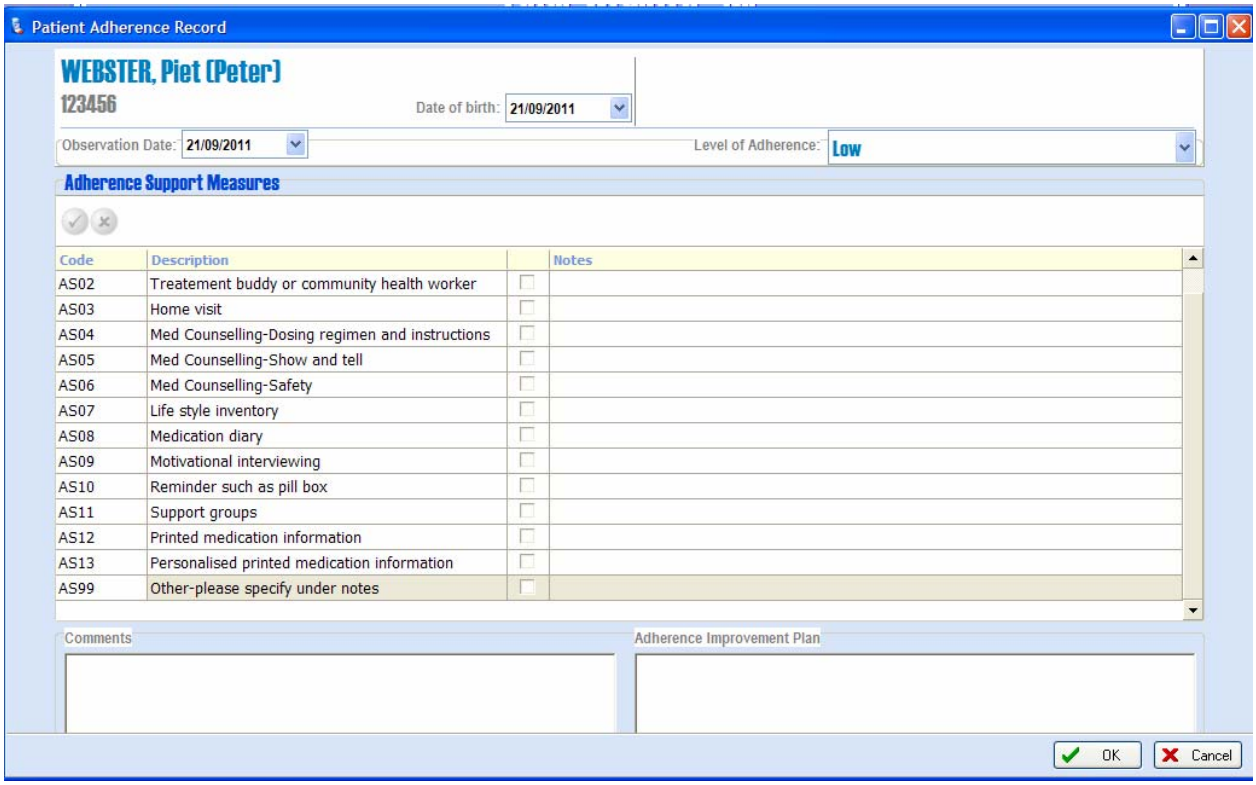
What is Adherence?

The WHO defined adherence as "the extent to which a person's behaviour – taking medication, following a diet, and/or executing lifestyle changes, corresponds with agreed recommendations from a health care provider".

1. Click on the Adherence tab



2. Click on the Plus button 



How do I classify levels of adherence?

Adherence can be measured using the Multi-Method Adherence Tool recommended in the *South African Standard Treatment Guidelines and Essential Drug List* or in the *South African Clinical Guidelines for the Management of HIV & AIDS in Adults and Adolescents*.

Once assessment of adherence is complete, patient will be classified as either having low, moderate or high adherence.

OR if the patient did not attend the clinic on their designated day to collect their medication they will be classified as a defaulter.

Select from the drop down menu the Level of Adherence that corresponds to the patient.

When to choose an Adherence Support Measure?

If the level of adherence is high, record it in the clinic record and provide the client with reinforcement.

For moderate levels of adherence, discuss the result with the client and continue to measure adherence levels. If moderate levels of adherence have been observed for three consecutive visits, institute an adherence support measure.

