



Pharmacy Information System (PhIS) and Clinic Pharmacy System (CPS)

Pharmacy Based User Manual Medication Therapy Adherence Clinic (MTAC)

Version	: 9th EDITION
Document ID	: PB_U. MANUAL_MTAC



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Reference ID : PB_U. MANUAL_MTAC-9th EDITION

Application reference: PhIS & CPS v2.0.1



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1.0 Introduction

1.1 Overview of PhIS

Pharmacy Information System or better known as PhIS, is a complete and comprehensive system that integrates pharmacy related services geared towards pharmacy excellence. PhIS implementation would transform most of current manual process to electronic system to benefit facility end user in the health care sector.

There are 12 modules to assist services delivery by the health care sector which comprises of:

1. Order Management
2. Inpatient Pharmacy
3. Outpatient Pharmacy
4. Medication Counselling
5. Ward Pharmacy
6. Pharmacy Inventory
7. Manufacturing of Cytotoxic Drug Reconstitution, Parenteral Nutrition, IV Admixture & Eye Drop, Radiopharmaceuticals and Extemporaneous
8. Adverse Drug Reaction & Drug Allergic (ADR & DAC)
9. Clinical Pharmacokinetics Services (TDM)
10. Drug Information & Consumer Education (DICE)
11. Medication Therapy Adherence Clinic (MTAC)
12. Data Mining (PhARM)

1.2 Purpose and Objectives

This user manual outlines the Medication Therapy Adherence Clinic (MTAC) sub-module and its key features and functionalities. The primary objective is to guide user through the process of completing PhIS application process.

User will understand the following activities in detail:

- MTAC Reporting

1.3 Organised Sections

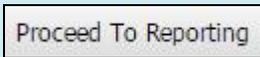
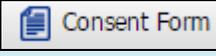
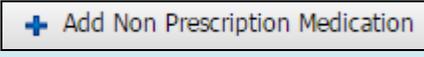
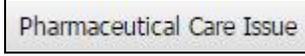
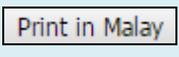
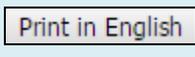
These are the sections within this document:

- Section 1 : Introduction
- Section 2 : Application Standard Features
- Section 3 : MTAC
- Section 4 : Acronyms
- Section 5 : Links to clinical modules

2.0 Application Standard Features

2.1 PhIS Legend

Standard Legend			
<input type="text"/>	Blank Field	<input type="text" value="v"/>	Drop Down Box
	Reset Login	<input type="button" value="LOGIN"/>	Login to PhIS
	Expand Menu		Collapse Menu
<input type="button" value="Home"/>	Display Home Tab		Expand Module
	Collapse Module	<input type="button" value="Logout"/>	Logout from PhIS
	Close All Tabs		Refresh
	Search First Page/ Previous Page		Search Next Page/Last Page
	Search Up/Down Button	<input type="text" value="F02FBW-0003984"/>	Hyperlink
	Save		Show Help
	Search Icon		Add/Create New Record
	Calendar Icon	<input type="button" value="Search"/>	Search Record
	Close Window	<input type="button" value="Add/Update"/>	Add/Update Button
<input type="text" value="HPSF00088304"/>	Auto generate an information by the system	<input type="text" value="SPUB5656569"/>	Auto generate record no by the system
*	Mandatory Field	<input type="button" value="Cancel"/>	Cancel Button
<input type="button" value="Yes"/>	Yes Button	<input type="button" value="No"/>	No Button
<input type="button" value="OK"/>	OK Button		Edit Record
	Print	<input type="button" value="Export to Excel"/>	Export report from PDF to Excel
<input type="checkbox"/>	Check Box	<input type="radio"/>	Radio Button
	Cancel		Delete Record

MTAC Module Legend			
	Lab Parameter Button		Proceed To Reporting Button
	Search History Button	Audit Trail	Audit Trail Hyperlink
	Consent Form Button		CP1 Button
	CP4 Button		Add Prescription Medication Button
Calculate Score	Calculate Score Hyperlink		Add Non Prescription Medication Button
	Save & Continue Button		Pharmaceutical Care Issue Button
	Malay Language Button		Assessment Form for Diabetes Mellitus Button
	Medication Order Button		Confirm Button
	Print In Malay Button		Print In English Button

Note

To learn more about Login Information, kindly click [Login Information](#) module for descriptive steps.

2.2 Latest Enhancement and Updates

Latest Functions	Page
Combine screen for MTAC Order at MTAC Reporting Screen. No More MTAC Order Sub Menu	Related screen
<p>CP1</p> <p>Change from merged Past Medical History to individual table:</p> <ul style="list-style-type: none"> i. Past Medication - CP1 ii. Non-Prescription Medication (including Herbal/Vitamin/Herbal/Vitamin/Another Supplement) - CP1 <p>Column for i) and ii) should include:</p> <ul style="list-style-type: none"> a) Original Rx no. b) Order details (like in preparation screen) c) Supply details d) Remark/Balance/Comments <p>List of medication to be included in all 2 table in the printed report will be indicated by a checkbox</p>	41
<p>Assessment</p> <ul style="list-style-type: none"> a. Change 'Comorbidity' from check box selection into drop down menu with History field (free text 500 characters) - For Old data, Comorbidity History will be empty 	27
<ul style="list-style-type: none"> b. Diagnostic test change to be in 1 box only (2000 char) 	27
<p>New MTAC -Cardiovascular Care Bundle(CCB) Add specific detail for MTAC Type = CCB</p>	91
New screenshot-Remove mandatory field for adherence score	30

3.0 MTAC

Overview

The MTAC module emphasis on medication management to improve quality and safety include. Implementing safe, organized, and efficient drug-dispensing systems is essential for controlling costs and assuring that the medical prescription is safely followed as requested and within the relevant deadline. An appropriate dispensing system and cost-effectiveness of patient care. MTAC is operated to drug therapy monitoring and patient's education in improving their ability to successfully manage disease condition and reducing medication error.

User Group

This module is intended for registration staff and pharmacist (subject to the user assigned by the facility)

Functional Diagram

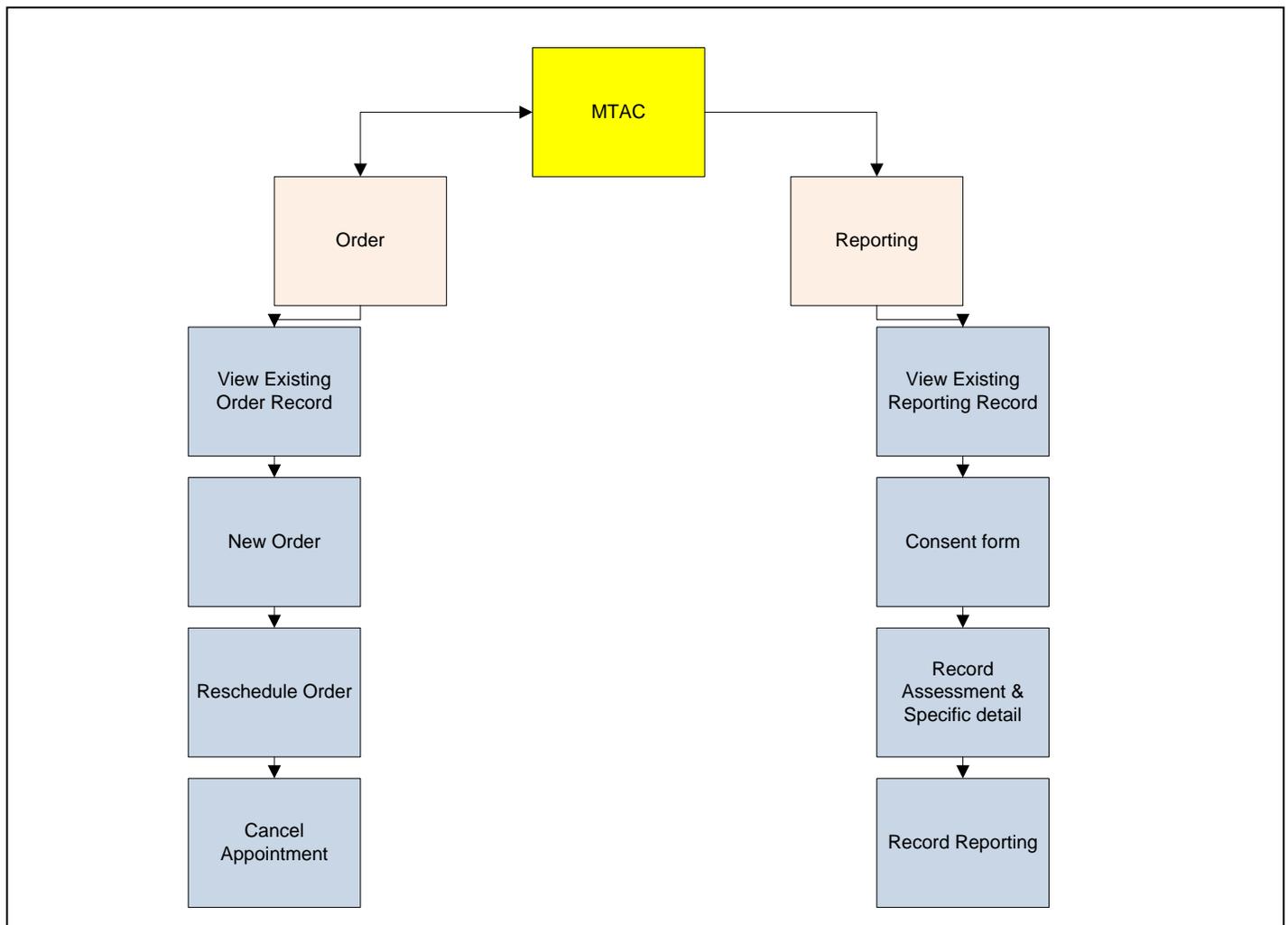


Figure 3.0-1

Functional Description:

MTAC Reporting

MTAC Reporting is to record the type of MTAC for counselling and to schedule appointment dates. Reporting is used to record assessment, specific details and report of counselling

There are ten (10) types of MTAC with No Specific Details

1. Cardiac Rehab Program
2. Chronic Pain
3. Gastrohepatology
4. Hemophilia
5. Hepatitis
6. Neurology
7. Osteoporosis
8. Psoriasis
9. Psychiatry
10. Rheumatology

There are ten (11) types of MTAC with Specific Details

1. Chronic Kidney Disease
2. Diabetes Mellitus
3. Dialysis
4. Geriatric
5. Heart Failure
6. Methadone
7. Renal Transplant
8. Respiratory
9. Retro Viral Disease
10. Warfarin
11. Cardiovascular Care Bundle

3.1 MTAC

Order will be ordered by prescriber from order management. Pharmacists are also able to create a new order at the MTAC Reporting screen

3.1.1 View Existing Order at MTAC Reporting

MTAC Reporting screen allow users to search and view existing patients' MTAC order records.

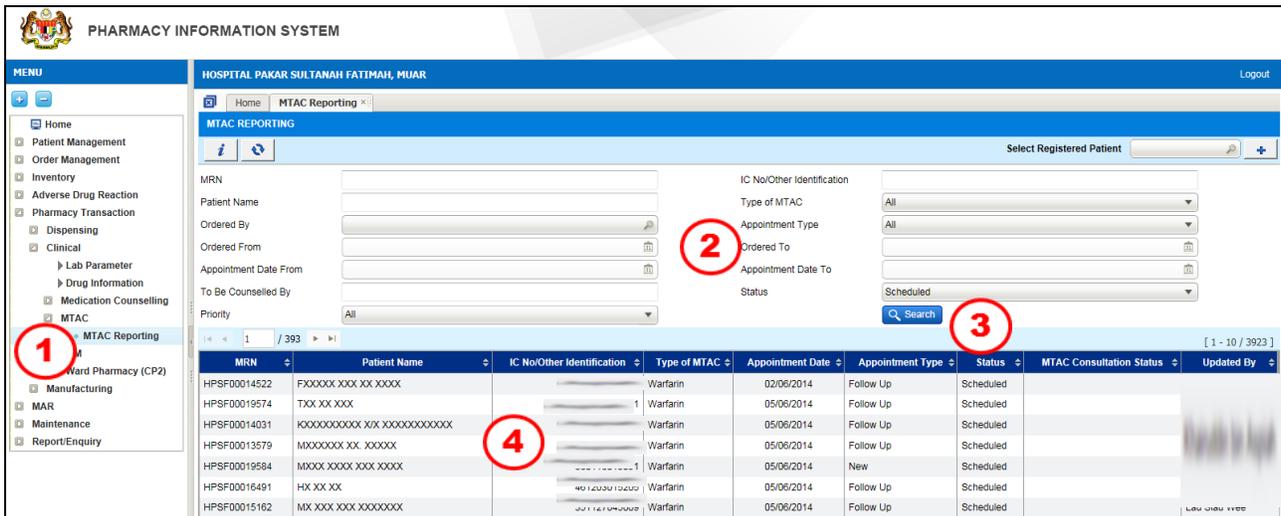


Figure 3.1.1-1 MTAC Reporting Listing Page

STEP 1

Click on 'Pharmacy Transaction' menu followed by 'Clinical' then 'MTAC' and 'MTAC Reporting' sub menu

STEP 2

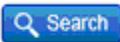
Search existing patient record by: -

Field	Description	Remark
MRN	Patient Medical Record Number	Search option: Type the MRN either full or partial: Example: HPSF00001234 or "1234"
Patient Name	Patient Name	Allow to search by patient full name or partial
Ordered by	Ordered by	Able to filter and search by ordered by
Ordered from	Ordered from	Able to filter and search by ordered from
Appointment Date From	Appointment Date From	Able to filter and search by appointment date before
To Be Counselling by	To Be Counselling by	Able to filter and search by to be counselling by
Priority	- All - Urgent - Routine	Able to filter and search by priority
ID No/ Other Identification	Identification Number	Allow to search by full or partial ID Number
Type of MTAC	- All	Able to filter and search by type of MTAC order

	<ul style="list-style-type: none"> - Cardiac Rehab Program - Chronic Kidney Disease - Chronic Pain - Diabetes Mellitus - Dialysis - Gastrohepatology - Geriatric - Hemophilia - Heart Failure - Hepatitis - Methadone - Neurology - Osteoporosis - Psoriasis - Psychiatry - Renal Transplant - Respiratory - Retro Viral Disease - Rheumatology - Warfarin 	
Appointment Type	<ul style="list-style-type: none"> - All - Follow Up - Follow Up Reschedule - New - New Reschedule 	Able to filter and search by appointment type
Ordered to	Ordered to	Able to filter and search by ordered to
Appointment Date To	Appointment Date To	Able to filter and search by appointment date the latest
Status	<ul style="list-style-type: none"> - All - Ordered - Scheduled - Cancelled - In Progress - Completed 	Able to filter and search by status

Table 3.1.1-1

STEP 3

Click on the  button to search the patient

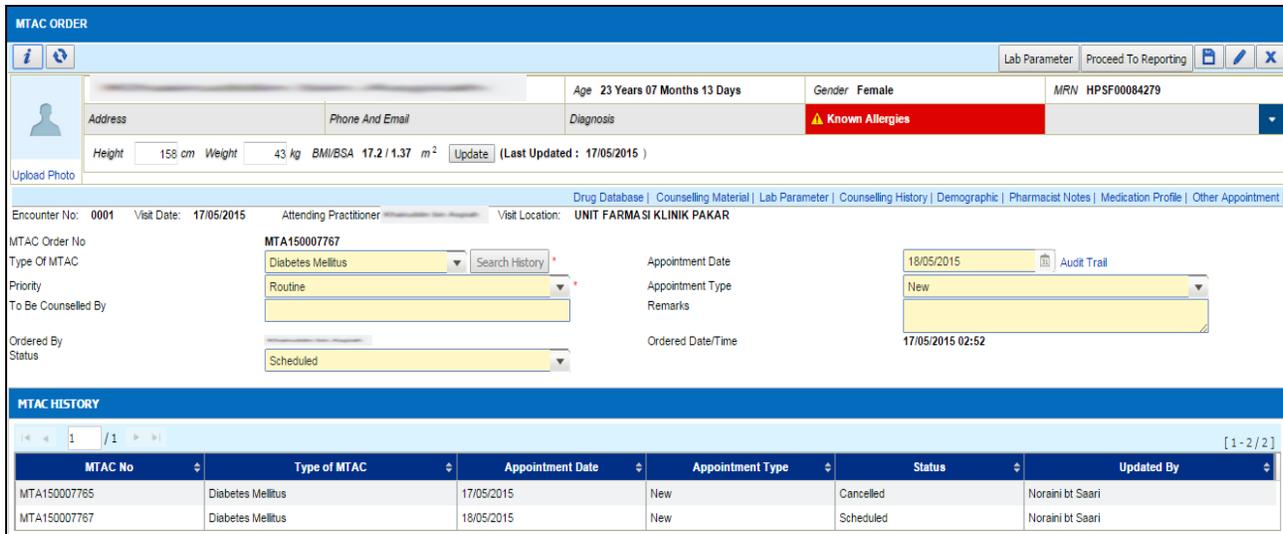
Note

Search result of current order patient list will be displayed:

- MRN
- Patient Name
- ID No
- Type of MTAC
- Appointment Date
- Appointment Type
- Status
- Updated By

STEP 4

Double click on the selected patient's name and Order record will be displayed



MTAC No	Type of MTAC	Appointment Date	Appointment Type	Status	Updated By
MTA150007765	Diabetes Mellitus	17/05/2015	New	Cancelled	Noraini bt Saari
MTA150007767	Diabetes Mellitus	18/05/2015	New	Scheduled	Noraini bt Saari

Figure 3.1.1-2 MTAC Order

Note

- Once click on the selected patient name, the summary of patient information will be displayed in the patient banner. The patient banner will be displayed at the specific screen which is required patient information. Below is the list of patient information:
 - Patient Name
 - Patient Address
 - Patient IC No
 - Patient Phone and Email
 - Patient Age
 - Patient Diagnosis
 - Patient Gender
 - Patient Allergy
 - Patient MRN
- Below options are provided for user to view the additional patient's information. Click on the hyperlink as below:
 - a) **Counselling Material**
 - User able to download and use medication counselling material during the counselling session
 - b) **Lab Parameter**
 - Patient's laboratory test results and standard parameter results for laboratory test
 - c) **Counselling History**
 - Patient's previous medication counselling history records
 - d) **MTAC History**
 - Patient's previous MTAC History records
 - e) **Demographic**
 - Patient's demographic details
 - f) **Pharmacist Notes**
 - Pharmacist notes according to type of service such as CP1, CP2, MTAC, TDM and etc

g) **Medication Profile**

- Patient's current medication and previous medication history records

h) **Other Appointments**

- Provides information if there are any other appointments recorded for the patient

- MTAC Order Details will be displayed as below:

- MTAC Order No – Auto generated by system
- Type of MTAC
- Priority
- To Be Counselling By
- Ordered By
- Status - Status of the order
- Appointment Date
- Appointment Type
- Remarks
- Ordered Date/Time

- Search result of MTAC History order list of the patient will be displayed:

- MTAC No
- Type of MTAC
- Appointment Date
- Appointment Type
- Status
- Updated By

- User able to edit and schedule MTAC Order. Status will be defaulted as Scheduled

3.1.2 Create New MTAC Order

This function allows user to create a new order for MTAC patients.

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HOSPITAL PAKAR SULTANAH FATIMAH, MUAR

MTAC REPORTING

Select Registered Patient

MRN	Patient Name	IC No/Other Identification	Type of MTAC	Appointment Date	Appointment Type	Status	MTAC Consultation Status	Updated By
HPSF00014522	FXXXXX XX XX XXXX		Warfarin	02/06/2014	Follow Up	Scheduled		Roon Shara Tim
HPSF00019574	TX XX XXX		Warfarin	05/06/2014	Follow Up	Scheduled		
HPSF00014031	XXXXXXXXXX XX XXXXXXXXXXXX		Warfarin	05/06/2014	Follow Up	Scheduled		
HPSF00013579	MXXXXX XX XXXX		Warfarin	05/06/2014	Follow Up	Scheduled		
HPSF00019584	MX XX XXX XXX XXXX		Warfarin	05/06/2014	New	Scheduled		
HPSF00016491	HX XX XX		Warfarin	05/06/2014	Follow Up	Scheduled		
HPSF00015162	MX XXX XXX XXXXXXXX		Warfarin	05/06/2014	Follow Up	Scheduled		

Figure 3.1.2-1 MTAC Reporting Listing Page

STEP 1

Click on 'Pharmacy Transaction' menu followed by 'Clinical' then 'MTAC' and 'MTAC Reporting' sub menu

STEP 2

Click on the button to search for registered patient at the

Select Registered Patient

PHARMACY INFORMATION SYSTEM
HOSPITAL PAKAR SULTANAH FATIMAH, MUAR

MTAC REPORTING

Select Registered Patient

3

4

5

Patient Search

Patient MRN	Patient Name	IC No/Other Identification
HPSF00000001	XXXX XX XXXX	
HPSF00000002	XXXXXXXX XXXX XXXX	
HPSF00000003	XXXXXXXXXX XXXX XXXX	
HPSF00000004	XXXX XXXXXX XXX XXX XXXX	
HPSF00000005	FX XXX XXXX XXX XXXX XXXX	
HPSF00000006	MX XXXX XX XXXXXX	
HPSF00000007	MX XXXXXX XXXXXX XXX XXXX XXXXXX	
HPSF00000008	NX XXXX XX XXXX XXXXXX	
HPSF00000009	CXXXX XXXX XX	
HPSF00000010	NX XXXXX XXXXX XXXXX XXXXXXXX	

Figure 3.1.2-2 Patient Search

Note

- Search MRN screen will be displayed as per Figure Patient search screen will be displayed as shown in Figure 3.1.2-2
- On this screen, user will be able to search existing patient record by:
 - a) MRN
 - b) Patient Name
 - c) Ordered By
 - d) Ordered From
 - e) Appointment Date
 - f) To Be Counseled By
 - g) ID No
 - h) Type of MTAC
 - i) Appointment Type
 - j) Ordered To
 - k) Priority
 - l) Status
- User able to view the list of MTAC order at the listing page as per Figure 3.1.2-2
- If need to re-schedule the order again, click on the selected patient name and continue to proceed re-schedule process.

STEP 3

Search existing patient record as follow: -

Field	Description	Remark
Patient MRN	Patient Medical Record Number	Search option: Type the MRN either in full or partially: Example: HPSF00001234 or "1234"
Patient Name	Patient's name	Allow to search by full or partial patient name
ID No	Identification Number	Allow to search by full or partial ID Number

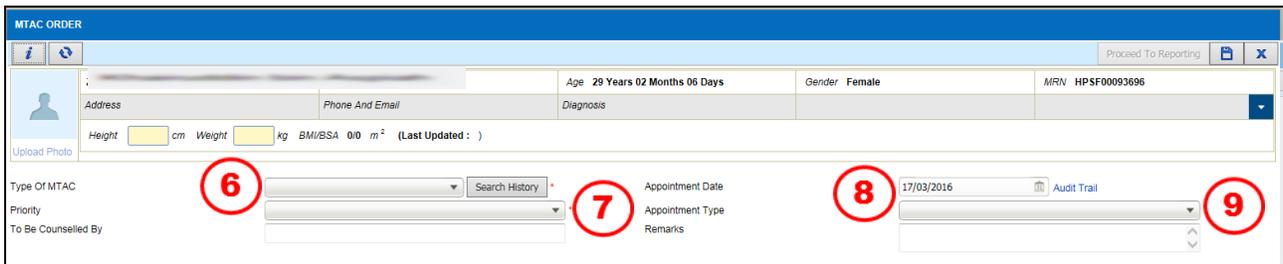
Table 3.1.2-1

STEP 4

Click on the  button to search for the patient and system will display all the registered patients

STEP 5

Click on  button to add a new MTAC order record as Figure 3.1.2-3



The screenshot shows the 'MTAC ORDER' form with the following fields and callouts:

- 6**: Type Of MTAC dropdown menu.
- 7**: Appointment Date field.
- 8**: Appointment Type dropdown menu.
- 9**: Remarks text area.

Other visible fields include: Address, Phone And Email, Age (29 Years 02 Months 06 Days), Gender (Female), MRN (HPSF00093696), Height (cm), Weight (kg), BMI/BSA (0/0 m²), and To Be Counseled By.