If a low level of adherence or non-adherence has been observed-

- Refer the client to a pharmacist for a step-up adherence intervention such as motivational interviewing.
- Monitor CD4 count as usual and monitor viral load as the client is at risk of developing resistance.

How do I complete the Adherence support measure indicators?

Once you have established that the patient has an adherence problem and needs an intervention, you can use the list of Adherence Support Measures as a guideline to choose which intervention will work best with the patient.

A menu of different options is provided.

Review the clinical records as well as past adherence assessment records and verify with the patient whether or not he/she has any additional aids to assist him/her to remember to take his/her medication and record the menu of measures in the boxes provided.

Tick any of the blocks corresponding to a support measure which has previously or is currently being used. The notes section allows for an expanded description of interventions or the success or failures of the interventions.

It is likely with any given patient that more than one of the measures may be used or has been used in the past.

AS01 Treatment Preparedness

This should take place once a patient has found out their HIV status and before they start taking antiretroviral therapy. Part of this intervention is to start the patient on co-trimoxazole prophylaxis treatment. This preventative therapy has to be taken on a continuous basis. The patient learns the routine of taking medication every day at regular intervals. If the patient realizes that they can adapt their lifestyle to incorporate this daily medication it will give them more confidence to start their ART.

Patient must be educated on HIV/AIDS, what it means to adhere, CD4 counts and viral load. Patient must understand fully about HIV and the implications of starting ART that it is a lifetime commitment to therapy.
In this stage a relationship needs to be built up between the healthcare provider and the patient.

Together with the patient, the health care team is to develop a treatment plan for the patient.

ART readiness assessment should be done. This includes assessing the patient's knowledge of HIV, implications of non-adherence, expected side effects and understanding of their treatment regimen.

AS02 Treatment buddy or community health worker

A treatment buddy is a family member or friend of the patient that has been assigned to help the patient adhering to their treatment. A community health worker can also be used as a treatment buddy.

A treatment buddy will be there to support a patient by reminding them to take their medication, provide support, offering encouragement, helping to remember hospital/clinic appointments.

A treatment buddy will identify with the patient and the patient should be able to trust their treatment buddy.

A treatment buddy will be in constant support with the patient. This can be via sms, phone calls, visits or emails.

AS03 Home visit

A home visit can be conducted by the treatment buddy, community health worker, social worker or nurse.

A home visit will be able to give more information on the patient's socio-economic status and also the home-life stresses that the patient faces.
The home situation must be assessed for potential barriers to the patient's adherence. Consider any changes that may help the patient. E.g. food parcels, treatment buddy.
Announced or unannounced pill counts can also be conducted at a home visit.

AS04 Medication counselling—dosing regimen and instructions

It is important for the patient to be taught all about the medication they are taking. They should know the name of their medication, what it does, why they need to take the medication, what side effects to expect, special precautions and what to do if they experience any side effects. Dosing schedule must be emphasized, the time of each dose, number of tablets/capsules per dose. Also patients must know the additional instructions of the medicines e.g. dietary requirements, storage instructions. Patients must understand what to do in the event of missed doses.
Remind patient that each medicine has to be taken at the same time every day and that medicine has to be taken continuously even if they feel better.
Ask patient to repeat dosing instructions for each medication back to you so that you are sure they understand instructions for each medication.

AS05 Medication counselling—show and tell

Counselling involving show and tell is a more in depth counselling session than before. Counselling must be done in an area optimal to communication, where there are few barriers and distractions. Privacy is also an important factor to consider.
Counselling should be a two way discussion between the health care worker and the patient, a time where the patient feels comfortable to ask questions. The health care worker should be confident after the session that the patient is leaving with a much better understanding of their treatment regimen.

Basic show and tell questions are

- What do you take the medicine for?
- How do you take it?
- What kind of problems are you having?

If the patient does not know all the information, fill in gaps of knowledge where lacking.

Conclude with asking the patient to repeat back to you how they are going to use the medication.
Listen carefully, correct the patient, reemphasise important information, fill in any gaps.
Ask the patient if they have any questions.

AS06 Medication counselling—safety

Counselling the patient on the side effects is very important if the patient is not adhering to treatment because of the side effects they are experiencing.

Empathise with the difficulties that the patient is experiencing. Explain to the patient which are the life threatening side effects and which are more transient in nature. The patient must know which side effects should be reported to the doctor.
Go through each medication with the patient and discuss the possible side effects that the patient might experience.
Discuss the management of these side effects with the patient. If necessary prescribe medications to help the patient cope with the side effects. It is important to explain to the patient that their medication must not be stopped for minor side effects.