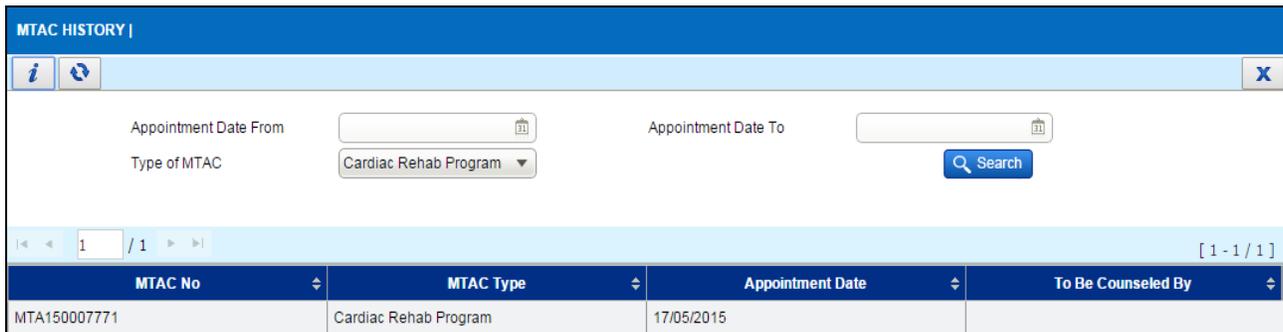
Figure 3.1.2-3 MTAC Order

STEP 6

Select **Type Of MTAC** from the drop-down box

Note

- **Type of MTAC** listed depends on the facility's MTAC availability.
- Select **Type of MTAC** and click on the **Search History** button. System will display previous MTAC History details (according to the selected MTAC type) in the pop up window as shown in Figure 3.1.2-4.
- MTAC History will also be listed at the bottom of the 'MTAC Order' screen.



The screenshot shows a pop-up window titled "MTAC HISTORY". It contains search filters for "Appointment Date From", "Appointment Date To", and "Type of MTAC" (set to "Cardiac Rehab Program"). A "Search" button is present. Below the filters is a table with the following data:

MTAC No	MTAC Type	Appointment Date	To Be Counseled By
MTA15000771	Cardiac Rehab Program	17/05/2015	

Figure 3.1.2-4 MTAC History

STEP 7

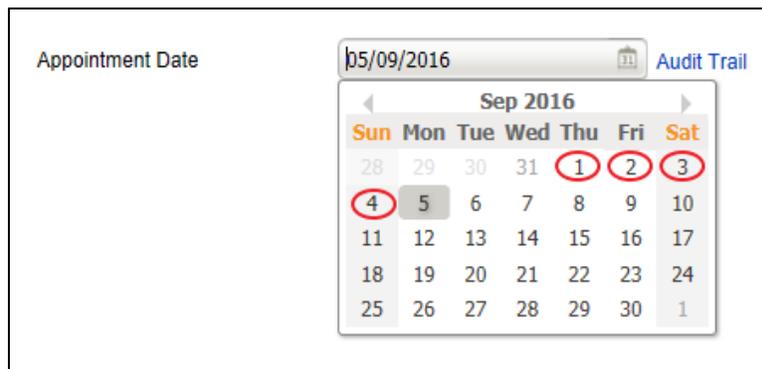
Select **Priority** as listed from the drop down box

- Routine
- Urgent

STEP 8

Click on the  button to select **Appointment Date**

Note



The screenshot shows the "Appointment Date" field with a calendar icon. The date "05/09/2016" is selected. A calendar for "Sep 2016" is displayed, showing dates from 28 to 1. The dates 1, 2, 3, and 4 are circled in red, indicating they are selectable options. An "Audit Trail" link is visible next to the date field.

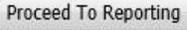
- Click on the [Audit Trail](#) hyperlink to view a list of changes/amendment on the same MTAC report if there is any.
- User is allow to select the date from 5 days back. For example today is **5/9/2016**, user can select **31 Aug, 1, 2, 3 and 4 Sept**.

STEP 9

Select **Appointment Type** as listed from the drop-down box

- New
- New Reschedule
- Follow Up
- Follow Up Reschedule

Note

- User will be able to enter **To Be Counseled By** person name and **Remarks** if required.
- The **Status** of the order will be changed to 'Scheduled' if the **Appointment Date** is selected.
- Additional information will be displayed for the **Type of MTAC** 'Warfarin'.
- User can click on the  button to save the MTAC Order and system will proceed to 'MTAC Reporting' window.
- Assessment section is automatically copied from the previous/latest visit.
- 'Specific details' will be automatically copied from the latest record only for the same **Type of MTAC**.

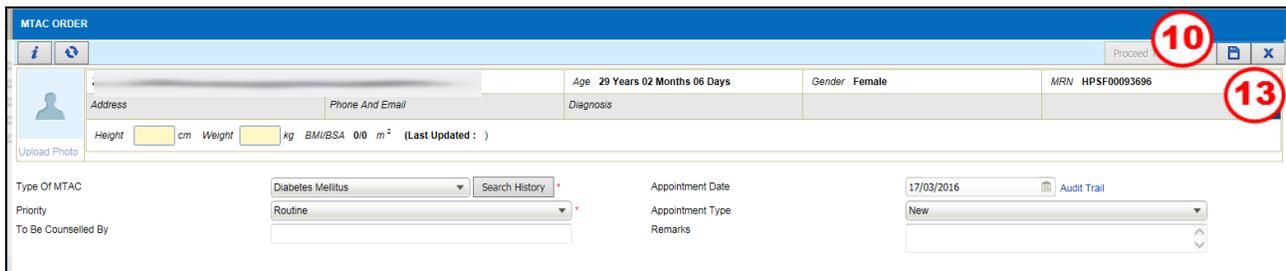


Figure 3.1.2-5 MTAC Order

STEP 10

Click on the  button to save the record

STEP 11

Click on the  button to confirm saving of order

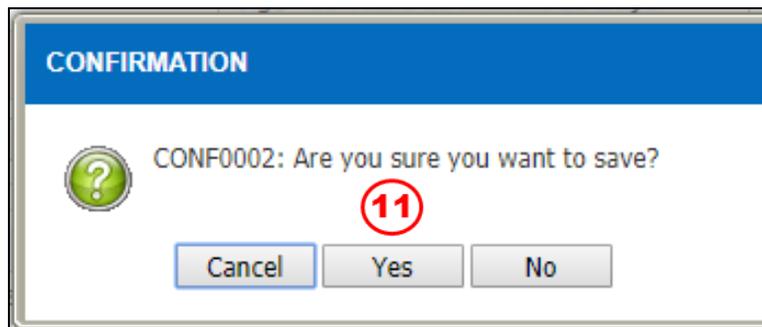


Figure 3.1.2-6 Confirmation Alert Message

STEP 12

Click on the  button to confirm record

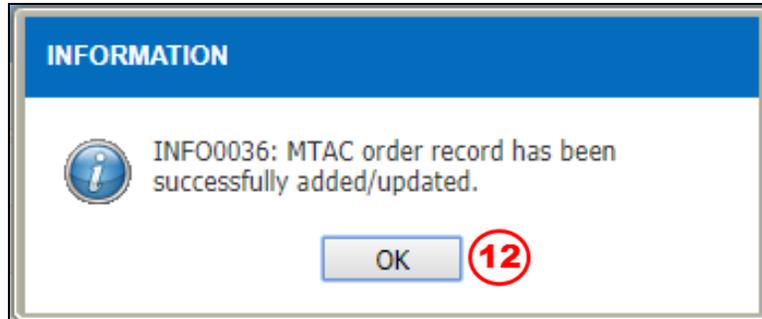


Figure 3.1.2-7 Information Alert Message

STEP 13

Click on the  button to close record as shown in Figure 3.1.2-5

3.1.3 Reschedule MTAC Order

This function is used to reschedule MTAC appointment date

MTAC ORDER

Age 07 Years 05 Months 28 Days Gender Male MRN HPSF0000009

Address Phone And Email Diagnosis No known Allergies

Height cm Weight kg BMI/BSA 0.0 m² (Last Updated :)

MTAC Order No: MTA140001126

Type Of MTAC: Renal Transplant

Priority: Routine

To Be Counselling By: [Empty]

Ordered By: [Empty]

Status: Scheduled

Appointment Date: 06/11/2014

Appointment Type: [Empty]

Remarks: [Empty]

Ordered Date/Time: [Empty]

Figure 3.1.3-1 MTAC Order

Note

Repeat **STEP 1** to **4** as in section [3.1.1 View Existing Order](#) before performing reschedule MTAC order for patient.

STEP 1

Click on the button to edit MTAC order

STEP 2

Click on the button to select a different **Appointment Date**

Note

- User have to change the **Appointment Type** to **New Reschedule** or **Follow Up Reschedule** after selecting the new **Appointment Date**.
- User will be able to edit **Appointment Date** at 'MTAC Order' screen only before the MTAC Reporting is saved.
- Click on the [Audit Trail](#) hyperlink to view a list of changes/amendment on the same MTAC report if there is any.

MTAC ORDER

Age 23 Years 07 Months 13 Days Gender Female MRN HPSF00084279

Address Phone And Email Diagnosis **Known Allergies**

Height 158 cm Weight 43 kg BMI/BSA 17.2 / 1.37 m² Update (Last Updated : 17/05/2015)

MTAC Order No: MTA150007767

Type Of MTAC: Diabetes Mellitus

Priority: Routine

To Be Counselling By: Noraini bt Saari

Ordered By: [Empty]

Status: Scheduled

Appointment Date: 19/05/2015

Appointment Type: New

Remarks: [Empty]

Ordered Date/Time: 17/05/2015 02:52

MTAC HISTORY

MTAC No	Type of MTAC	Appointment Date	Appointment Type	Status	Updated By
MTA150007765	Diabetes Mellitus	17/05/2015	New	Cancelled	Noraini bt Saari
MTA150007767	Diabetes Mellitus	18/05/2015	New	Scheduled	Noraini bt Saari

Figure 3.1.3-2 MTAC Order

STEP 3

Click on the  button to save the record

STEP 4

Click on the  button to confirm saving of order

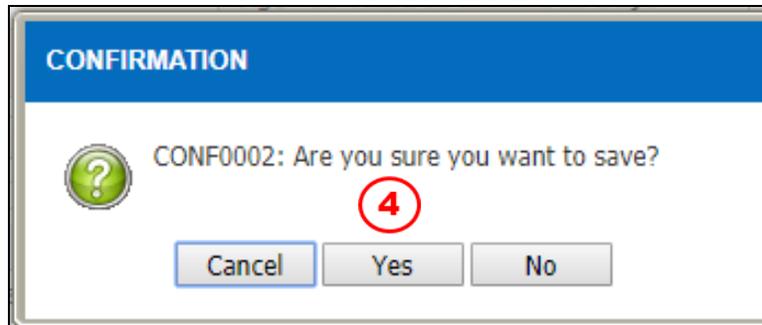


Figure 3.1.3-3 Confirmation alert message

STEP 5

Click on the  button to confirm record

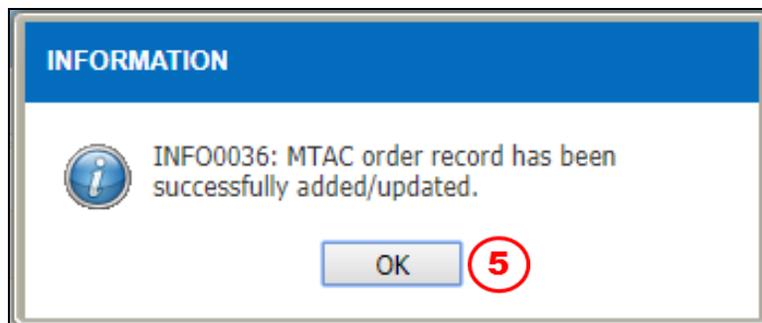


Figure 3.1.3-4 Information alert message

STEP 6

Click on the  button to close record as shown in Figure 3.1.3-2

3.1.4 Cancel MTAC Order

This function is used to cancel an existing MTAC order

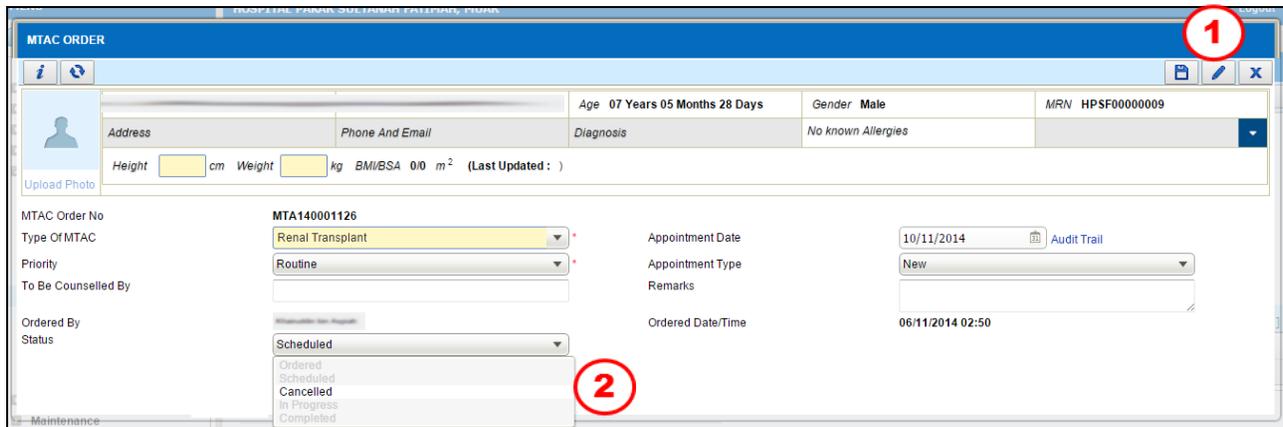


Figure 3.1.4-1 MTAC Order

Note

Repeat **STEP 1** to **4** as in section [3.1.1 View Existing Order](#) to cancel an existing MTAC order for patient.

STEP 1

Click on the  button to edit MTAC order

STEP 2

Select **Status** as 'Cancelled' from the drop down box

Note

- User will be able to cancel order at 'MTAC order' screen only before the MTAC Reporting is saved.
- Only order with **Status** 'Ordered' and 'Scheduled' can be cancelled.

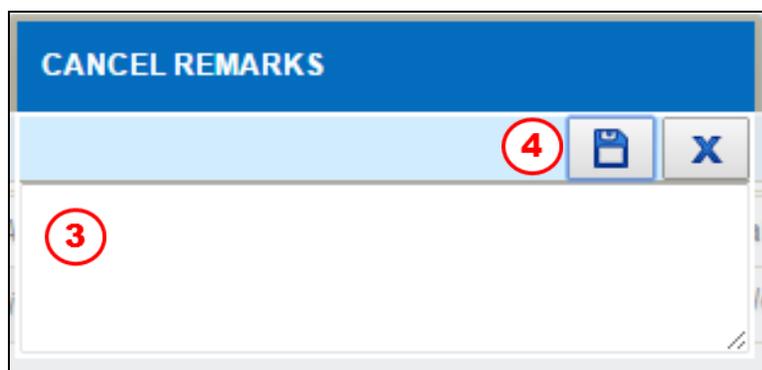


Figure 3.1.4-2 Cancel Remarks

STEP 3

Enter **Cancel Remarks** and save the record

STEP 4

Click on the  button to save record

STEP 5

Click on the  button to confirm saving of order

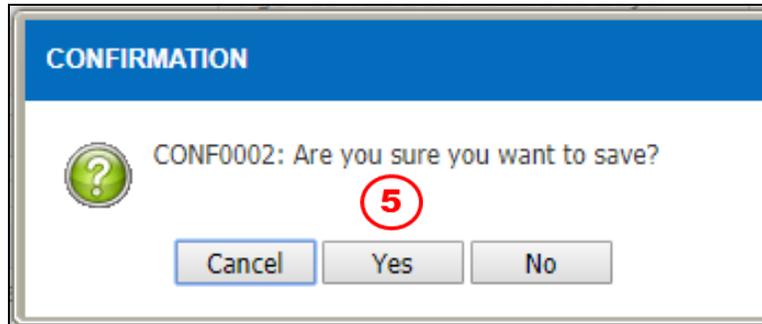


Figure 3.1.4-3 Confirmation Alert Message

STEP 6

Click on the  button to confirm record

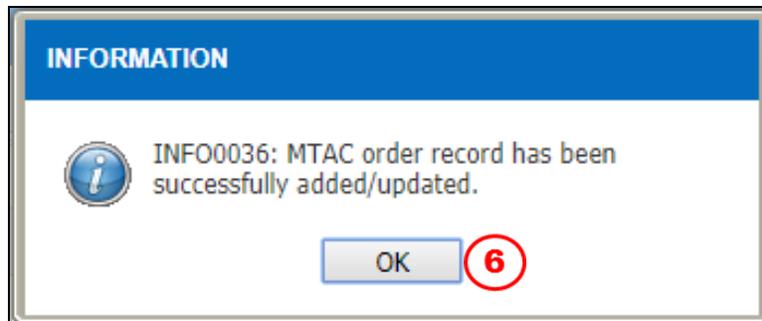


Figure 3.1.4-4 Information Alert Message

3.2 MTAC Reporting

This function is used to search and view existing MTAC reporting or record new MTAC reporting

3.2.1 Create New MTAC Reporting With No Specific Details

This function allow user to record new MTAC reporting with no specific details for MTAC patient

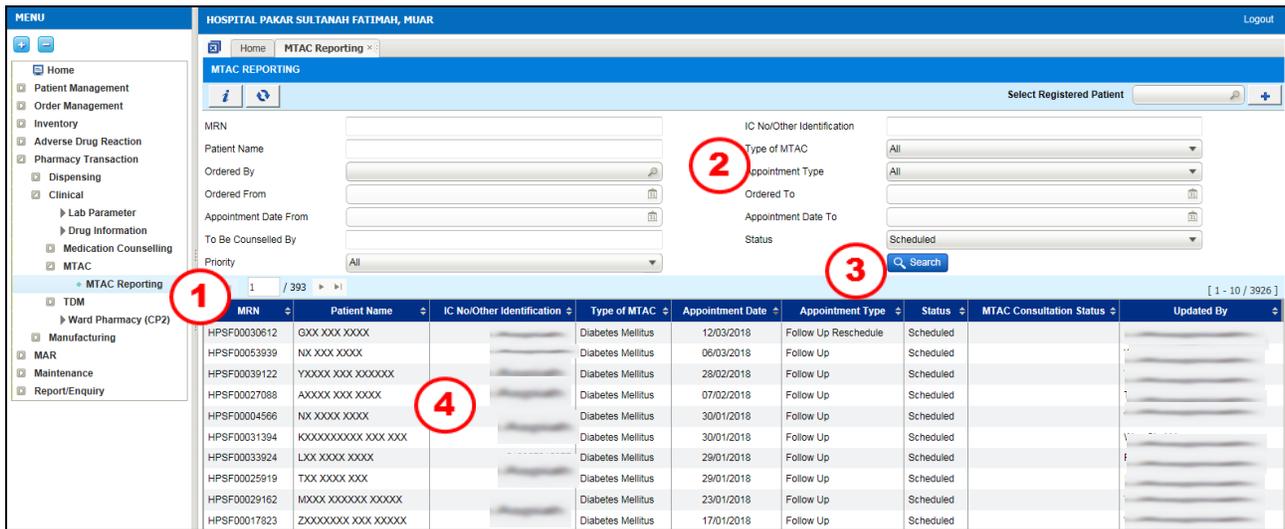


Figure 3.2.1-1 MTAC Reporting Listing Page

STEP 1

Click on 'Pharmacy Transaction' menu followed by 'Clinical' then 'MTAC' and 'MTAC Reporting' sub menu

STEP 2

Search for existing patient record by below criteria:

Field	Description	Remark
MRN	Patient Medical Record Number	Search option: Type the MRN either full or partial: Example: HPSF00001234 or "1234"
Patient Name	Patient Name	Allow to search by patient full name or partial
Ordered by	Ordered by	Able to filter and search by ordered by
Ordered from	Ordered from	Able to filter and search by ordered from
Appointment Date From	Appointment Date From	Able to filter and search by appointment date before
To Be Counselling by	To Be Counselling by	Able to filter and search by to be counselling by
Priority	- All - Urgent - Routine	Able to filter and search by priority
ID No/ Other Identification	Identification Number	Allow to search by full or partial ID Number

Type of MTAC	<ul style="list-style-type: none"> - All - Cardiac Rehab Program - Chronic Kidney Disease - Chronic Pain - Diabetes Mellitus - Dialysis - Gastrohepatology - Geriatric - Hemophilia - Heart Failure - Hepatitis - Methadone - Neurology - Osteoporosis - Psoriasis - Psychiatry - Renal Transplant - Respiratory - Retro Viral Disease - Rheumatology - Warfarin 	Able to filter and search by type of MTAC order
Appointment Type	<ul style="list-style-type: none"> - All - Follow Up - Follow Up Reschedule - New - New Reschedule 	Able to filter and search by appointment type
Ordered to	Ordered to	Able to filter and search by ordered to
Appointment Date To	Appointment Date To	Able to filter and search by appointment date the latest
Status	<ul style="list-style-type: none"> - All - Ordered - Scheduled - Cancelled - In Progress - Completed 	Able to filter and search by status

Table 3.2.1-1

STEP 3

Click on the  button to search the patient

Note

Search results of current order patient list will display:

- MRN
- ID No
- Patient Name
- Type of MTAC
- Appointment Date
- Appointment Type
- Status
- MTAC Consultation Status
- Updated By

STEP 4

Double click on the selected patient's record and the 'Consent Form' window will be displayed as shown in Figure 3.2.1-2

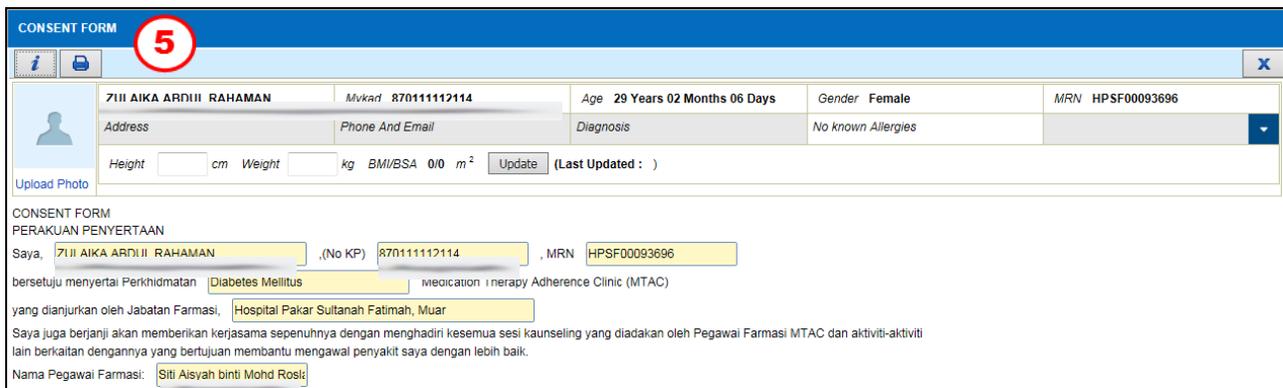


Figure 3.2.1-2 Consent Form

STEP 5

Click on the  button to print the consent form

STEP 6

Click on the  to confirm printing Consent form and new screen will be displayed for user to print Consent Form as per Figure 3.2.1-4

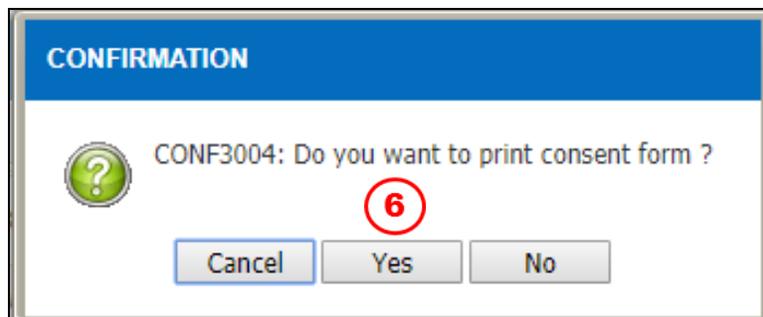


Figure 3.2.1-3 Print Report Alert Message



MEDICATION THERAPY ADHERENCE CLINIC (MTAC)
Jabatan Farmasi, Hospital Pakar Sultanah Fatimah, Muar

PERAKUAN PENYERTAAN

S  A, (No KP  MRN HPSF00186863 bersetuju menyertai Perkhidmatan DIABETES MELLITUS Medication Therapy Adherence Clinic (MTAC) oleh Jabatan Farmasi, HOSPITAL PAKAR SULTANAH FATIMAH, MUAR. Saya juga berjanji akan memberikan kerjasama sepenuhnya dengan menghadiri kesemua sesi kaunseling yang diadakan oleh Pegawai Farmasi MTAC dan aktiviti-aktiviti lain berkaitan dengannya yang bertujuan membantu mengawal penyakit saya dengan lebih baik.

.....
Tandatangan

Nama pesakit: 

Tarikh: 06/09/2017

.....
Tandatangan

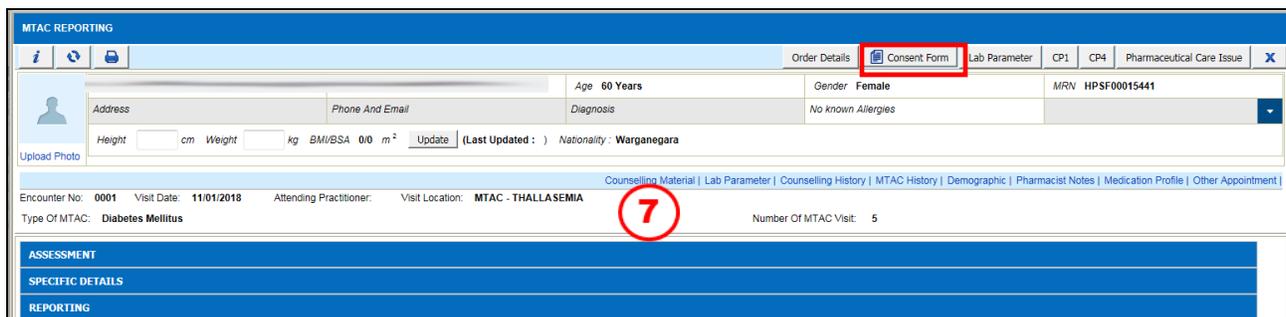
Nama Peg. Farmasi: 

Tarikh: 06/09/2017

Figure 3.2.1-4 Print Consent Form

Note

- Consent form details will automatically display:
 - a) Patient name
 - b) ID No
 - c) MRN
 - d) Type of MTAC
 - e) Facility Name
- Consent form is mandatory to be printed for new visit of MTAC appointment only. For subsequent visits, user can print the consent form by click on the  button at the 'MTAC Reporting' screen



The screenshot shows the 'MTAC REPORTING' interface. At the top, there are navigation tabs: 'Order Details', 'Consent Form' (highlighted with a red box), 'Lab Parameter', 'CP1', 'CP4', and 'Pharmaceutical Care Issue'. Below the tabs, there is a patient information section with fields for 'Address', 'Phone And Email', 'Age 60 Years', 'Gender Female', and 'MRN HPSF00015441'. There are also input fields for 'Height' (cm) and 'Weight' (kg), and a 'BMI/BSA' field. A 'Diagnosis' field is highlighted with a red circle containing the number 7, showing 'MTAC - THALASSEMIA'. Other fields include 'No known Allergies' and 'Nationality: Warganegara'. At the bottom, there are tabs for 'ASSESSMENT', 'SPECIFIC DETAILS', and 'REPORTING'. The 'ASSESSMENT' tab is currently selected.

Figure 3.2.1-5 MTAC Reporting Screen

Note

- Type of MTAC
- No of MTAC Visit
- Assessment Tab
- Reporting Tab

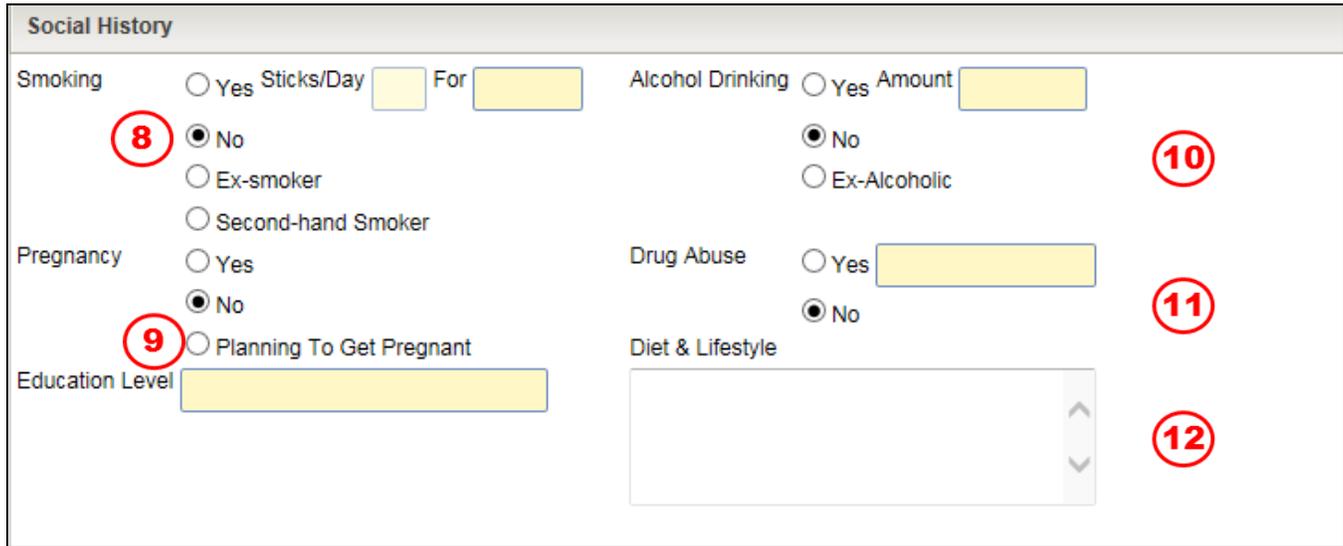
Assessment

- Click on the Assessment tab
- There are 4 sections under the Assessment tab as below:
 - a) Social History
 - b) Family History
 - c) Medical History
 - d) Past Medication History

Social History

STEP 7

Enter **Estimated Dry Body Weight in Kg**



Social History

Smoking Yes Sticks/Day For No Ex-smoker Second-hand Smoker

Pregnancy Yes No Planning To Get Pregnant

Education Level

Alcohol Drinking Yes Amount No Ex-Alcoholic

Drug Abuse Yes No

Diet & Lifestyle

Figure 3.2.1-6 MTAC Reporting – Assessment on Social History

STEP 8

Select on **Smoking** radio button

- Yes
- No
- Ex-smoker
- Second-hand Smoker

Note

Sticks/Day and **for** fields will be enabled only if user select **Yes** and **Ex-smoker** radio button

STEP 9

Select on **Pregnancy** radio button

- Yes
- No
- Planning to Get Pregnant

STEP 10

Select on **Alcohol Drinking** radio button

- Yes
- No
- Ex-Alcoholic

Note

Amount field will be enabled if user select 'Yes' radio button



STEP 11

Select **Drug Abuse** radio button

- Yes
- No

Note

Blank field will be enabled if user select 'Yes' radio button

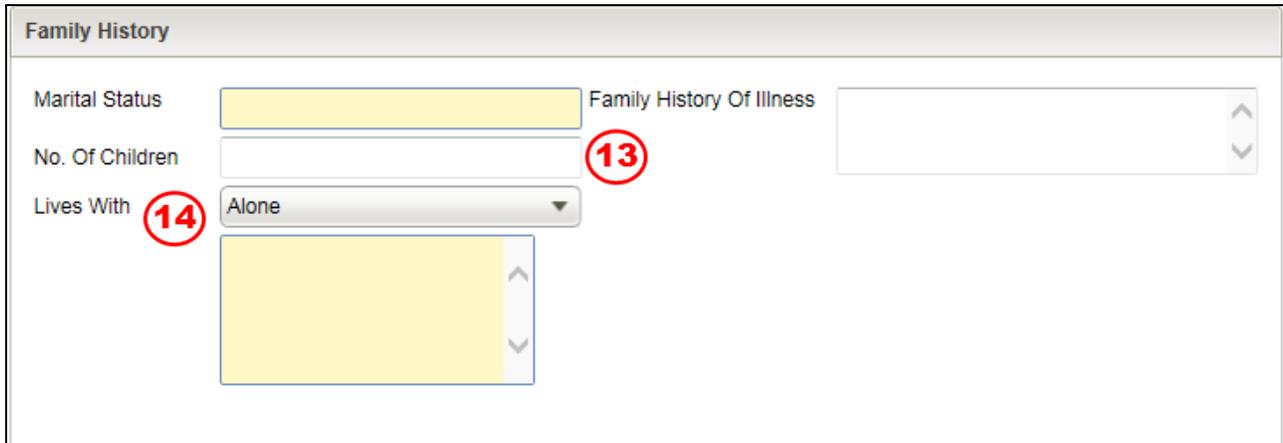
STEP 12

Enter **Diet & Lifestyle**

Note

- **Pregnancy** field will only be available for married female
- **Education Level** and **Marital Status** information will be retrieved from Patient's Demographic

Family History



The screenshot shows a 'Family History' form with the following fields:

- Marital Status: A yellow text input field.
- No. Of Children: A white text input field, highlighted with a red circle containing the number 13.
- Lives With: A dropdown menu with 'Alone' selected, highlighted with a red circle containing the number 14.
- Family History Of Illness: A large white text area with a scroll bar.

Figure 3.2.1-7 MTAC Reporting – Assessment on Family History

STEP 13

Enter **No. Of Children**

STEP 14

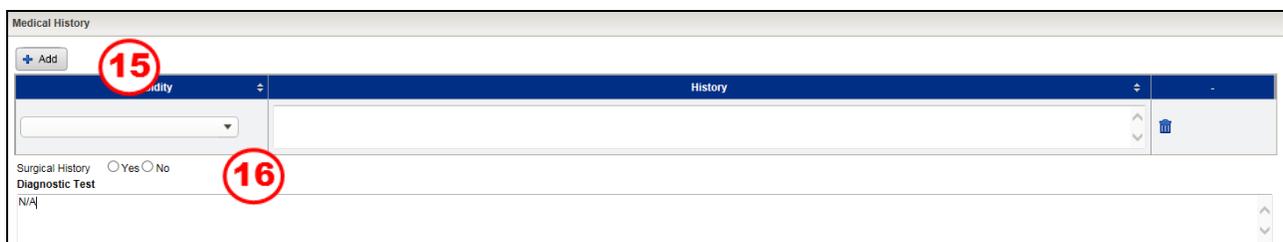
Select **Lives with** from the drop-down box

- Alone
- Family Members
- Nursing Home
- Others

Note

- Blank fields will be enabled if user select 'Others' from the drop-down box
- Enter **Family History of Illness** if available

Medical History



The screenshot shows a 'Medical History' form with the following elements:

- + Add button: Highlighted with a red circle containing the number 15.
- Comorbidity dropdown: A dropdown menu for selecting a comorbidity.
- History field: A large white text area with a scroll bar and a trash icon, highlighted with a red circle containing the number 16.
- Surgical History: Radio buttons for Yes and No.
- Diagnostic Test: A text input field with 'N/A' entered.

Figure 3.2.1-8 MTAC Reporting – Assessment on Medical History

STEP 15

Click **+ Add** button and select any **Comorbidity** from drop-down menu and Fill up at **History** field.

Note

- User can enter multiple Comorbidity record by click **+ Add** button.

- *There are several type **Comorbidity**:*
 - *Hypertension*
 - *Diabetes Mellitus*
 - *Tuberculosis*
 - *AF*
 - *Asthma*
 - *Hepatitis B*
 - *Hepatitis C*
 - *Heart Failure*
 - *ESRD*
 - *COPD*
 - *RVD*
 - *Other*
- ***The History field can be free text 500 characters***

STEP 16

Select **Surgical History** radio button

- Yes
- No

Note

- *User can enter **Diagnosis Test** that already change to 1 box only and can be fill up 2000 characters.*

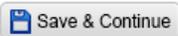
The screenshot shows the 'MTAC REPORTING' interface. At the top, there are navigation tabs: 'Order Details', 'Consent Form', 'Lab Parameter', 'CP1', 'CP4', and 'Pharmaceutical Care Issue'. The 'CP1' tab is highlighted with a red box. Below the tabs, patient information is displayed, including 'My', 'Age 73 Years 05 Months 16 Days', 'Gender Female', and 'MRN HPSF00019577'. There are also fields for 'Height', 'Weight', 'BMI/BSA', and 'Nationality: Warganegara'. The 'Type Of MTAC' is 'Warfarin' and 'Number Of MTAC Visit' is '11'. The 'Medical History' section includes 'Comorbidity' and 'History' (both with 'No Records Found!') and 'Surgical History' (Yes/No). The 'Past Medication History' section has two tables, both with 'No Records Found!'.

Figure 3.2.1-9 MTAC Reporting – Assessment on Past Medication History

Note

Click on the  button to add 'Past Medication History' as shown in Figure 3.2.1-9. Further details in Section 3.2.2 Other Tabs

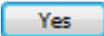
STEP 17

Click on the  button as shown in Figure 3.2.1-10 to save assessment and continue with reporting section

This screenshot shows the 'Past Medication History' section. It contains two tables. The first table has columns: 'Medication (Specify Strength)', 'Dose', 'Frequency', 'Balance From Previous Supply', 'Medication Status', 'Source of Medication', and 'Comments'. The second table has columns: 'Non-Prescription Medication(Includes Herbal/Vitamin/Other Supplements)', 'Reason For Taking', 'Source of Medication', and 'Balance/Comments'. Both tables show 'No Records Found!'. At the bottom right, there is a 'Save & Continue' button circled in red with the number 17.

Figure 3.2.1-10 MTAC Reporting – Assessment Past Medication History

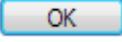
STEP 18

Click on the  button to confirm

The dialog box has a blue header with the text 'CONFIRMATION'. Below the header, there is a question mark icon and the text 'CONF0002: Are you sure you want to save?'. At the bottom, there are three buttons: 'Cancel', 'Yes', and 'No'. The 'Yes' button is circled in red with the number 18.

Figure 3.2.1-11 Confirmation Alert Message

STEP 19

Click on the  button to confirm record

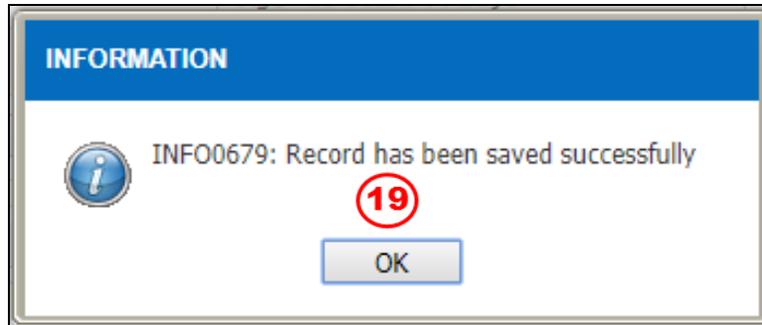


Figure 3.2.1-12 Information Alert Message

Note

- User will be able to close the record at reporting screen or continue with the reporting section.
- Click on the **Reporting** row (blue color) once and scroll down to continue with the reporting process.
- “Recommended Lab Test field” was removed and rearranged the Pharmacist Note and Remarks field.
- ‘Compliance Score’ was renamed to “Adherence Score”.

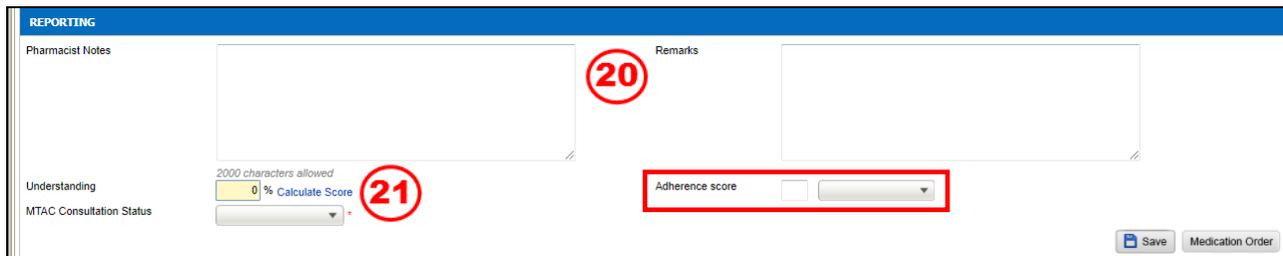


Figure 3.2.1-13 MTAC Reporting

STEP 20

Enter the **Pharmacist Notes** and **Remarks** if available

STEP 21

Click on the  hyperlink for **Understanding** and the ‘**Review of Patient’s Understanding (Medication) DFIT**’ will be displayed as shown in Figure 3.2.1-14

Drug	Dosage Form	Drug Code	Drug Name	Active Ingredient	Drug Category	Strength	UOM	Indication	Time of Administration
Telmisartan 80 mg Tablet	Oral Tablet	B01AA03520T100 1XX	Warfarin Sodium 1 mg Tablet	Warfarin	B	1.0000 mg			YES
	Oral Tablet	C02CA04196T500 1XX	Doxazosin Mesilate 4 mg CR Tablet	Doxazosin	A*	4.0000 mg			
	Oral Tablet	C09CA07000T100 2XX	Telmisartan 80 mg Tablet	Telmisartan	A/KK	80.0000 mg			
	Oral Tablet	H02AB06000T100 1XX	Prednisolone 5 mg Tablet	Prednisolone	B	5.0000 mg			
	Oral Tablet	H02AB06000T100 1XX	Prednisolone 5 mg Tablet	Prednisolone	B	5.0000 mg			
	Oral Solution	N07BC02110L900 1XX	Methadone 5mg/ml Syrup	Methadone	A/KK	5.0000 mg			

Figure 3.2.1-14 Review of Patient's Understanding (Medication) DFIT

STEP 22

Select **Drug** by clicking on the button

Note

- Select **Dose, Frequency, Indication and Time of Administration** from the radio button:
 - Yes
 - No
- Score will be automatically calculated and displayed.

STEP 23

Click on the button to add and update at drug list

Drug	Dose	Frequency	Indication	Time of Administration
Telmisartan 80 mg Tablet	YES	YES	YES	YES

Figure 3.2.1-15 Review of Patient's Understanding (Medication) DFIT

STEP 24

Click on the button to save the Understanding calculator record

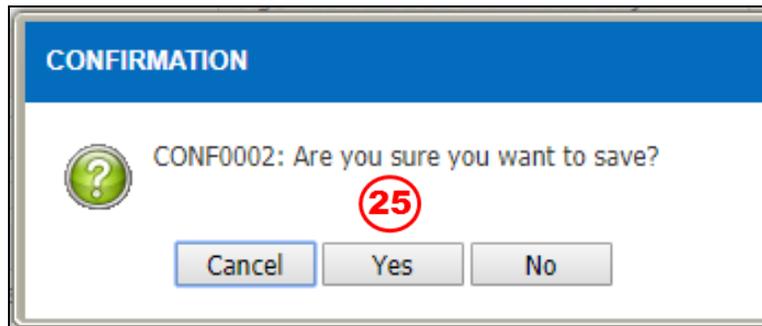


Figure 3.2.1-16 Confirmation alert message

STEP 25

Click on the  button to confirm save record

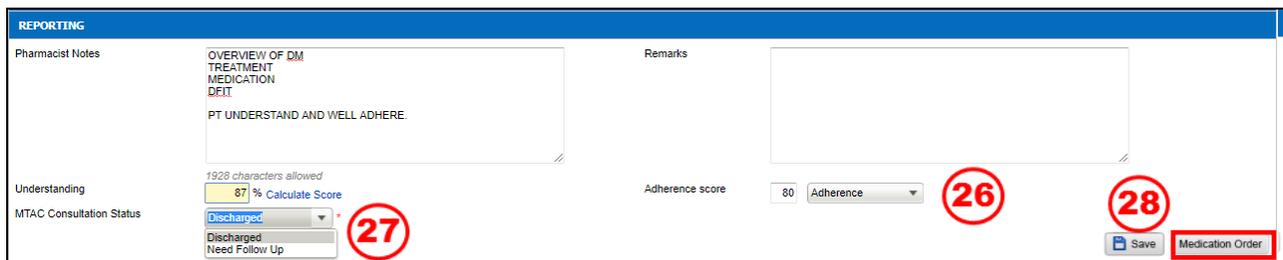


Figure 3.2.1-17 MTAC Reporting - Reporting

STEP 26

Enter the Adherence Score and select the status

- Adherence
- Non-Adherence

Note

Adherence Score is not mandatory

STEP 27

Select **MTAC Consultation Status** from the drop-down box

- Discharged
- Need Follow Up

Note

- Medication Order button reallocate at the bottom of the screen.
- Click on the  button to view medication order screen and perform MTAC medication order if necessary.

STEP 28

Click on the  button as shown in Figure 3.2.1-17

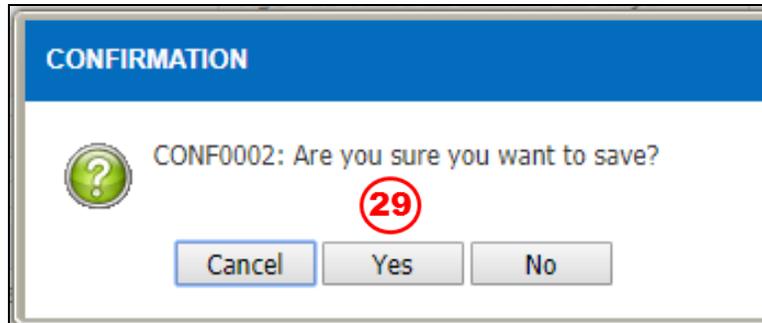


Figure 3.2.1-18 Confirmation Alert Message

STEP 29

Click on the  button to confirm save record

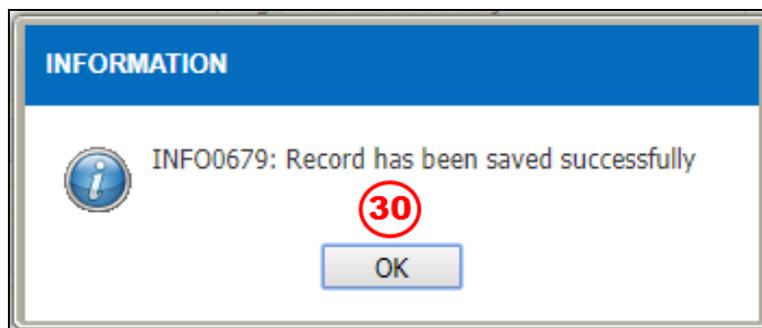
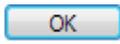


Figure 3.2.1-19 Information Alert Message

STEP 30

Click on the  button

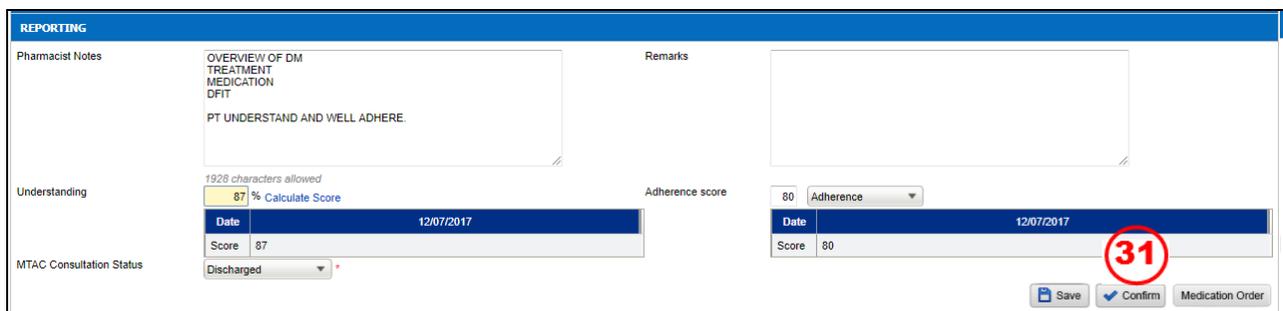


Figure 3.2.1-19 MTAC Reporting – Reporting

STEP 31

Click on the  button to confirm reporting

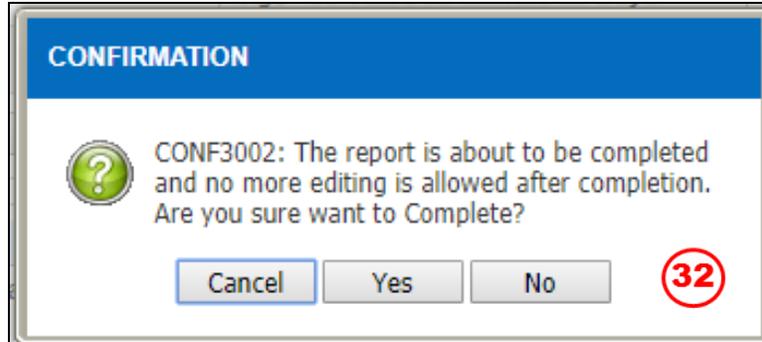


Figure 3.2.1-20 Confirmation Alert Message

STEP 32

Click on the button to complete

Note

- After user has confirmed the record, no more editing is allowed, and the boxes change to yellow color.
- User can click on the button to schedule an appointment as per Figure 3.2.1-21
- Previous Adherence Score record from previous visit is display (if any – max 5 newest record).