AS07 Life style inventory

Life style inventory is an understanding of the patient's daily routine and how their medication regimen fits into this routine.
Finding out what a typical week day and weekend is like for the patient and then helping them find the best times to take their regimen. Identifying what in their routine can be used as reminders and dosing cues. Helping the patient structure their day will be of benefit so that the patient can see some sort of routine in every day. Every patient is different. Not every patient can take their treatment at 6am and 6pm. They all have

unique demands, travel times and working hours. Sitting down with a patient and discussing their typical day will help you customize the medication taking routine so that it fits in with their life style.

AS08 Medication diary

A medication diary can be a note book or diary where the patient will mark off each dose that they have taken. This should be done at the time of dosing.
If a dose is missed, the patient must write the reason why that dose was missed.
The patient will then be able to see just by looking at the diary the number of doses they have missed in a month. They may be able to see a pattern forming for missed doses.

The medication diary will also serve as a reminder for patient to take the medicine.

AS09 Motivational interviewing

Motivational interviewing is a directive, client-centered counselling style for eliciting behaviour change by helping clients to explore and resolve ambivalence.

Motivational interviewing is processes that seeks to explore this uncertainty and helps the client identify their own purpose for adherence.
It is a style of counselling designed to assist the patient commit to a desired change. In this case – adoption of dosing regimen into the patient's daily routine.
During the process of motivational interviewing the health care practitioner explores the patients understanding and concerns in order to evaluate their readiness for change.
If ambivalence (uncertainty) is discovered the counsellor facilitates the client's resolution of this and hence provides impetus for motivation.

AS10 Reminder such as a pill box

Reminders to take medication can take different forms. Examples of reminders are: cell phone reminder, alarm, MEMS, pill boxes. Some patients can find it difficult to remember to take their medication at the correct times. Reminders are useful to get the patient into the routine of taking their medication at the designated times.

AS11 Support groups

Support groups are a place where people with the same troubles or issues can get together to help each other cope. People who have been through a similar life experience are a great support to another person experiencing something for the first time. Members of the support group will be able to relate to each other and therefore be able to sympathize with each other.
With people with HIV, support groups are very helpful for people to cope with the stigma associated with HIV. Support groups may help the patient with disclosure to friends and family members. Patients are able to openly discuss barriers that they encounter to taking their medication. Members of the support group will be able to advise them how

they dealt with a similar problem. People will be able to motivate each other to continue to take their medication properly. In this open and honest environment patients can become accountable to each other.

Support groups can be run at the clinic, a church or in the community.
Often a support group will be run by the social worker. Mostly a support group should incorporate people living with HIV/AIDS and taking medication as leaders so that the patients attending the support group will identify with the others and the person running the group.

AS12 Printed medication information

Communication between health care workers and patients is sometimes not good. Patients given verbal instructions may not understand them or find it difficult to recall what they have heard. Written information, like patient information leaflets, will ensure that all the important information is presented to the patient.

If the patient needs extra information on medication, anti-retrovirals or adherence, printed information available in the clinic/hospital and a package insert can be given to the patient to take home with them.
It is best to go through this information with the patient before they go home, so they can ask any questions that they might have.

AS13 Personalised printed medication information

If the patient needs extra information on their specific medication or disease state, the health care worker can supply them with a personalised patient information leaflet for their specific medication that they are taking. Personalised information sheets can be made for the patient on either their disease state or the medication that they are taking.
Direction to other information sites applicable to the patient can also be given to patients. E.g. websites, help line numbers, discussion forums.
Another option is to start a database of leaflets on a computer that can just be printed off at the time it is needed for a patient. Some PIL's are not specific enough for a particular use of a medicine, so individually tailored ones can be developed and stored in this database.

What do I fill in the comments block?

The comments section allows you to record —

- A more detailed description of any identified adherence barriers
- Counselling points to assist with additional increasing counselling
- Any important information that would enrich future adherence counselling or other improvement interventions

Click in the comment block and type in comments.

What is an Adherence Improvement Plan?

This block allows you to develop an adherence improvement plan for those patients who require it.
Here you are able to record planned future interventions for patients who are being actively monitored. You will be able to list additional improvement interventions to be used on the patient.
Any support measures that are going to be offered to the patient at this visit or future visits should be recorded in this block.

Click in the Adherence Improvement Plan block and type in your plan to help patient.