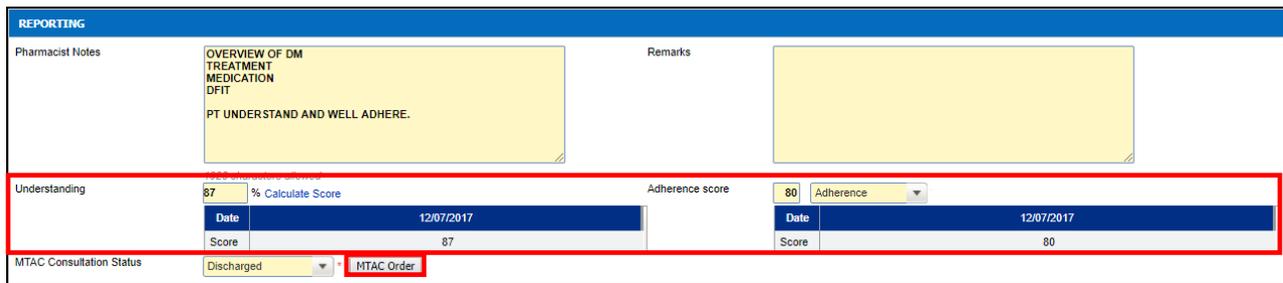


Figure 3.2.1-21 Confirmation Alert Message



Figure 3.2.1-22 MTAC Reporting - Print

- Click on the button to print the MTAC report as per Figure 3.2.1-22 and the system will show the report as per Figure 3.2.1-23

Other Issue:

No.	Intervention Date	Intervention Details		Pharmaceutical Care Issues	Pharmacist Recommendation	Prescriber Review
		Types	Description			
1	12/07/2017	Incorrect/Inappropriate/Inadequate Regimen	Dose	PCM DOSAGE 500MG	1000MG	

Patient Understanding (medication) DFIT : 87%

Patient Adherence Score : 80 - Adherence

Pharmacist Notes :
OVERVIEW OF DM
TREATMENT
MEDICATION
DFIT

Other remarks : -
PT UNDERSTAND AND WELL ADHERE.

Pharmacist Name: _____ Date: 19/07/2017

Figure 3.2.1-23 MTAC Printed Report

3.2.2 Other Tabs

Lab Parameter

MTAC REPORTING

Order Details | Consent Form | **Lab Parameter** | CP1 | CP4 | Pharmaceutical Care Issue

Mykad: [Redacted] Age: 73 Years 05 Months 16 Days Gender: Female MRN: HPSF00019577

Address: [Redacted] Phone And Email: [Redacted] Diagnosis: [Redacted] No known Allergies

Height: [Redacted] cm Weight: [Redacted] kg BMI/BSA: 0.0 m² Update (Last Updated:) Nationality: Warganegara

Encounter No: 1051 Visit Date: 24/07/2017 Attending Practitioner: [Redacted] Visit Location: KLINIK PAKAR PERUBATAN
Type Of MTAC: Warfarin Number Of MTAC Visit: 11

ASSESSMENT

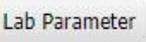
Social History: Smoking (Yes/No/Ex-smoker/Second-hand Smoker), Alcohol Drinking (Yes/No/Ex-Alcoholic), Pregnancy (Yes/No/Planning To Get Pregnant), Education Level, Drug Abuse (Yes/No), Diet & Lifestyle.

Family History: Marital Status, Family History Of Illness, No. Of Children, Lives With.

Medical History

Figure 3.2.2-1 MTAC Reporting Screen

STEP 1

Click on the  button to enter Lab Test Result and the system will show Figure 3.2.2-2

LAB PARAMETER

FBC | BUSE/RP | LFT | Coag | CE | Urine FEME | LP | **Blood Sugar** | ABG | Thyroid | RVD | Hepatitis | Drug Urine Test | Others

Full Blood Count

Sample Date/Time: [Redacted]

Sample	Result	Normal Range			
		Adult	Children	Neonates	Infant
TWBC	[Redacted] x10 ⁹ /L	4 - 11 x 10 ⁹	4.5-13.5	5-21	6-18
Neutrophils	[Redacted]	0.4-0.7	55	40	30
Lymphocytes	[Redacted]	0.22-0.44	38	63	48
Eosinophils	[Redacted]	0-0.08			
Basophils	[Redacted]	0-0.03			
RBC (/L)	[Redacted] x10 ⁶	4.5 - 6.3 x 10 ¹²	3.7 - 6.5 x 10 ¹²	3.7 - 6.5 x 10 ¹²	
Monocytes	[Redacted]				
Hb (g/dL)	[Redacted] g/100ml	Male 13.5 - 17.5 Female 12 - 16			
HCT	[Redacted]	Male 0.41 - 0.53 Female 0.36 - 0.46	0.31 - 0.37	0.28 - 0.55	0.33 - 0.39
Platelet (/L)	[Redacted] x10 ⁹	150 - 400 x 10 ⁹			
MPV	[Redacted]				
MCV (fL)	[Redacted] fL	80 - 100	76 - 80		70 - 74
MCH (pg/cell)	[Redacted]	26 - 34	26-32	29	27
MCHC (g/L)	[Redacted]	310 - 370	310 - 370	290 - 380	

Remarks: [Redacted]

Delete | Add/Update

Figure 3.2.2-2 Lab Parameter Screen

STEP 2

Click on the Lab Test Tabs as per Figure 3.2.2-2

Sample	Result	Adult	Children	Neonates & Infant
FBS (mmol/L)	<input type="text"/>	<= 7		
RBS (mmol/L)	<input type="text"/>	<= 11.1		
2HPP (mmol/L)	<input type="text"/>	<= 11.1		
HbA1c (%)	<input type="text"/>	< 6.5		

Figure 3.2.2-3 Lab Parameter Screen

STEP 3

Click on the calendar button to select the **Sample Date/Time**

STEP 4

Enter the Lab Test **Result** and **Remarks**

STEP 5

Click the **Add/Update** button and **Result List** will be updated as per Figure 3.2.2-4

Sample Date/Time	FBS (mmol/L)	RBS (mmol/L)	2HPP (mmol/L)	HbA1c (%)	Remarks
11/01/2018 12:37 PM	6	6	6	6	

Figure 3.2.2-4 Lab Parameter Screen

STEP 6

Click on the button to save the record

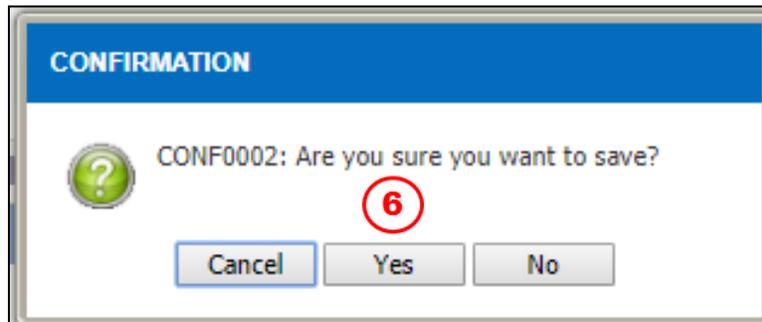
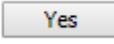


Figure 3.2.2-5 Confirmation Alert Message

STEP 6

Click on the  button to confirm

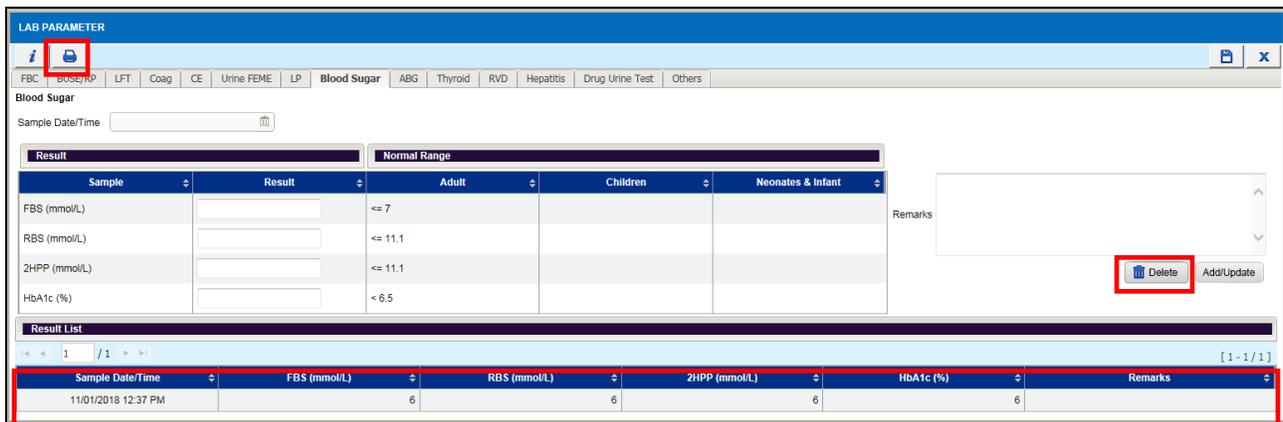


Figure 3.2.2-6 Lab Parameter Screen

Note

- To delete the record, double click the Result List and click the  button.
- To print the lab report, click on the  button as per Figure 3.2.2-6

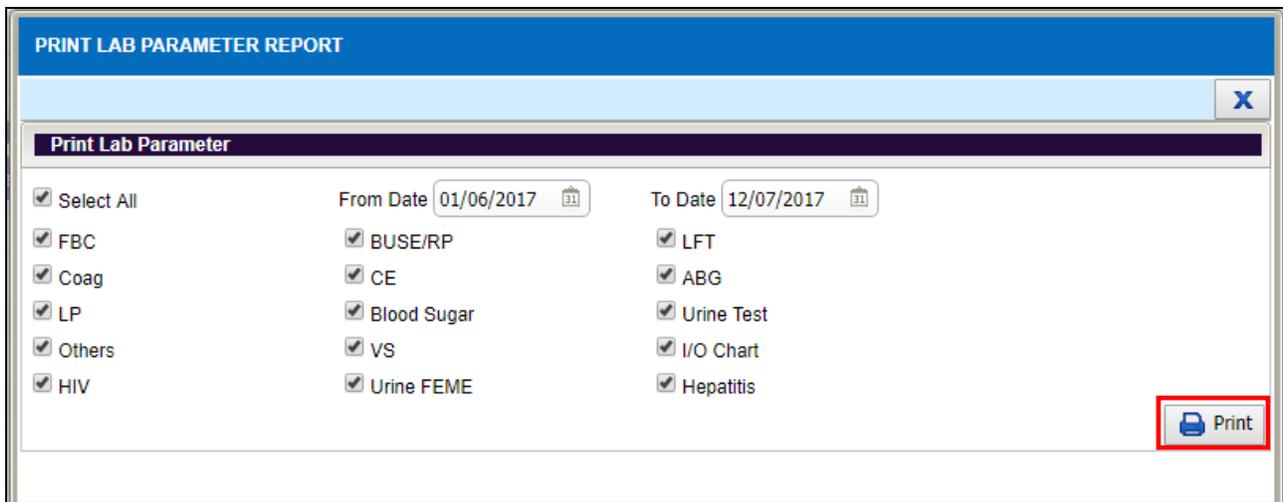


Figure 3.2.2-7 Print Lab Parameter Report

- Tick the checkbox to select the **Lab Test** and Select **From Date & To Date** by clicking the  button.
- Click the  button to print the Lab Parameter Report as per Figure 3.2.2-7

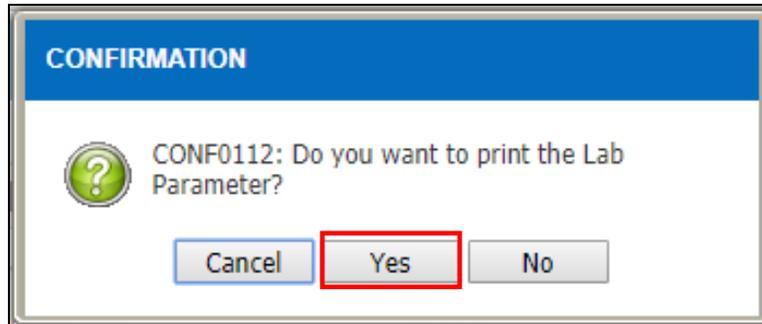
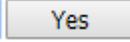


Figure 3.2.2-8 Confirmation Alert Message

- Click the  button to confirm and the system will show the Lab Parameter Report as per Figure 3.2.2-9

PATIENT NAME : PT TEST		IC NO :	AGE :
MRN NO : HPSF00186555	Weight/Height : Kg / Cm	: 68 Years 03 Months 25 Days	
WARD/BED : KLINIK PAKAR PERUBATAN /	ADMISSION DATE : 12/07/2017	GENDER : Female	
		REASON FOR ADMISSION :	

BUSE/RP

Sample Date\Type	Urea	Na	K	SrCr	CrCl	Cl	Ca	Mg	PO4-	Remarks

Coag

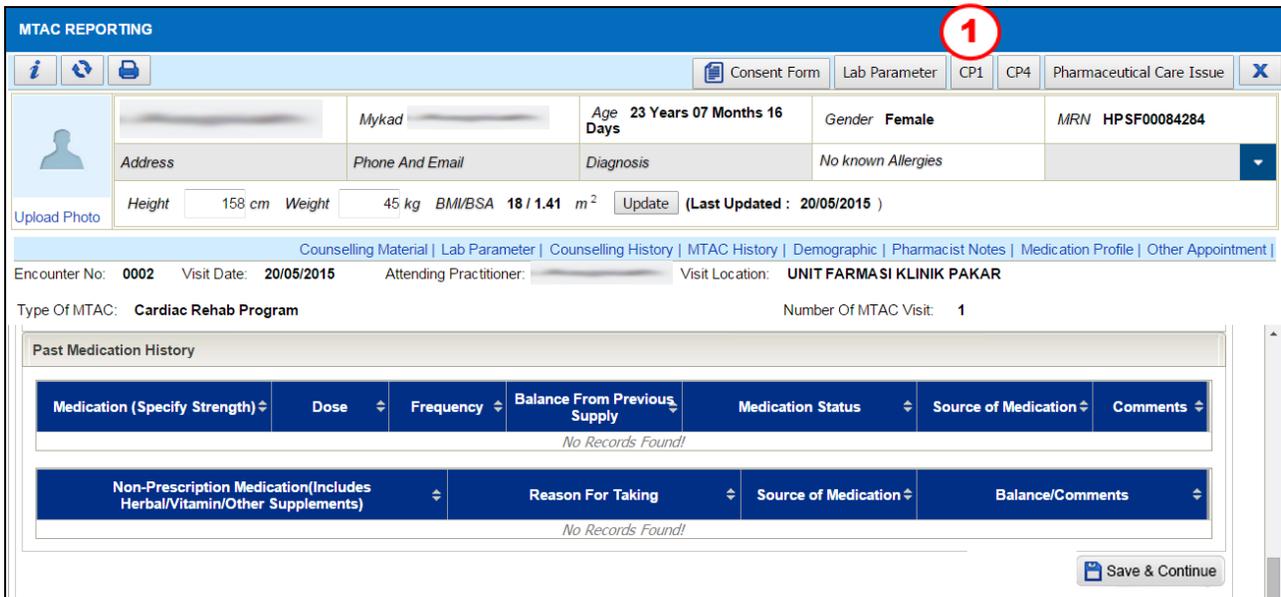
Sample Date\Type	PT	APTT	INR	Remarks
26/06/2017	13	28	1.2	All Normal

Blood Sugar

Sample Date\Type	FBS	RBS	2HPP	HbA1c	Remarks
10/07/2017	6	12	10	5	FBS 2HPP & HbA1c are normal. RBS slightly high.

Figure 3.2.2-9 Lap Parameter Printed Report

CP1



MTAC REPORTING 1

Consent Form | Lab Parameter | CP1 | CP4 | Pharmaceutical Care Issue

Mykad: [Redacted] Age: 23 Years 07 Months 16 Days Gender: Female MRN: HPSF00084284

Address: [Redacted] Phone And Email: [Redacted] Diagnosis: [Redacted] No known Allergies

Height: 158 cm Weight: 45 kg BMI/BSA: 18 / 1.41 m² Update (Last Updated: 20/05/2015)

Encounter No: 0002 Visit Date: 20/05/2015 Attending Practitioner: [Redacted] Visit Location: UNIT FARMASI KLINIK PAKAR

Type Of MTAC: Cardiac Rehab Program Number Of MTAC Visit: 1

Past Medication History

Medication (Specify Strength)	Dose	Frequency	Balance From Previous Supply	Medication Status	Source of Medication	Comments
No Records Found!						

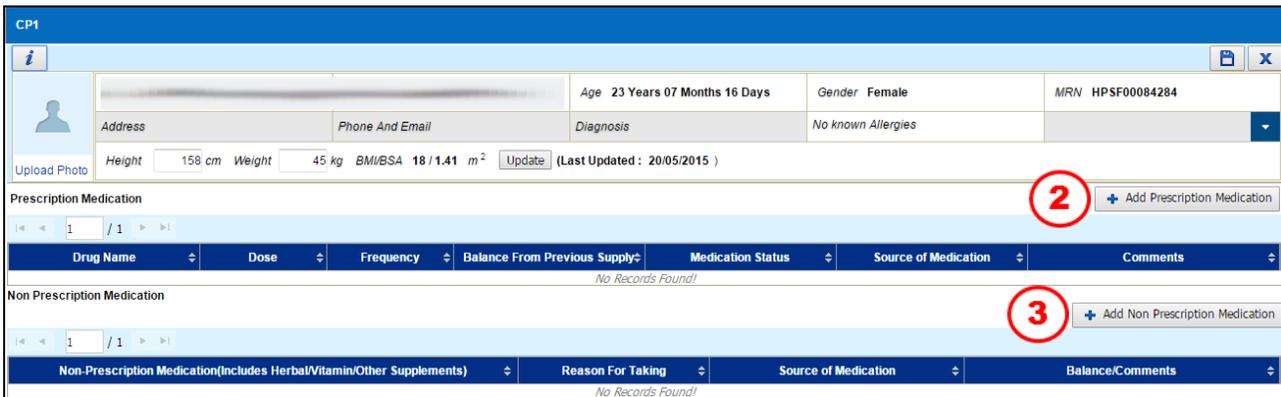
Non-Prescription Medication(Includes Herbal/Vitamin/Other Supplements)	Reason For Taking	Source of Medication	Balance/Comments
No Records Found!			

Save & Continue

Figure 3.2.2-10 MTAC Reporting – Assessment on Past Medication History

STEP 1

Click on the CP1 button to add 'Past Medication History' as shown in Figure 3.2.2-10



CP1

Age: 23 Years 07 Months 16 Days Gender: Female MRN: HPSF00084284

Height: 158 cm Weight: 45 kg BMI/BSA: 18 / 1.41 m² Update (Last Updated: 20/05/2015)

Prescription Medication 2 + Add Prescription Medication

Drug Name	Dose	Frequency	Balance From Previous Supply	Medication Status	Source of Medication	Comments
No Records Found!						

Non Prescription Medication 3 + Add Non Prescription Medication

Non-Prescription Medication(Includes Herbal/Vitamin/Other Supplements)	Reason For Taking	Source of Medication	Balance/Comments
No Records Found!			

Figure 3.2.2-11 CP1

STEP 2

Click on the + Add Prescription Medication button and the 'Prescription Medication' window will be displayed as shown in Figure 3.2.2-12. Enter the necessary information and save

Note

Past Medication History:

- *Prescription Medication.*
 - *It has certain condition whereby the drug display at prescription medication come from the latest visit patient at that facility*

- User can add prescriptions medication from other facility too
- User can fill up **Original Rx No & Order Details** drug at prescription medication

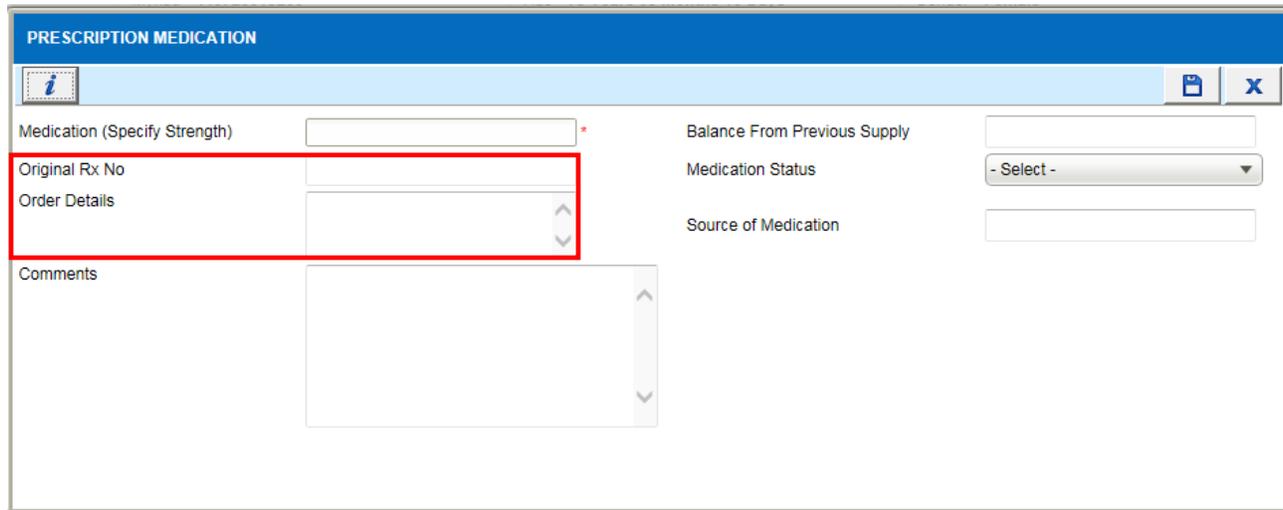
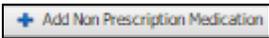


Figure 3.2.2-12 Prescription Medication

STEP 3

Click on the  button and the 'Non-Prescription Medication' window will be displayed as shown in Figure 3.2.2-13. Enter the necessary information and save

Note

Past Medication History:

- *Non-Prescription Medication.*
 - *User can add any none prescription medication that has been taken by patient in system*

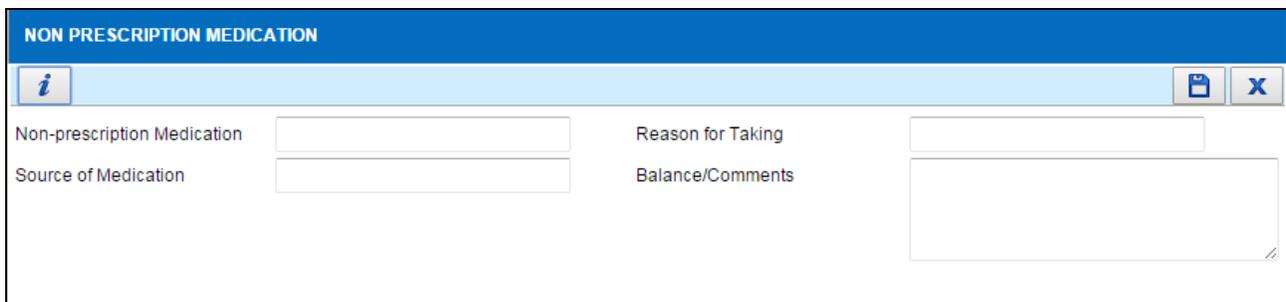
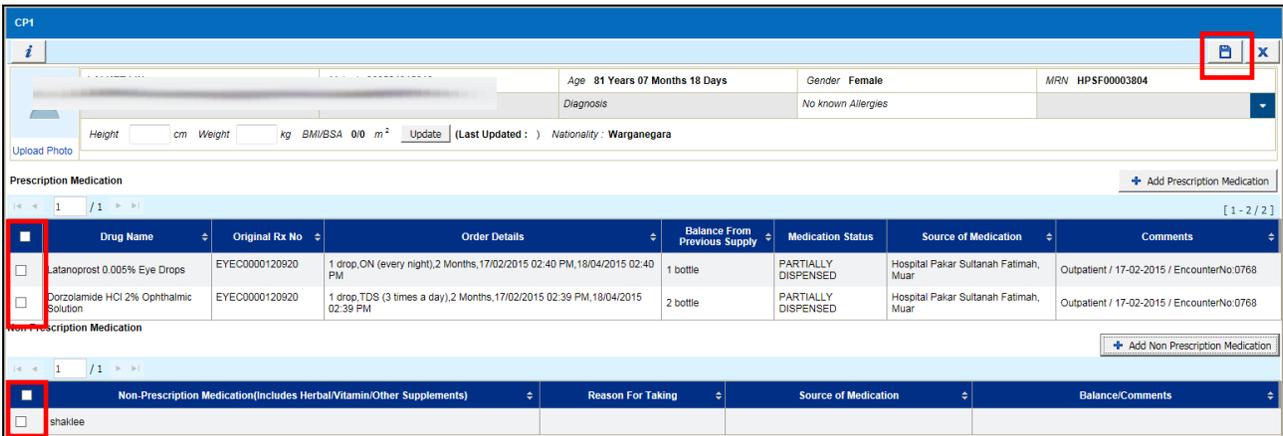


Figure 3.2.2-13 Non-Prescription Medication



CP1

Age: 81 Years 07 Months 18 Days | Gender: Female | MRN: HPSF00003804

Diagnosis: No known Allergies

Nationality: Warganegara

Prescription Medication

Drug Name	Original Rx No	Order Details	Balance From Previous Supply	Medication Status	Source of Medication	Comments
<input type="checkbox"/> Latanoprost 0.005% Eye Drops	EYEC0000120920	1 drop, ON (every night), 2 Months, 17/02/2015 02:40 PM, 18/04/2015 02:40 PM	1 bottle	PARTIALLY DISPENSED	Hospital Pakar Sultanah Fatimah, Muar	Outpatient / 17-02-2015 / EncounterNo.0768
<input type="checkbox"/> Dorzolamide HCl 2% Ophthalmic Solution	EYEC0000120920	1 drop, TDS (3 times a day), 2 Months, 17/02/2015 02:39 PM, 19/04/2015 02:39 PM	2 bottle	PARTIALLY DISPENSED	Hospital Pakar Sultanah Fatimah, Muar	Outpatient / 17-02-2015 / EncounterNo.0768

Non-Prescription Medication

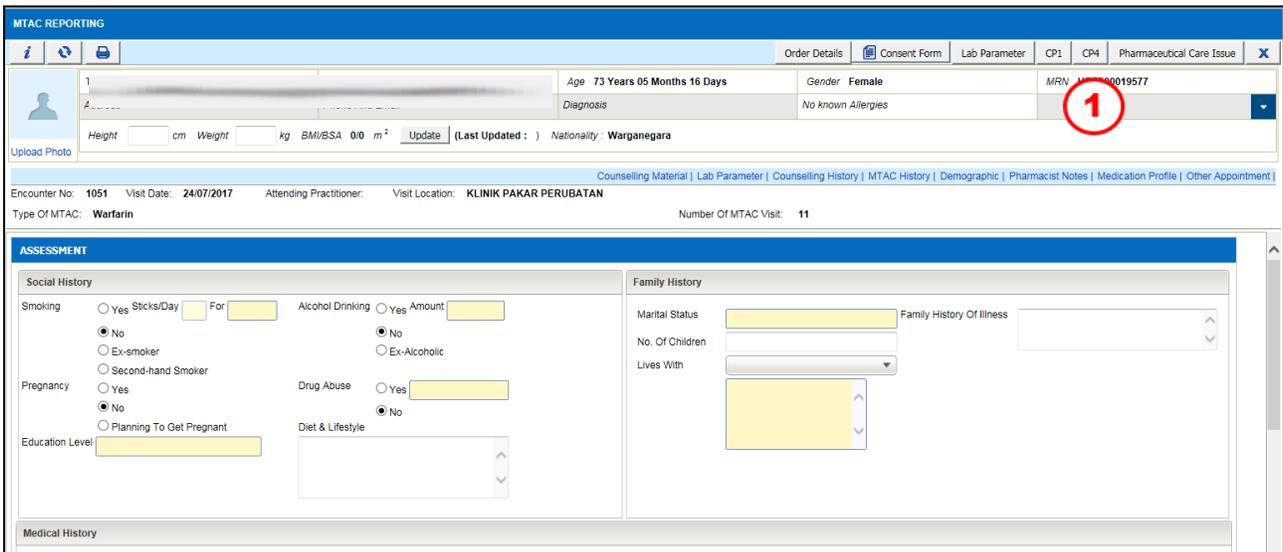
Non-Prescription Medication(Includes Herbal/Vitamin/Other Supplements)	Reason For Taking	Source of Medication	Balance/Comments
<input type="checkbox"/> shaklee			

Figure 3.2-2-14 CP1 (Edit)

Note

- Click on the  button as shown in Figure 3.2.1-14 to edit or to add details to the medication
- Now user can select (ticked) prescription medication or non-prescription medication they want and will be display at the report

CP4



MTAC REPORTING

Order Details | Consent Form | Lab Parameter | CP1 | CP4 | Pharmaceutical Care Issue

Age: 73 Years 05 Months 16 Days | Gender: Female | MRN: HPSF000019577

Diagnosis: No known Allergies

Nationality: Warganegara

Encounter No: 1051 | Visit Date: 24/07/2017 | Attending Practitioner: | Visit Location: KLINIK PAKAR PERUBATAN

Type Of MTAC: Warfarin | Number Of MTAC Visit: 11

ASSESSMENT

Social History

Smoking: Yes Sticks/Day [] For [] | Alcohol Drinking: Yes Amount [] | No | Ex-smoker | Ex-Alcoholic

Pregnancy: Yes | No | Planning To Get Pregnant

Education Level: []

Drug Abuse: Yes [] | No

Diet & Lifestyle: []

Family History

Marital Status: [] | Family History Of Illness: []

No. Of Children: []

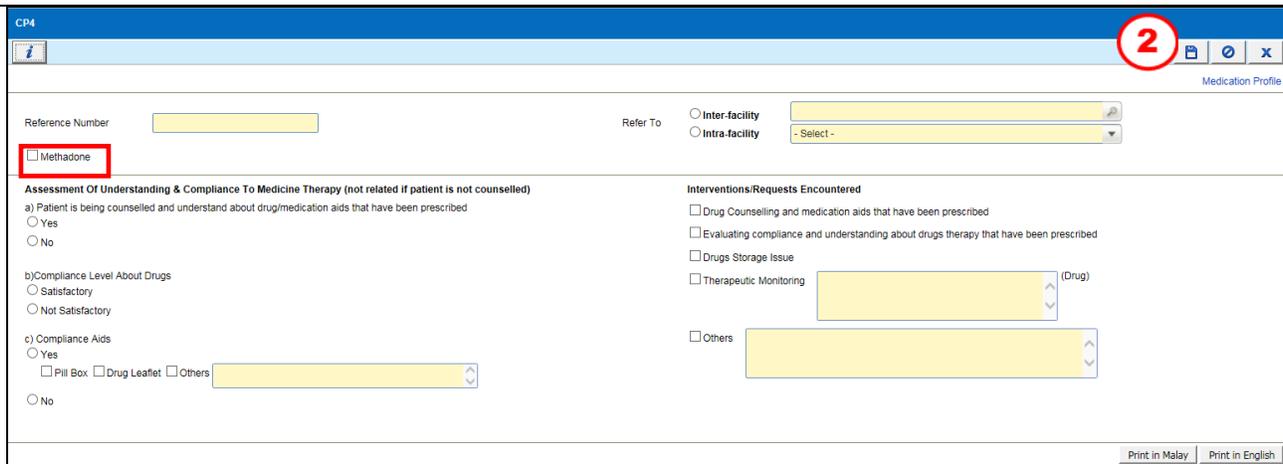
Lives With: []

Medical History: []

Figure 3.2.2-15 CP4 Screen

STEP 1

Click on the  button to enter the details

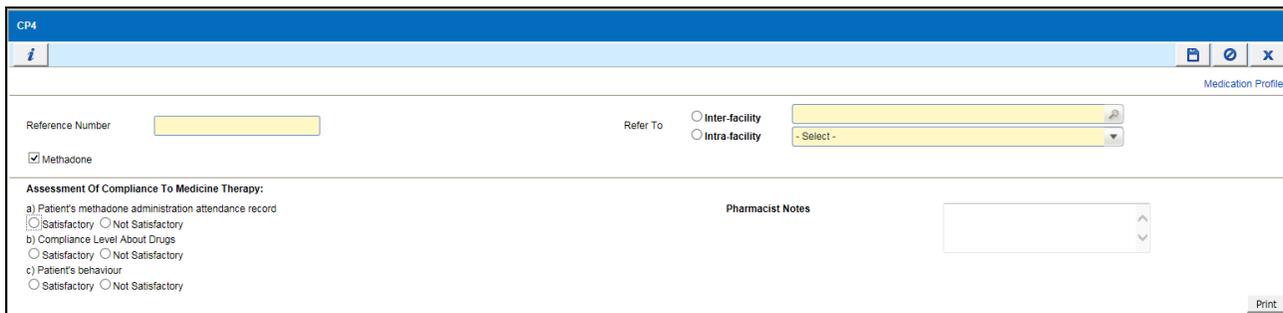


The screenshot shows the 'CP4 Medication Profile' window. At the top right, a red circle with the number '2' highlights the window title bar. The form includes a 'Reference Number' field, a 'Refer To' section with radio buttons for 'Inter-facility' and 'Intra-facility', and a dropdown menu. A red box highlights the 'Methadone' checkbox. Below this are two main sections: 'Assessment Of Understanding & Compliance To Medicine Therapy (not related if patient is not counselled)' and 'Interventions/Requests Encountered'. The first section has sub-sections a, b, and c, each with radio buttons for 'Yes' and 'No'. The second section has checkboxes for 'Drug Counselling and medication aids that have been prescribed', 'Evaluating compliance and understanding about drugs therapy that have been prescribed', 'Drugs Storage Issue', and 'Therapeutic Monitoring', followed by a dropdown menu for '(Drug)'. There is also an 'Others' dropdown menu. At the bottom right, there are 'Print in Malay' and 'Print in English' buttons.

Figure 3.2.2-16 CP4 Assessment Of Understanding & Compliance Screen

Note

- For Methadone, user can click on the Methadone checkbox **Methadone** to assess the compliance as per Figure or proceed with the **Assessment Of Understanding & Compliance To Medicine Therapy** below and enter the **Interventions/Requests Encountered**



The screenshot shows the 'CP4 Medication Profile' window with the 'Methadone' checkbox checked. The 'Assessment Of Compliance To Medicine Therapy' section is active, with sub-sections a, b, and c, each with radio buttons for 'Satisfactory' and 'Not Satisfactory'. A 'Pharmacist Notes' dropdown menu is visible. At the bottom right, there is a 'Print' button.

Figure 3.2.2-17 CP4 – Methadone Screen

STEP 2

Click on the  button to save the record

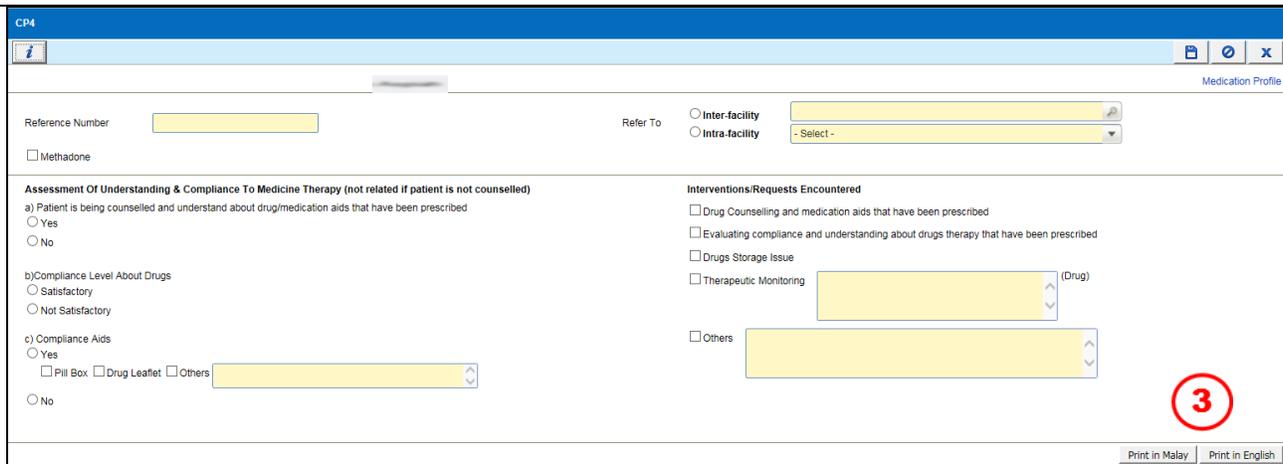


Figure 3.2.2-18 CP4 Print Report

STEP 3

Click on the **Print in Malay** or **Print in English** to print the CP4 as per Figure 3.2.2-18

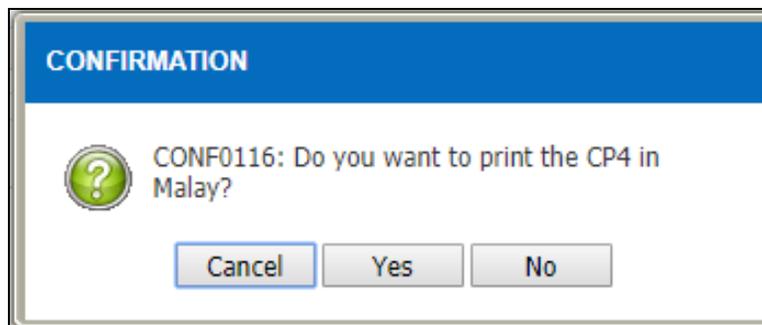


Figure 3.2.2-19 Confirmation Alert Message

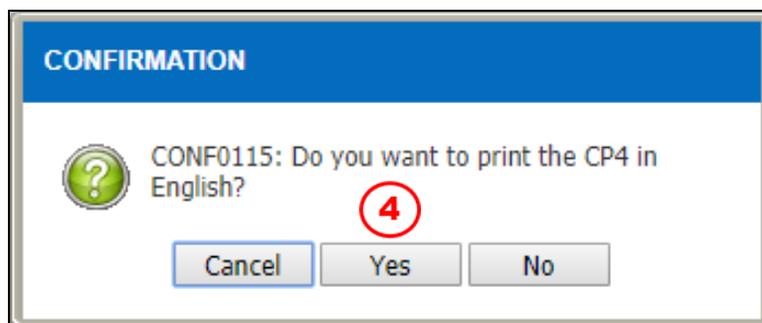


Figure 3.2.2-20 Confirmation Alert Message

STEP 4

Click on the **Yes** button to confirm and the Referral Note will be display as per Figure 3.2.2-20

KEMENTERIAN KESIHATAN MALAYSIA

Hospital Pakar Sultanah Fatimah, Muar

Pharmacy Department

REFERRAL NOTE

CP4/151

TO:

Medical Officer / Pharmacist : Hospital Pakar Sultanah Fatimah, Muar

RE: PATIENT REFERRAL

_____ PT TEST _____ / _____ HPSF00186555 _____ / _____ 490318015646 _____
Name MRN

This patient HAS / NOT BEEN GIVEN MEDICATION COUNSELING for understanding of the treatment that have been prescribed. We expect that you can give the counselling & further evaluation that needed to increase the effectiveness of the treatment.

2. DIAGNOSIS :

None

3. LIST OF CURRENT DRUG :

Drug Name	Dose	Frequency	Start Date	End Date	Supply Period
Insulin regular (Insuman Rapid) 100 IU/mL Penfill	1 IU	OD (once daily)	11/07/2017	10/08/2017	30 Days
Simvastatin 40 mg Tablet	20 mg	ON (every night)	11/07/2017	10/08/2017	30 Days
metFORMIN HCl 500 mg Tablet	500 mg	TDS (3 times a day)	11/07/2017	10/08/2017	30 Days
Acetylsalicylic Acid 100 mg, Glycine 45 mg Tablet	1 tablet	OM (every morning)	11/07/2017	10/08/2017	30 Days

4. UNDERSTANDING ASSESSMENT & COMPLIANCE TO DRUG

(not applicable if the patient has not been counseled):

a) The patient has been counseled and understand the drug/medication aids prescribed

Yes

No

b) Compliance level about Drugs

Satisfactory

Not-Satisfactory

c) Compliance Aids

Pill Box

Drug Message

Others

No

5. INFORMATION / REQUESTS ENCOUNTERED :

[Please tick () in the box provided]

<input checked="" type="checkbox"/>	Drug counselling and medication aids that have been prescribed
<input checked="" type="checkbox"/>	Evaluate compliance with and understanding of the prescribed drug therapy
<input type="checkbox"/>	Therapeutic monitoring: (Drug)
<input checked="" type="checkbox"/>	Drug storage issues
<input type="checkbox"/>	Other:

Thank You,

Noraini Binti Saari

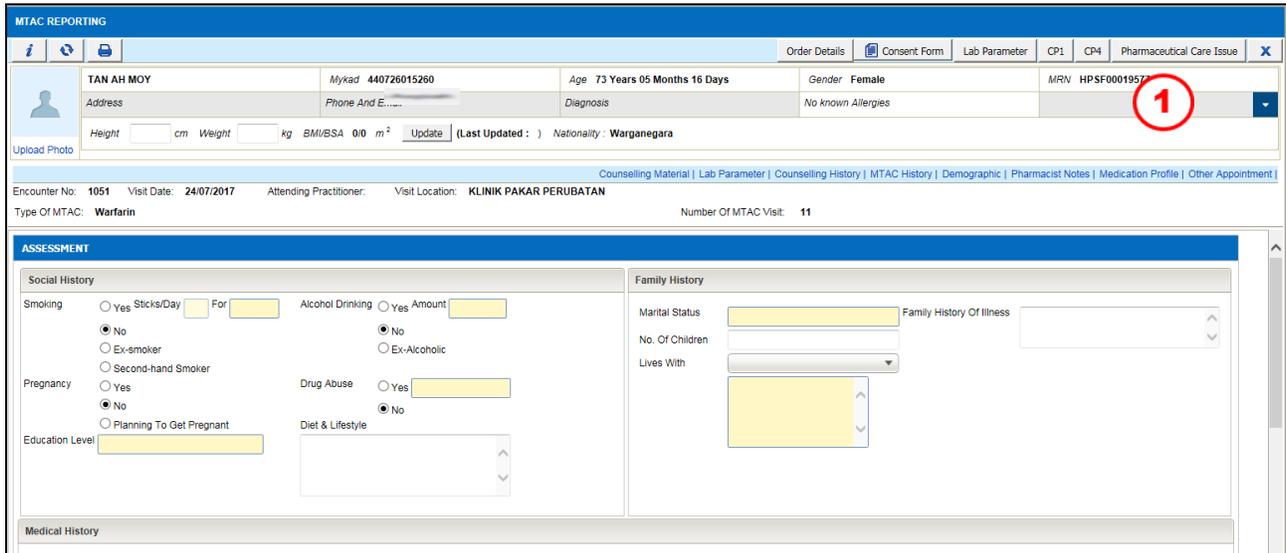
PF54

060521901

12/07/2017

Figure 3.2.2-21 CP4 / Referral Note Printed Report

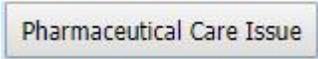
Pharmaceutical Care Issue

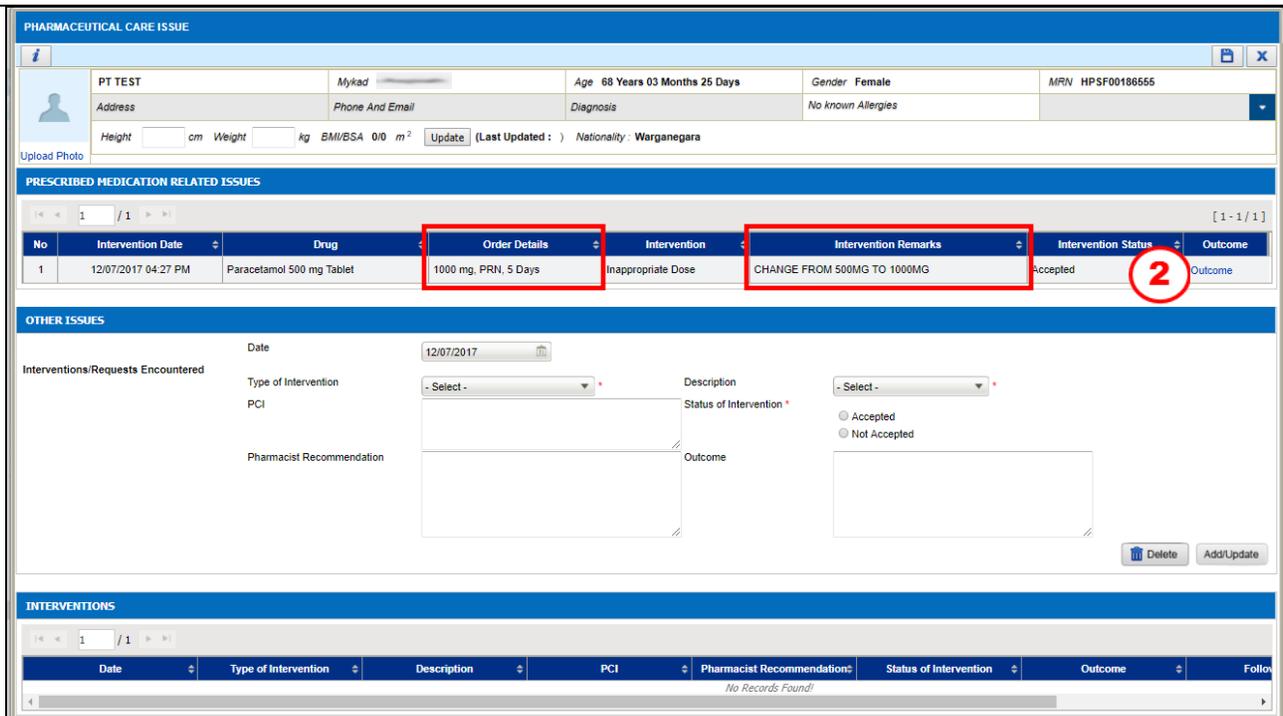


The screenshot shows the 'MTAC REPORTING' interface. At the top, there are navigation tabs: 'Order Details', 'Consent Form', 'Lab Parameter', 'CP1', 'CP4', and 'Pharmaceutical Care Issue'. The 'Pharmaceutical Care Issue' tab is selected and highlighted with a red circle containing the number '1'. Below the tabs, patient information is displayed: Name 'TAN AH MOY', MyKad '440726015260', Age '73 Years 05 Months 16 Days', Gender 'Female', and M/RN 'HPSF0001957'. There are also fields for Address, Phone And E..., Diagnosis, and No known Allergies. Below this, there are fields for Height, Weight, BMI/BSA, and Nationality 'Warganegara'. A 'Medical History' section is visible at the bottom, with sub-sections for 'Social History' and 'Family History'. The 'Social History' section includes fields for Smoking (Yes/No/Ex-smoker/Second-hand Smoker), Alcohol Drinking (Yes/No/Ex-Alcoholic), Pregnancy (Yes/No/Planning To Get Pregnant), Drug Abuse (Yes/No), and Diet & Lifestyle. The 'Family History' section includes Marital Status, No. Of Children, and Lives With.

Figure 3.2.2-22 MTAC Reporting Screen

STEP 1

Click on the  button and the system will show Figure 3.2.2-22



PHARMACEUTICAL CARE ISSUE

PT TEST Mykad Age 68 Years 03 Months 25 Days Gender Female MRN HPSF00186555

Address Phone And Email Diagnosis No known Allergies

Height cm Weight kg BMI/BSA 0/0 m² Update (Last Updated :) Nationality : Warganegara

Upload Photo

PRESCRIBED MEDICATION RELATED ISSUES

No	Intervention Date	Drug	Order Details	Intervention	Intervention Remarks	Intervention Status	Outcome
1	12/07/2017 04:27 PM	Paracetamol 500 mg Tablet	1000 mg, PRN, 5 Days	Inappropriate Dose	CHANGE FROM 500MG TO 1000MG	Accepted	Outcome

OTHER ISSUES

Interventions/Requests Encountered

Date: 12/07/2017

Type of Intervention: - Select -

PCI

Pharmacist Recommendation

Description: - Select -

Status of Intervention: Accepted Not Accepted

Outcome

Delete Add/Update

INTERVENTIONS

Date	Type of Intervention	Description	PCI	Pharmacist Recommendation	Status of Intervention	Outcome	Follow
No Records Found!							

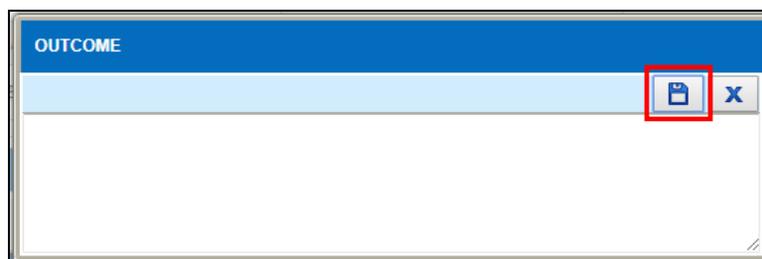
Figure 3.2.2-23 PCI Screen

Note

- The column for **Intervention Remarks** in PCI screen has been added.
- **Other Details** was renamed to **Order Details** as per Figure 3.2.2-23

STEP 2

Click on the [Outcome](#) hyperlink to enter the details. The system will display as per Figure 3.2.2-24. Save when done.



OUTCOME

Figure 3.2.2-24 Outcome Screen

STEP 3

Fill up the **Interventions/Requests Encountered** under **Other Issues** section as per Figure 3.2.2-24

PHARMACEUTICAL CARE ISSUE

PT TEST Mykad [redacted] Age 68 Years 03 Months 25 Days Gender Female MRN HPSF00186555

Address [redacted] Phone And Email [redacted] Diagnosis [redacted] No known Allergies

Height [redacted] cm Weight [redacted] kg BMI/BSA 0/0 m² Update (Last Updated :) Nationality : Warganegara

PRESCRIBED MEDICATION RELATED ISSUES

No	Intervention Date	Drug	Order Details	Intervention	Intervention Remarks	Intervention Status	Outcome
1	12/07/2017 04:27 PM	Paracetamol 500 mg Tablet	1000 mg, PRN, 5 Days	Inappropriate Dose	CHANGE FROM 500MG TO 1000MG	Accepted	Outcome

OTHER ISSUES

Interventions/Requests Encountered Date: 12/07/2017

Type of Intervention: - Select - Description: - Select -

PCI: Status of Intervention: Accepted Not Accepted

Pharmacist Recommendation: Outcome:

Delete Add/Update

INTERVENTIONS

Date	Type of Intervention	Description	PCI	Pharmacist Recommendation	Status of Intervention	Outcome	Follow-up	Checklist
No Records Found!								

Figure 3.2.2-25 Other Issues Screen

STEP 4

Click on the button to update and it will appear below under **Interventions** section as per Figure 3.2.2-26

OTHER ISSUES

Interventions/Requests Encountered Date: 12/07/2017

Type of Intervention: - Select - Description: - Select -

PCI: Status of Intervention: Accepted Not Accepted

Pharmacist Recommendation: Outcome:

Delete Add/Update

INTERVENTIONS

Date	Type of Intervention	Description	PCI	Pharmacist Recommendation	Status of Intervention	Outcome	Follow-up	Checklist
12/07/2017	Incorrect/inappropriate/inadequate Regimen	Dose	PCM DOSAGE 500MG	1000MG	Accepted	TEMPERATURE DECREASE		

Figure 3.2.2-26 Interventions Section

STEP 5

Click on the button to save the record as per Figure 3.2.2-23

Note

Tick on the  checkbox and click the  button to delete the intervention record.

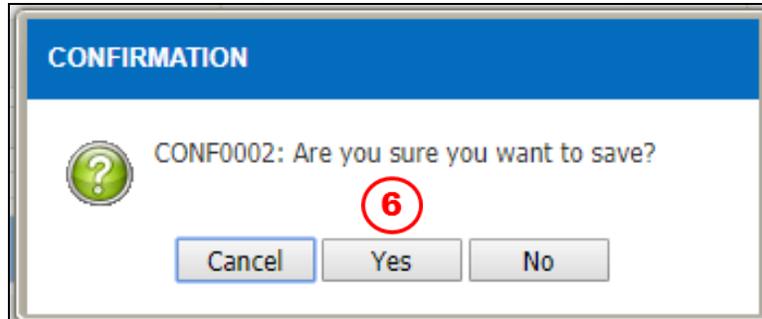
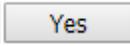


Figure 3.2.2-27 Confirmation Alert Message

STEP 6

Click on the  button to confirm

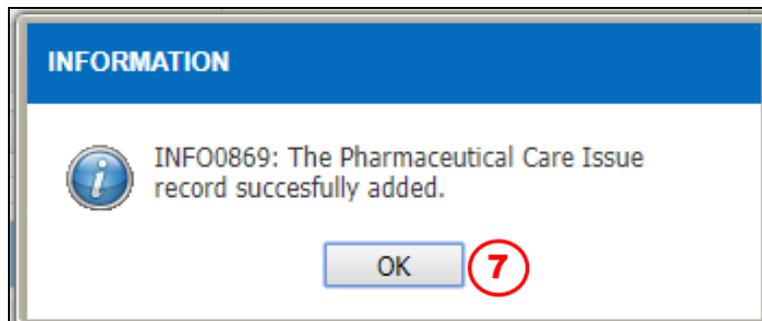
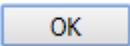


Figure 3.2.2.28 Information Alert Message

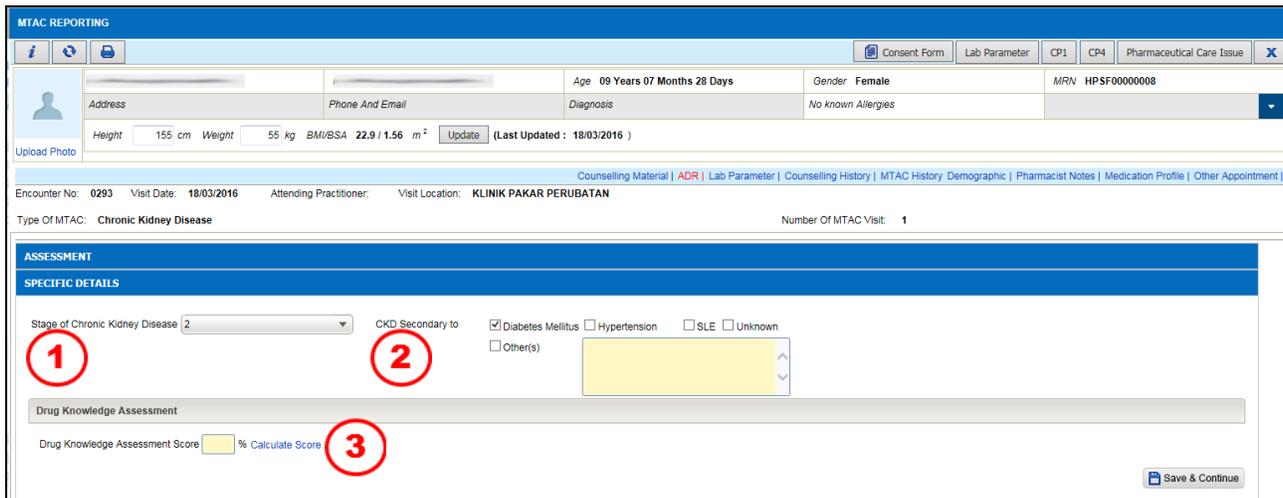
STEP 7

Click on the  button

3.2.3 Create New MTAC Reporting With Specific Details

3.2.3.1 Chronic Kidney Disease

This function allows user to record Specific Details for Chronic Kidney Disease for MTAC patients.



The screenshot displays the 'MTAC REPORTING' interface. At the top, there are navigation tabs for 'Consent Form', 'Lab Parameter', 'CP1', 'CP4', and 'Pharmaceutical Care Issue'. Below this, patient information is shown, including 'Age 09 Years 07 Months 28 Days', 'Gender Female', and 'MRN HPSF00000008'. The 'SPECIFIC DETAILS' section is highlighted in blue and contains a dropdown for 'Stage of Chronic Kidney Disease' (set to '2'), a 'CKD Secondary to' section with checkboxes for 'Diabetes Mellitus', 'Hypertension', 'SLE', 'Unknown', and 'Other(s)', and a 'Drug Knowledge Assessment' section with a 'Drug Knowledge Assessment Score' field and a 'Calculate Score' button. Three red circles with numbers 1, 2, and 3 are overlaid on the interface to indicate the steps described in the text.

Figure 3.2.3.1-1 Specific Details – Chronic Kidney Disease

Note

Repeat **STEP 1 to 16** as in 3.2.1 Create New MTAC Reporting with No Specific Details before performing MTAC Reporting - Specific Details for Chronic Kidney Disease.

STEP 1

Select **Stage of Chronic Kidney Disease** from the drop down box

- 1
- 2
- 3a
- 3b
- 4
- 5

STEP 2

Select the check box for **CKD Secondary to** as below:

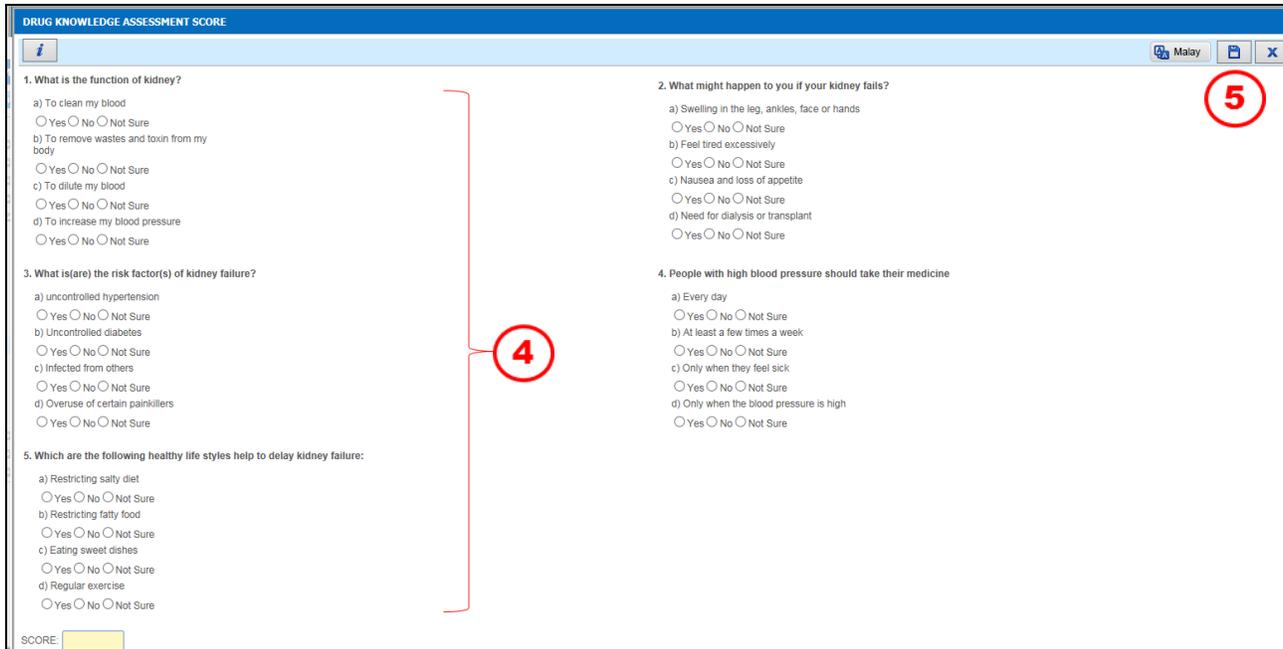
- Diabetes Mellitus
- Hypertension
- SLE
- Unknown
- Other(s)

Note

Blank fields will be enabled if user selects 'Other(s)' radio button.

STEP 3

Click on the [Calculate Score](#) hyperlink and window for '**Drug Knowledge Assessment Score**' will be displayed as shown in Figure 3.2.3.1-2



DRUG KNOWLEDGE ASSESSMENT SCORE

1. What is the function of kidney?

a) To clean my blood
 Yes No Not Sure

b) To remove wastes and toxin from my body
 Yes No Not Sure

c) To dilute my blood
 Yes No Not Sure

d) To increase my blood pressure
 Yes No Not Sure

3. What is(are) the risk factor(s) of kidney failure?

a) uncontrolled hypertension
 Yes No Not Sure

b) Uncontrolled diabetes
 Yes No Not Sure

c) Infected from others
 Yes No Not Sure

d) Overuse of certain painkillers
 Yes No Not Sure

5. Which are the following healthy life styles help to delay kidney failure:

a) Restricting salty diet
 Yes No Not Sure

b) Restricting fatty food
 Yes No Not Sure

c) Eating sweet dishes
 Yes No Not Sure

d) Regular exercise
 Yes No Not Sure

2. What might happen to you if your kidney fails?

a) Swelling in the leg, ankles, face or hands
 Yes No Not Sure

b) Feel tired excessively
 Yes No Not Sure

c) Nausea and loss of appetite
 Yes No Not Sure

d) Need for dialysis or transplant
 Yes No Not Sure

4. People with high blood pressure should take their medicine

a) Every day
 Yes No Not Sure

b) At least a few times a week
 Yes No Not Sure

c) Only when they feel sick
 Yes No Not Sure

d) Only when the blood pressure is high
 Yes No Not Sure

SCORE:

Figure 3.2.3.1-2 Drug Knowledge Assessment Score

STEP 4

Answer the questions for **Drug Knowledge Assessment** by checking the radio button for below:

1. **What is the function of kidney?**
2. **What might happen to you if your kidney fails?**
3. **What is (are) the risk factor(s) of kidney failure?**
4. **People with high blood pressure should take their medicine**
5. **Which are the following healthy life styles help to delay kidney failure:**

Note

- The questions are not mandatory to be answered.
- Click on the  button to view the questions in Malay language.
- Score will be automatically calculated and automatically displayed.

STEP 5

Click on the  button to save the answered question(s)

STEP 6

Click on the  button to confirm save record

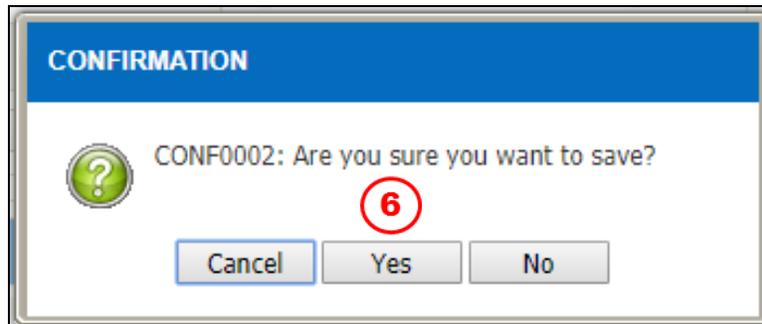


Figure 3.2.3.1-3 Confirmation Alert Message

STEP 7

Click on the  button as shown in Figure 3.2.3.1-4 to save and continue with reporting section



Figure 3.2.3.1-4 Specific Details – Chronic Kidney Disease

STEP 8

Click on the  button to confirm save record

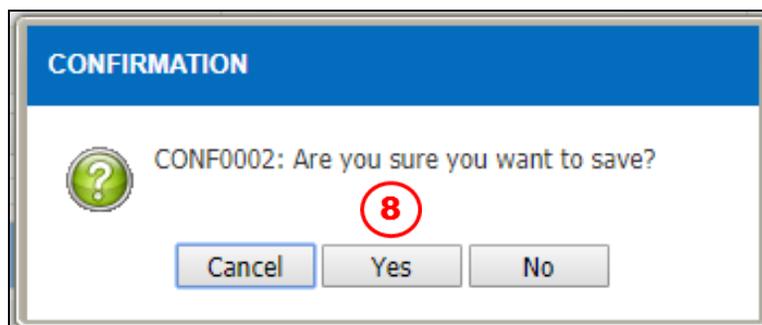


Figure 3.2.3.1-5 Confirmation Alert Message

STEP 9

Click on the  button to confirm record

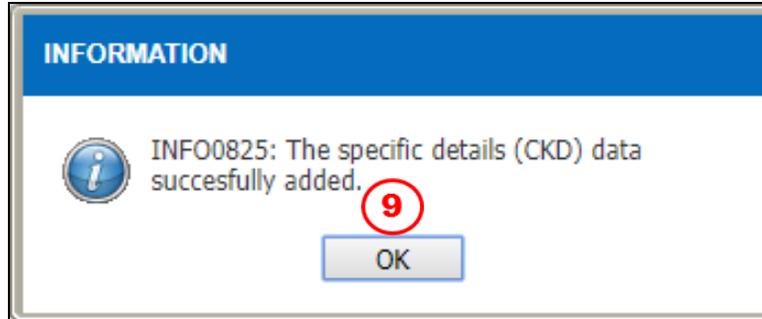


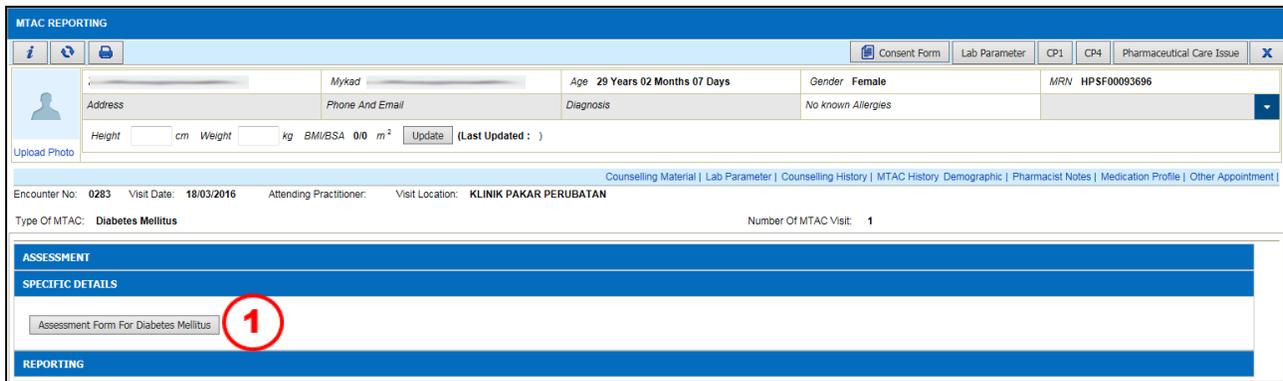
Figure 3.2.3.1-6 Information alert message

Note

For '**Reporting**' section, repeat steps from the **Note (page 28) to Step 32** as in 3.2.1 Create New MTAC Reporting with No Specific Details.

3.2.3.2 Diabetes Mellitus

This function allow user to record Specific Details for Diabetes Mellitus for MTAC patient



The screenshot shows the 'MTAC REPORTING' interface. At the top, there are navigation tabs: 'Consent Form', 'Lab Parameter', 'CP1', 'CP4', and 'Pharmaceutical Care Issue'. Below this is a patient information section with fields for 'Mykad', 'Age 29 Years 02 Months 07 Days', 'Gender Female', and 'MRN HPSF00093696'. There are also fields for 'Address', 'Phone And Email', 'Diagnosis', and 'No known Allergies'. A section for 'Height' and 'Weight' with units 'cm' and 'kg' is present, along with a 'BM/BSA 0/0 m²' field and an 'Update' button. Below this is a navigation bar with links: 'Counselling Material | Lab Parameter | Counselling History | MTAC History | Demographic | Pharmacist Notes | Medication Profile | Other Appointment |'. The main content area shows 'Encounter No: 0283', 'Visit Date: 18/03/2016', 'Attending Practitioner:', and 'Visit Location: KLINIK PAKAR PERUBATAN'. The 'Type Of MTAC: Diabetes Mellitus' and 'Number Of MTAC Visit: 1' are also displayed. The 'ASSESSMENT' section is expanded to show 'SPECIFIC DETAILS', where a button labeled 'Assessment Form For Diabetes Mellitus' is circled in red with the number '1'. The 'REPORTING' section is also visible at the bottom.

Figure 3.2.3.2-1 Specific Details - Diabetes Mellitus

Note

Repeat **STEP 1 to 16** as in 3.2.1 Create New MTAC Reporting with No Specific Details before performing MTAC Reporting - Specific Details Assessment Form for Diabetes Mellitus.

STEP 1

Click on the  button to view the specific details

STEP 2

Select the check box to answer the question(s)

Note

- The questions are not mandatory to be answered
- Click on the  button to print the assessment form
- 'Diabetes Mellitus Assessment' as shown in Figure 3.2.3.2-2 will be used during MTAC counselling

DIABETES MELLITUS ASSESSMENT

1. Kencing manis (Diabetes Mellitus) adalah penyakit?
 Paras gula dalam darah tinggi
 Kolesterol dalam darah tinggi
 Tekanan Darah Tinggi
 Tidak pasti

2. Fungsi gula (glukosa) di dalam badan adalah untuk?
 Menghasilkan tenaga
 Menghasilkan Oksigen
 Membina tisu badan
 Tidak pasti

3. Penyakit kencing manis disebabkan oleh factor berikut?
 Berat badan berlebihan
 Insulin dalam badan tidak mencukupi atau resistant
 Sejarah keluarga
 Virus atau jangkitan kuman
 Tidak pasti

4. Yang manakah antara berikut tanda-tanda paras gula di dalam darah tinggi (Hiperglisemia)?
 Mulut kering dan dahaga
 Turun berat badan
 Kerap kencing
 Kabur penglihatan
 Lapar

5. Yang manakah antara berikut tanda-tanda paras gula di dalam darah rendah (Hipoglisemia)?
 Tangan menggigil
 Berpeluh sejuk
 Kerap kencing
 Lapar
 Leth dan tidak bertenaga

6. Paras gula didalam darah rendah juga boleh berlaku sekiranya anda?
 Bersenam keterlaluan
 Tidak makan selepas mengambil ubat
 Mengambil ubat atau insulin berlebihan
 Makan berlebihan

7. Jika anda mengalami tanda-tanda hipoglisemia, apa yang patut dilakukan?
 Minum jus atau ambil gula-gula
 Periksa paras gula menggunakan glucometer
 Baring dan rehat
 Suntik insulin
 Bersenam

8. Apakah komplikasi (kesan buruk) penyakit kencing manis?
 Penglihatan kabur / katarak
 Penyakit buah pinggang
 Penyakit jantung
 Penyakit saraf? kebas-kebas
 Strok
 Mudah dapat jangkitan kuman
 Ulser

9. Apakah nama ubat kencing manis yang anda ambil?
 Metformin (Glucophage)
 Gliclazide (Diamicon)
 Gliclazide MR (Diamicon MR)
 Glibenclamide
 Rosiglitazone (Avandia)
 Acarbose
 Repaglinide (Novonorm)
 Insulin _____
 Tidak pasti

10. Bagaimana cara anda mengambil ubat-ubatan berkenaan?
 30 minit sebelum makan
 Bersama makanan
 Sebaik selepas makan
 Sebaik sebelum makan
 Pada bila-bila masa

11. Adakah anda ada mengalami tanda-tanda berikut selepas mengambil ubat-ubatan kencing manis?
 Berat badan meningkat
 Kembang perut
 Loya / muntah
 Cint-birit / sembelit
 Perut berasa pedih / tidak selesa

12. Sekiranya anda terlupa mengambil /makan ubat-ubatan kencing manis, apakah yang anda lakukan?
 Makan ubat sebaik teringat
 Lupakan saja dos yang tertinggal
 Gandakan dos ubat seterusnya
 Memeriksa paras gula dalam darah

13. Apakah sasaran? paras gula dalam darah yang perlu dicapai oleh setiap pesakit diabetes?
 HbA1c <7 %
 Plasma glukosa (puasa) 4.4 ? 6.1 mmol/L
 2 jam selepas makan /rambang 4.4 ?8.0mmol/l
 Plasma Glukosa > 10.00mmol/l (puasa)

Sila jawab soalan berikut, sekiranya anda mengambil suntikan insulin?

14. Dimanakah anda menyimpan Stok insulin?
 Dalam peti sejuk beku (0\u00EF\u00BF\u00BDC)
 Dalam peti sejuk (2 ?8 u00BAC)
 Atas peti sejuk
 Dalam almari

15. Dimanakah anda menyimpan Novopen /Humapen yang mengandungi insulin atau insulin yang sedang digunakan?
 Di dalam almari berkunci
 Di dalam peti sejuk
 Di dalam beg tangan
 Pada suhu bilik

16. Berapa kerap anda menukar jarum untuk suntikan insulin?
 Setiap kali digunakan
 Selepas 3 ?4 kali digunakan
 Sehingga jarum tumpul
 Sekali seminggu

Figure 3.2.3.2-2 Diabetes Mellitus Assessment

STEP 3

Click on the  button to save the answered question(s)

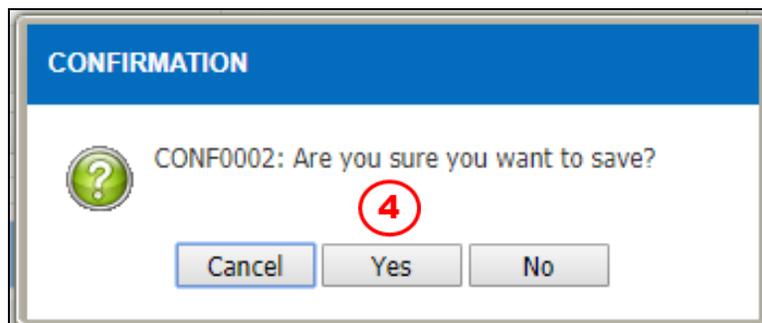


Figure 3.2.3.2-3 Confirmation Alert Message

STEP 4

Click on the  button to confirm save record

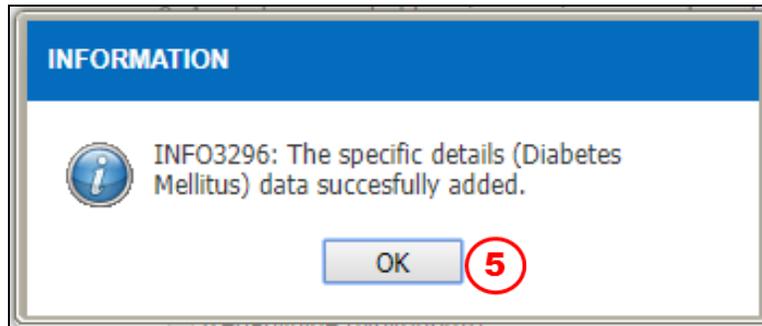


Figure 3.2.3.2-4 Information Alert Message

STEP 5

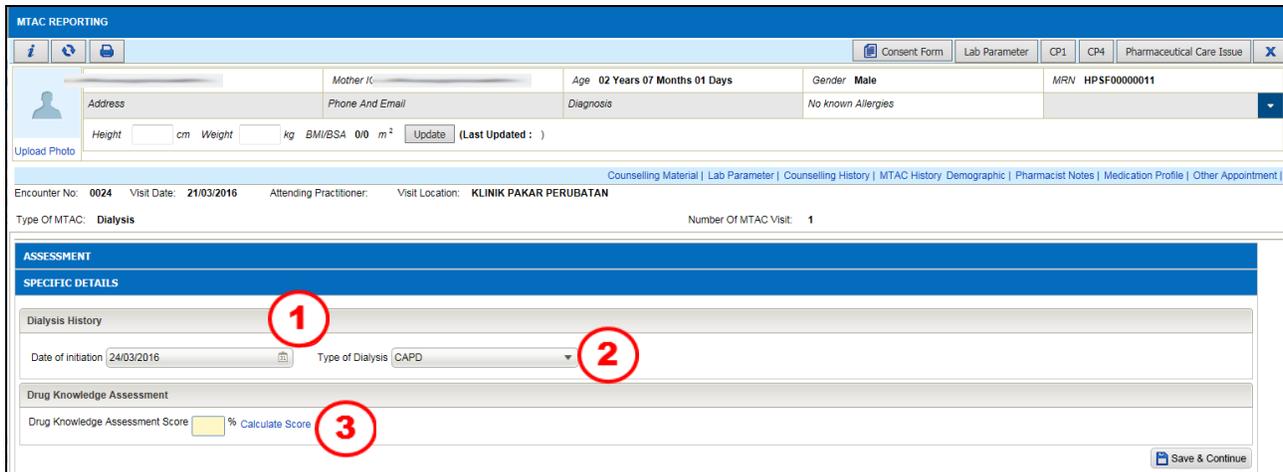
Click on the  button to confirm record

Note

*For 'Reporting' section, repeat **Note (Page 28) to Step 32** as in 3.2.1 Create New MTAC Reporting with No Specific Details.*

3.2.3.3 Dialysis

This function allows users to record Specific Details for Dialysis for MTAC patients



The screenshot shows the 'MTAC REPORTING' interface. At the top, there are navigation icons and buttons for 'Consent Form', 'Lab Parameter', 'CP1', 'CP4', and 'Pharmaceutical Care Issue'. Below this is a patient information section with fields for Address, Mother IC, Age (02 Years 07 Months 01 Days), Gender (Male), and MRN (HPSF0000011). There are also fields for Height, Weight, BMI/BSA, and an 'Update' button. The 'Encounter No.' is 0024, 'Visit Date' is 21/03/2016, and 'Visit Location' is KLINIK PAKAR PERUBATAN. The 'Type Of MTAC' is Dialysis and 'Number Of MTAC Visit' is 1. The 'ASSESSMENT' section is expanded to show 'SPECIFIC DETAILS'. Under 'Dialysis History', there is a 'Date of initiation' field (24/03/2016) with a calendar icon (1), a 'Type of Dialysis' dropdown menu (CAPD) (2), and a 'Drug Knowledge Assessment' section with a 'Drug Knowledge Assessment Score' field and a 'Calculate Score' button (3). A 'Save & Continue' button is at the bottom right.

Figure 3.2.3.3-1 Specific Details - Dialysis

Note

Repeat **STEP 1 to 16** as in 3.2.1 Create New MTAC Reporting with No Specific Details before performing MTAC Reporting - Specific Details for Dialysis.

Dialysis History

STEP 1

Click on the  button to select **Date of initiation**

STEP 2

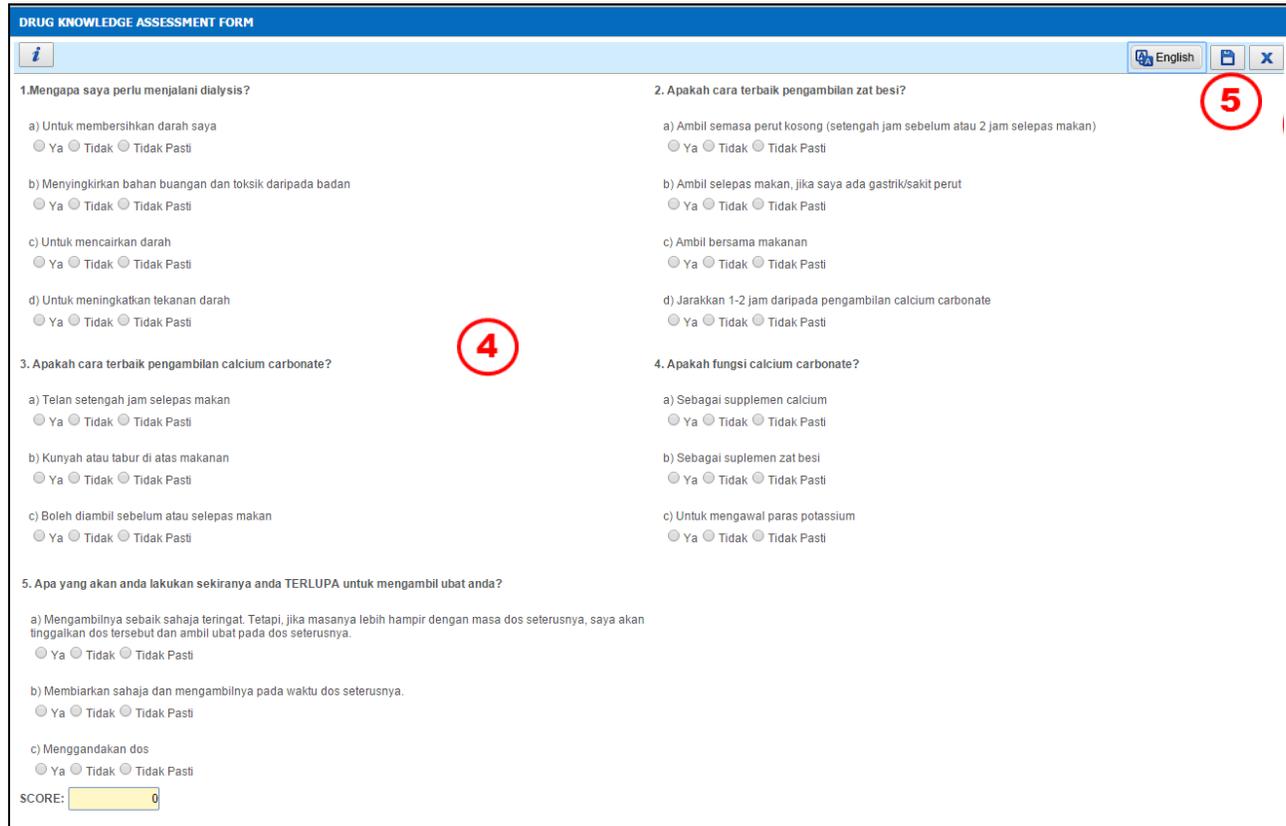
Select **Type of Dialysis** from the dropdown box

- APD
- CAPD
- HD

Drug Knowledge Assessment

STEP 3

Click on the [Calculate Score](#) and hyperlink '**Drug Knowledge Assessment Score** and '**Drug Knowledge Assessment Form**' window will be displayed as shown in Figure 3.2.3.3-2



DRUG KNOWLEDGE ASSESSMENT FORM

English

1. Mengapa saya perlu menjalani dialysis?

a) Untuk membersihkan darah saya
 Ya Tidak Tidak Pasti

b) Menyingkirkan bahan buangan dan toksik daripada badan
 Ya Tidak Tidak Pasti

c) Untuk mencairkan darah
 Ya Tidak Tidak Pasti

d) Untuk meningkatkan tekanan darah
 Ya Tidak Tidak Pasti

2. Apakah cara terbaik pengambilan zat besi?

a) Ambil semasa perut kosong (setengah jam sebelum atau 2 jam selepas makan)
 Ya Tidak Tidak Pasti

b) Ambil selepas makan, jika saya ada gastrik/sakit perut
 Ya Tidak Tidak Pasti

c) Ambil bersama makanan
 Ya Tidak Tidak Pasti

d) Jarakkan 1-2 jam daripada pengambilan calcium carbonate
 Ya Tidak Tidak Pasti

3. Apakah cara terbaik pengambilan calcium carbonate?

a) Telan setengah jam selepas makan
 Ya Tidak Tidak Pasti

b) Kunyah atau tabur di atas makanan
 Ya Tidak Tidak Pasti

c) Boleh diambil sebelum atau selepas makan
 Ya Tidak Tidak Pasti

4. Apakah fungsi calcium carbonate?

a) Sebagai suplemen calcium
 Ya Tidak Tidak Pasti

b) Sebagai suplemen zat besi
 Ya Tidak Tidak Pasti

c) Untuk mengawal paras potassium
 Ya Tidak Tidak Pasti

5. Apa yang akan anda lakukan sekiranya anda TERLUPA untuk mengambil ubat anda?

a) Mengambilnya sebaik sahaja teringat. Tetapi, jika masanya lebih hampir dengan masa dos seterusnya, saya akan tinggalkan dos tersebut dan ambil ubat pada dos seterusnya.
 Ya Tidak Tidak Pasti

b) Membiarkan sahaja dan mengambilnya pada waktu dos seterusnya.
 Ya Tidak Tidak Pasti

c) Menggandakan dos
 Ya Tidak Tidak Pasti

SCORE:

Figure 3.2.3.3-2 Specific Details - Dialysis

STEP 4

Answer the questions for *Drug Knowledge Assessment Form* by checking the radio button for below:

1. **Why do I have to do dialysis?**
2. **What is (are) the appropriate way(s) to take iron tablet?**
3. **What is (are) the appropriate way(s) to take calcium carbonate?**
4. **What is (are) function(s) of calcium carbonate?**
5. **What do you usually do when you missed a dose(s)?**

Note

- The questions are not mandatory to be answered.
- Click on the  button to view the questions in Malay language
- Score will be automatically calculated and automatically displayed

STEP 5

Click on the  button to save the answered questions(s)

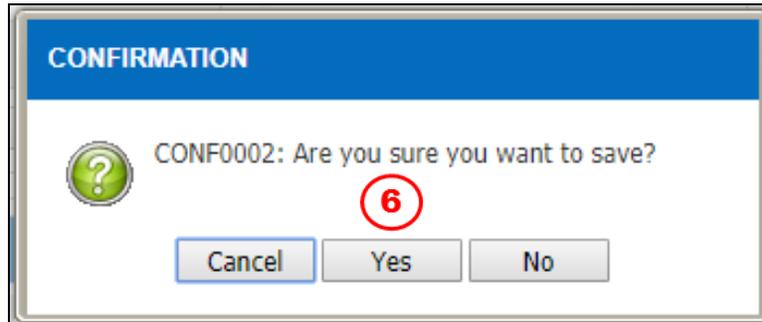


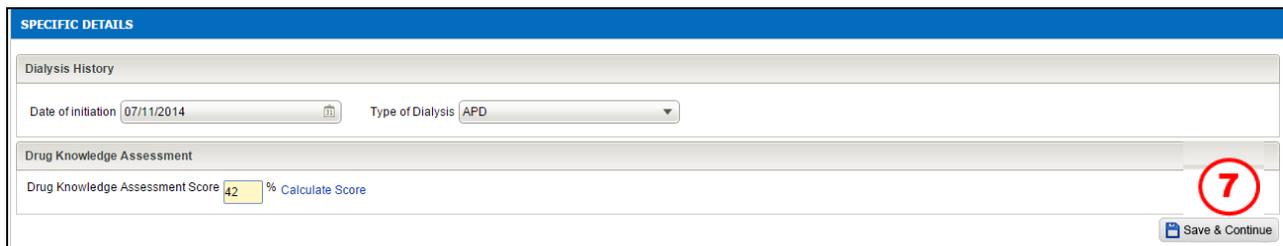
Figure 3.2.3.3-3 Confirmation Alert Message

STEP 6

Click on the  button to confirm save record

STEP 7

Click on the  button as shown in Figure 3.2.3.3-1 to save and continue with reporting section



A form titled "SPECIFIC DETAILS" with a blue header. It contains two sections: "Dialysis History" and "Drug Knowledge Assessment". The "Dialysis History" section has a "Date of initiation" field with the value "07/11/2014" and a "Type of Dialysis" dropdown menu with "APD" selected. The "Drug Knowledge Assessment" section has a "Drug Knowledge Assessment Score" field with the value "42" and a "Calculate Score" button. A "Save & Continue" button is located at the bottom right of the form, circled in red with the number "7" inside.

STEP 8

Click on the  button to confirm save record

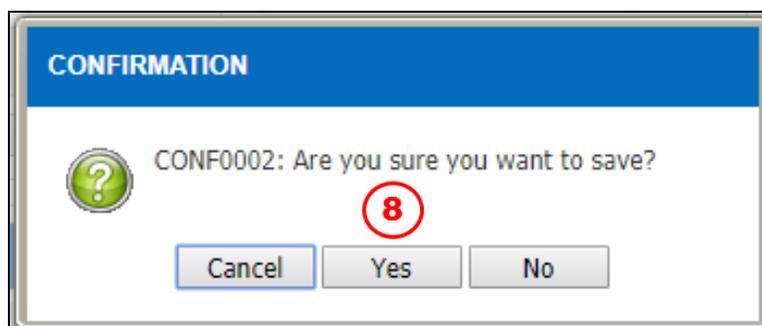


Figure 3.2.3.3-4 Confirmation Alert Message

STEP 9

Click on the  button to confirm record

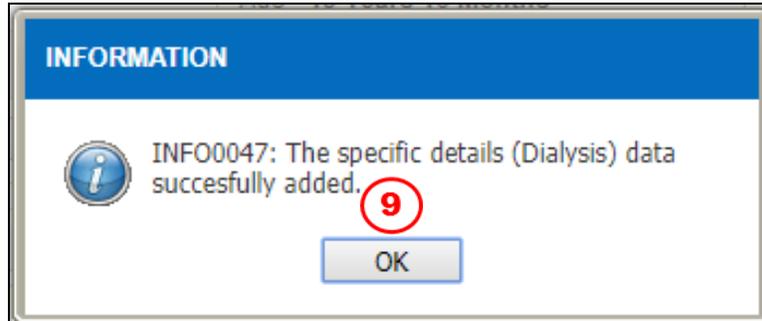


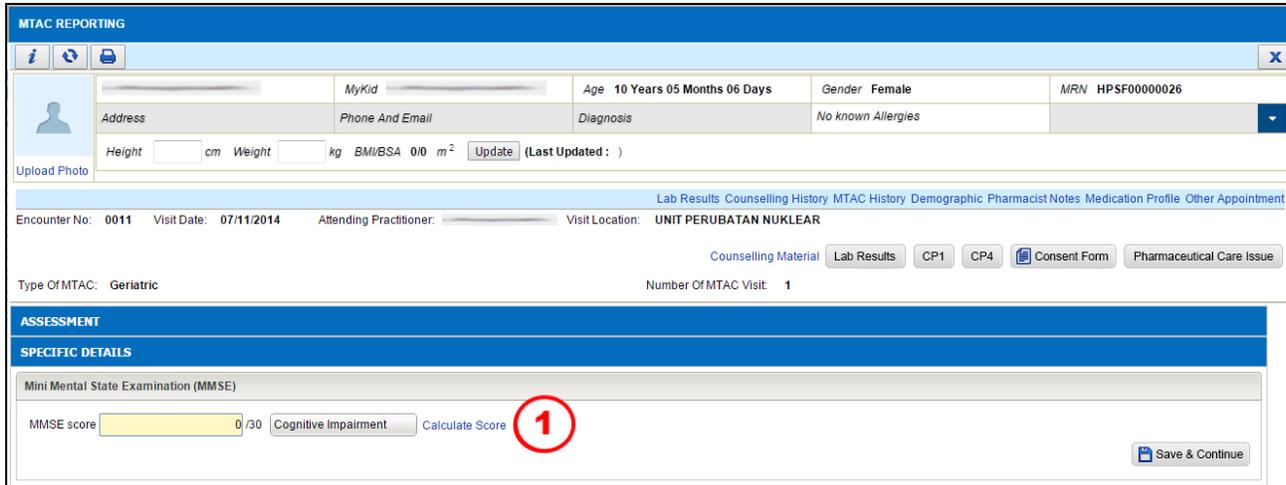
Figure 3.2.3.3-5 Information alert message

Note

For 'Reporting' section, repeat **Note (Page 28) to Step 32** as in 3.2.1 Create New MTAC Reporting with No Specific Details.

3.2.3.4 Geriatric

This function allows users to record Specific Details for Geriatric for MTAC patients



The screenshot displays the 'MTAC REPORTING' interface. At the top, there are navigation icons and a close button. Below this, a patient information table includes fields for MyKid, Age (10 Years 05 Months 06 Days), Gender (Female), MRN (HPSF00000026), Address, Phone And Email, Diagnosis, and No known Allergies. There are also input fields for Height (cm), Weight (kg), and BMI/BSA (0/0 m²), along with an 'Update' button and '(Last Updated :)' text. Below the patient information, there are tabs for 'Lab Results', 'Counselling History', 'MTAC History', 'Demographic', 'Pharmacist Notes', 'Medication Profile', and 'Other Appointment'. The 'Encounter No: 0011', 'Visit Date: 07/11/2014', 'Attending Practitioner:', and 'Visit Location: UNIT PERUBATAN NUKLEAR' are displayed. There are also buttons for 'Counselling Material', 'Lab Results', 'CP1', 'CP4', 'Consent Form', and 'Pharmaceutical Care Issue'. The 'Type Of MTAC: Geriatric' and 'Number Of MTAC Visit: 1' are also shown. The 'ASSESSMENT' section is expanded to show 'SPECIFIC DETAILS'. Under 'Mini Mental State Examination (MMSE)', there is an 'MMSE score' input field with '0/30', a 'Cognitive Impairment' button, and a 'Calculate Score' button. A red circle with the number '1' is placed over the 'Calculate Score' button. A 'Save & Continue' button is located at the bottom right of the MMSE section.

Figure 3.2.3.4-1 Specific Details - Geriatric

Note

Repeat **STEP 1 to 16** as in 3.2.1 Create New MTAC Reporting with No Specific Details before performing MTAC Reporting - Specific Details for Geriatric.

STEP 1

Click on the [Calculate Score](#) hyperlink for **MMSE Score** and 'Mini Mental State Examination (MMSE) – Orientasi Masa' window will be displayed as shown in Figure 3.2.3.4-2

STEP 2

Answer questions in **Mini Mental State Examination (MMSE)** by selecting radio button as shown in Figure 3.2.3.4-2

Note

- The questions are not mandatory to be answered.
- Score will be automatically calculated and automatically displayed.

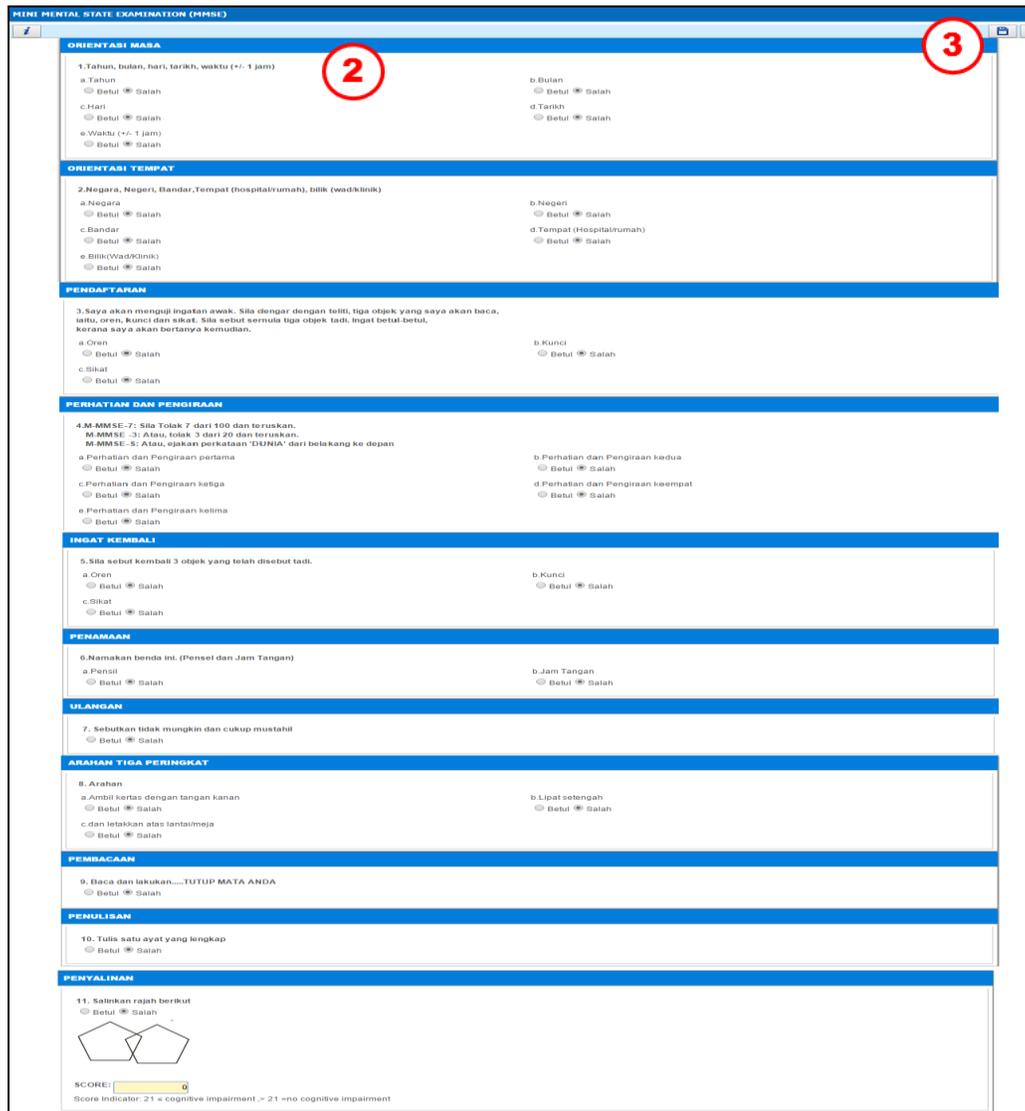


Figure 3.2.3.4-2 Mini Mental State Examination (MMSE)

STEP 3

Click on the  button to save the answered questions(s)

STEP 4

Click on the  button to confirm save record

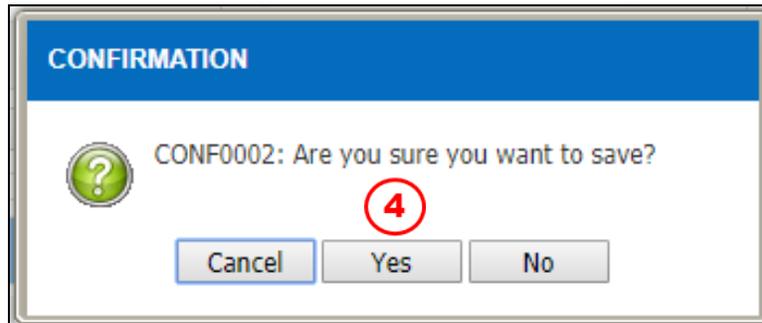
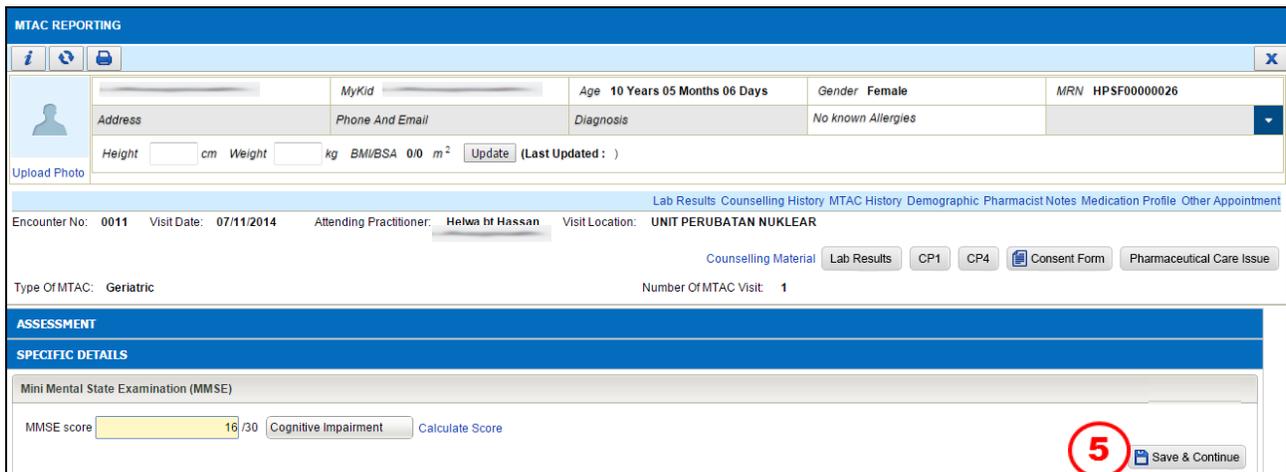


Figure 3.2.3.4-3 Confirmation Alert Message

STEP 5

Click on the  button as shown in Figure 3.2.3.4-1 to save and continue with reporting section



A screenshot of the "MTAC REPORTING" form. The form includes fields for patient information (MyKid, Age, Gender, MRN), address, phone, and email. It also displays encounter details (Encounter No: 0011, Visit Date: 07/11/2014, Attending Practitioner: Helwa bt Hassan, Visit Location: UNIT PERUBATAN NUKLEAR) and assessment options (Counselling Material, Lab Results, CP1, CP4, Consent Form, Pharmaceutical Care Issue). The "Type Of MTAC" is set to "Geriatric" and the "Number Of MTAC Visit" is 1. The "ASSESSMENT" section is expanded to "SPECIFIC DETAILS", showing a "Mini Mental State Examination (MMSE)" with a score of 16/30 and a "Cognitive Impairment" button. A "Save & Continue" button is visible in the bottom right corner, with a red circle and the number "5" next to it.

Figure 3.2.3.4-4 Specific Details - Geriatric

STEP 6

Click on the  button to confirm save record

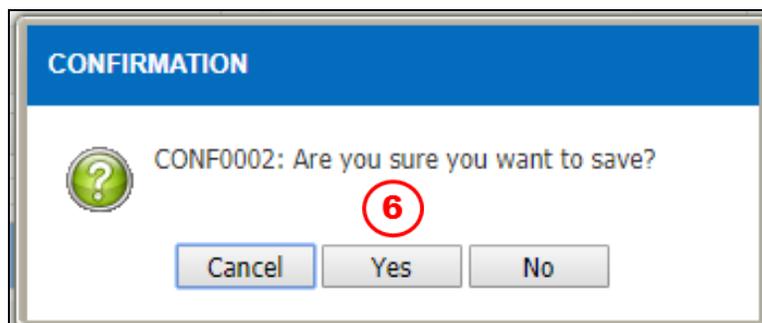


Figure 3.2.3.4-5 Confirmation Alert Message

STEP 7

Click on the  button to confirm record

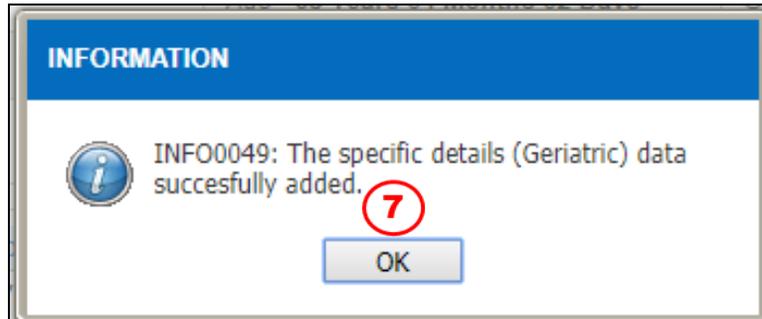


Figure 3.2.3.4-6 Information alert message

Note

For 'Reporting' section, repeat **Note (Page 28) to Step 32** as in 3.2.1 Create New MTAC Reporting with No Specific Details.

3.2.3.5 Heart Failure

This function allow user to record Specific Details for Heart Failure for MTAC patient.

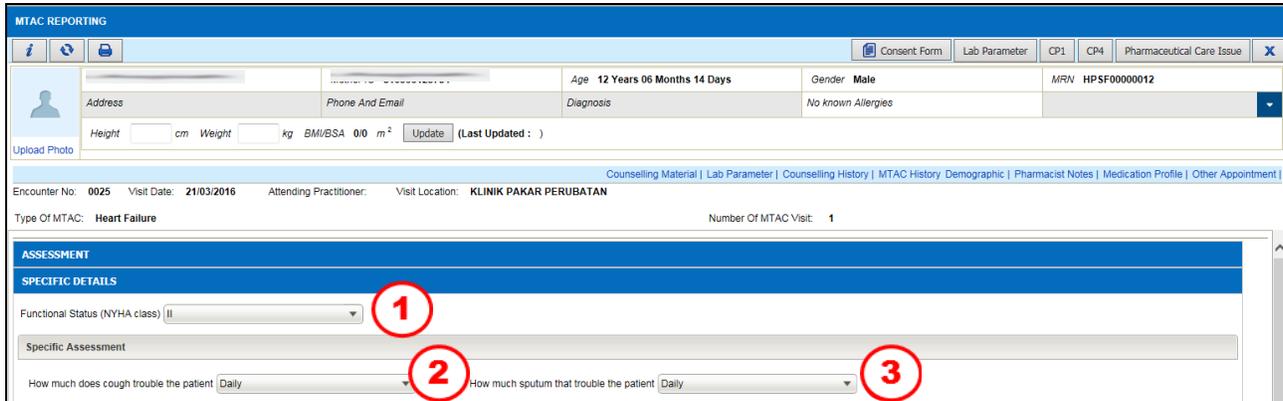


Figure 3.2.3.5 Specific Details - Heart Failure

Note

Repeat **STEP 1 to 16** as in 3.2.1 Create New MTAC Reporting with No Specific Details before performing MTAC Reporting - Specific Details for Heart Failure

STEP 1

Select **Functional Status (NYHA class)** from the drop down box

- I
- II
- III
- IV

Specific Assessment

STEP 2

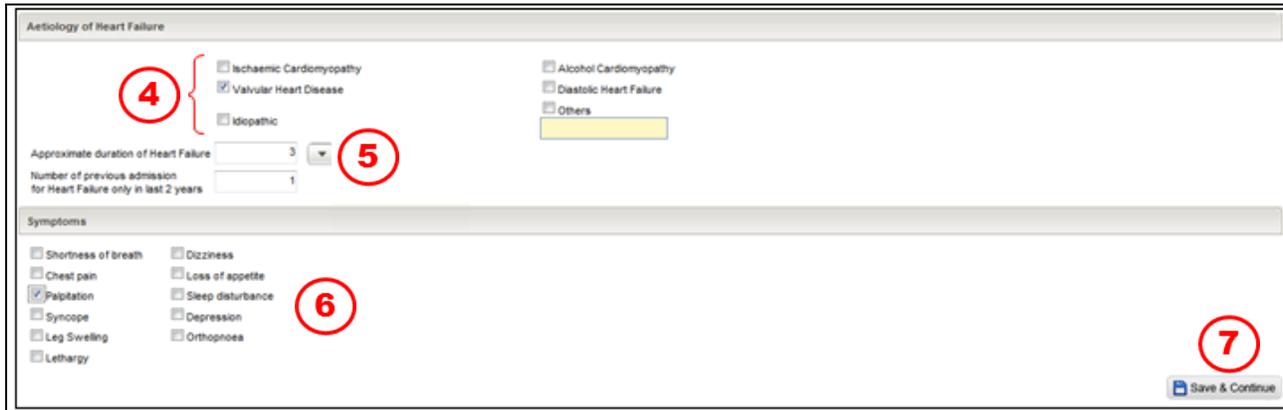
Select **How much does cough trouble the patient** from the drop down box

- Not Present
- Few Days/Month
- Few Days/Week
- Daily

STEP 3

Select **How much sputum that trouble the patient** from the drop down box

- Not Present
- Few Days/Month
- Few Days/Week
- Daily



The screenshot shows a web form titled "Aetiology of Heart Failure". It contains several sections:

- Aetiology of Heart Failure:** A group of checkboxes for "Ischaemic Cardiomyopathy", "Valvular Heart Disease", "Idiopathic", "Alcohol Cardiomyopathy", "Diastolic Heart Failure", and "Others". A red circle with the number 4 is placed over the "Valvular Heart Disease" checkbox.
- Approximate duration of Heart Failure:** A text input field with the number "3" and a dropdown arrow. A red circle with the number 5 is placed over the dropdown arrow.
- Number of previous admission for Heart Failure only in last 2 years:** A text input field with the number "1".
- Symptoms:** A group of checkboxes for "Shortness of breath", "Chest pain", "Palpitation", "Syncope", "Leg Swelling", "Lethargy", "Dizziness", "Loss of appetite", "Sleep disturbance", "Depression", and "Orthopnoea". A red circle with the number 6 is placed over the "Sleep disturbance" checkbox.
- Save & Continue:** A button in the bottom right corner with a red circle and the number 7.

Figure 3.2.3.5-2 Specific details - Heart Failure

STEP 4

Select the check box for **Aetiology of Heart Failure** as below:

- Ischaemic Cardiomyopathy
- Valvular Heart Disease
- Idiopathic
- Alcohol Cardiomyopathy
- Diastolic Hear Failure
- Others

Note

Blank fields will be enabled only if user selects 'Others' from the check box

STEP 5

Enter **Approximate duration of Heart Failure** and select from the drop down box

- Months
- Years

STEP 6

Select the check box for **Symptoms** as below:

- Shortness of breath
- Chest pain
- Palpitation
- Syncope
- Leg Swelling
- Lethargy
- Dizziness
- Loss of appetite

- Sleep disturbance
- Depression
- Orthopnea

STEP 7

Click on the  button as shown in Figure 3.2.3.5-1 to save and continue with reporting section

STEP 8

Click on the  button to confirm save record

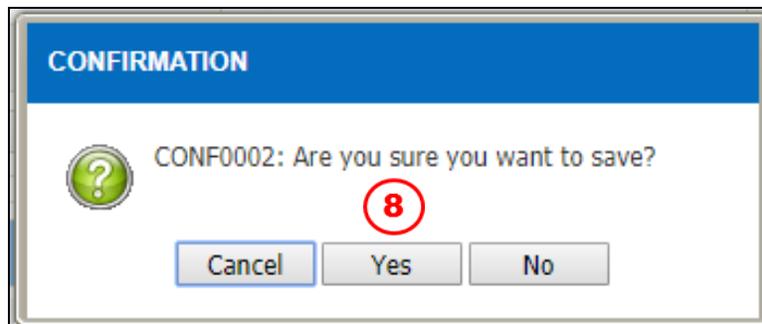


Figure 3.2.3.5-3 Confirmation Alert Message

STEP 9

Click on the  button to confirm record

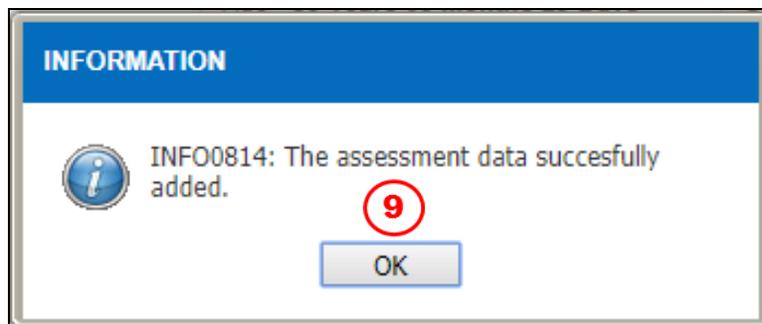


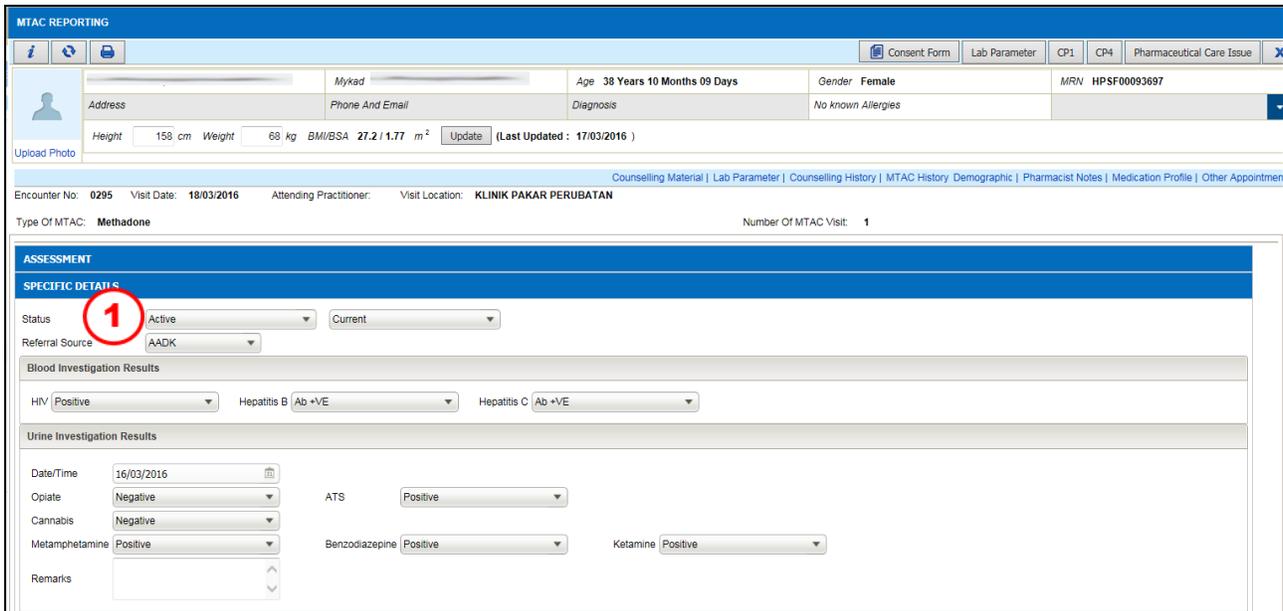
Figure 3.2.3.5-4 Information Alert Message

Note

For 'Reporting' section, repeat **Note (Page 28) to Step 32** as in 3.2.1 Create New MTAC Reporting with No Specific Details

3.2.3.6 Methadone

This function allow user to record Specific Details for Methadone for MTAC patient



The screenshot displays the 'MTAC REPORTING' interface. At the top, there are navigation tabs: 'Consent Form', 'Lab Parameter', 'CP1', 'CP4', and 'Pharmaceutical Care Issue'. Below this, patient information is shown: 'Mykad', 'Age 38 Years 10 Months 09 Days', 'Gender Female', and 'MRN HPSF00093697'. A table below contains fields for 'Address', 'Phone And Email', 'Diagnosis', and 'No known Allergies'. Further down, physical attributes are listed: 'Height 158 cm', 'Weight 68 kg', and 'BMI/BSA 27.2 / 1.77 m²'. A red circle with the number '1' highlights the 'Status' dropdown menu in the 'SPECIFIC DETAILS' section, which is currently set to 'Active'. Other dropdowns in this section include 'Referral Source' (set to 'AADK'), 'Blood Investigation Results' (HIV: Positive, Hepatitis B: Ab +VE, Hepatitis C: Ab +VE), and 'Urine Investigation Results' (Opiate: Negative, Cannabis: Negative, Metamphetamine: Positive, ATS: Positive, Benzodiazepine: Positive, Ketamine: Positive). A 'Remarks' field is also present at the bottom.

Figure 3.2.3.6-1 Specific Details - Methadone

Note

Repeat **STEP 1 to 16** as in 3.2.1 Create New MTAC Reporting with No Specific Details before performing MTAC Reporting - Specific Details for Methadone.

STEP 1

Select **Status** from the drop down box

- Active
- Inactive
- Current
- Re-entry
- Transfer

Select **Referral Source** from the drop down box

- AADK
- NGO
- NSEP
- Others
- Walk In

Note

Blank field will be enabled if user select **Other** from the **Referral Source** drop down box.

Blood Investigation Results

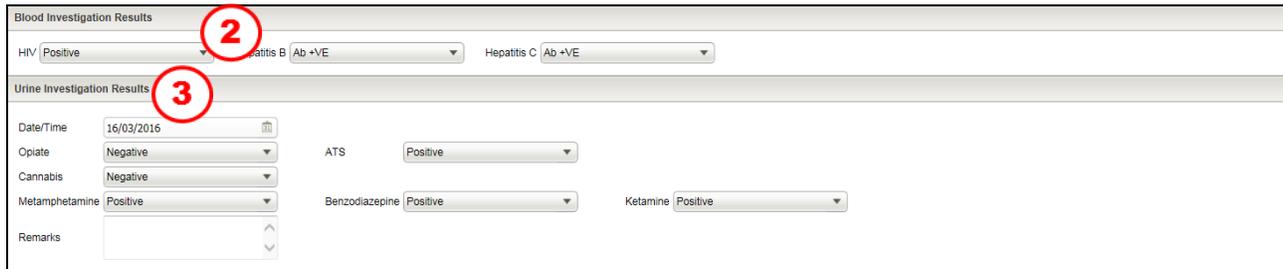


Figure 3.2.3.6-2 Specific Details – Methadone

STEP 2

Select **HIV** from the drop down box

- Negative
- Positive
- Unknown

Select **Hepatitis B** from the drop down box:

- Ab +VE
- Ab –VE
- Ag +VE
- Non-Reactive
- Unknown

Select **Hepatitis C** from the drop down box:

- Ab +VE
- Ab –VE
- Non-Reactive
- Unknown

Urine Investigation Results

STEP 3

Click on the  button to select *sample Date/Time*.

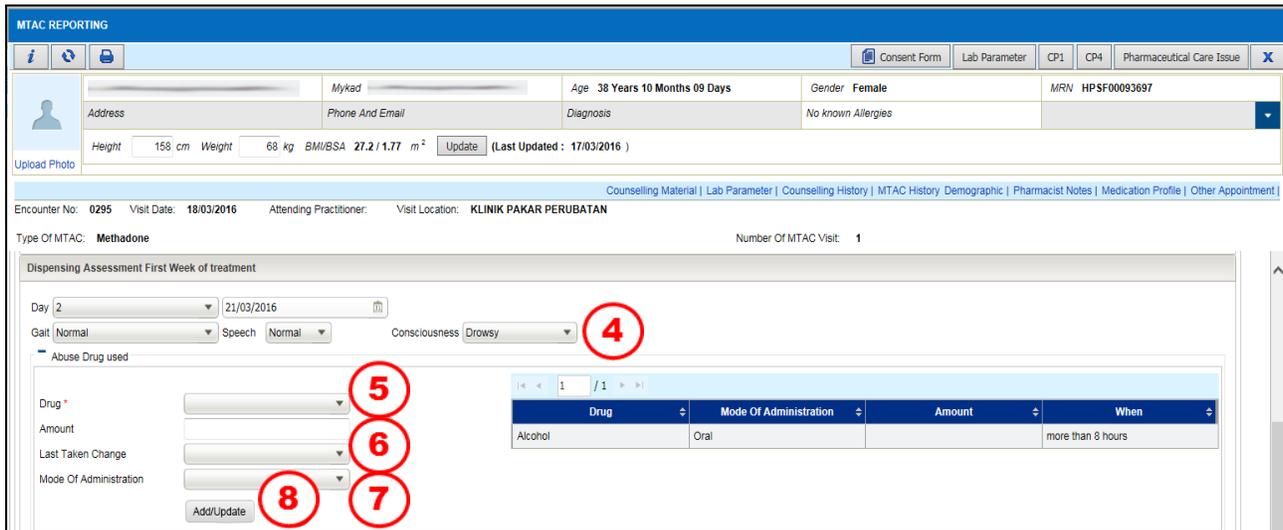
Select **Opiate, ATS, Cannabis, Methamphetamine, Benzodiazepine, and Ketamine** from the drop down box

- Negative
- Positive

Note

Enter **Remarks** if necessary

Dispensing Assessment First Week of Treatment



MTAC REPORTING

Consent Form | Lab Parameter | CP1 | CP4 | Pharmaceutical Care Issue

Mykad: [redacted] Age: 38 Years 10 Months 09 Days Gender: Female MRN: HPSF00093697

Address: [redacted] Phone And Email: [redacted] Diagnosis: [redacted] No known Allergies

Height: 158 cm Weight: 68 kg BMI/BSA: 27.2 / 1.77 m² Update (Last Updated: 17/03/2016)

Encounter No: 0295 Visit Date: 18/03/2016 Attending Practitioner: [redacted] Visit Location: KLINIK PAKAR PERUBATAN

Type Of MTAC: Methadone Number Of MTAC Visit: 1

Dispensing Assessment First Week of treatment

Day: 2 | 21/03/2016

Gait: Normal | Speech: Normal | Consciousness: Drowsy (4)

Abuse Drug used

Drug* (5) | Amount (6) | Last Taken Change | Mode Of Administration (7)

Add/Update (8)

Drug	Mode Of Administration	Amount	When
Alcohol	Oral		more than 8 hours

Figure 3.2.3.6-3 Specific Details – Methadone

STEP 4

Select **Day** from the drop down box and click on the  button to select date

Select **Gait** from the drop down box

- Impaired
- Normal

Select **Speech** from the drop down box

- Normal
- Pressured
- Slurred

Select **Consciousness** from the drop down box

- Agitated
- Alert
- Drowsy

Abuse Drug used

STEP 5

Select **Drug** from the drop down box

- ATS
- Alcohol
- Benzodiazepine
- Cannabis
- Mitragynine (Air Ketum)
- Opiate
- Others

Note

Enter **Amount** of drug

STEP 6

Select **Last Taken Change** from the drop down box

- Past 1 hour
- Past 2 hours
- Past 3 hours
- Past 4 hours
- Past 5 hours
- Past 6 hours
- Past 7 hours
- Past 8 hours
- More than 8 hours

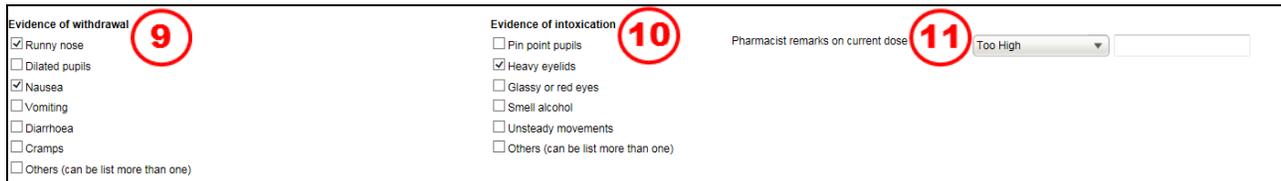
STEP 7

Select **Mode of Administration** from the drop down button

- Oral
- Others (please specify)
- Inhale/Snort/Smoke
- Injection

STEP 8

Click on the  button to add drug information on the list.



Evidence of withdrawal 9 <input checked="" type="checkbox"/> Runny nose <input type="checkbox"/> Dilated pupils <input checked="" type="checkbox"/> Nausea <input type="checkbox"/> Vomiting <input type="checkbox"/> Diarrhoea <input type="checkbox"/> Cramps <input type="checkbox"/> Others (can be list more than one)	Evidence of intoxication 10 <input type="checkbox"/> Pin point pupils <input checked="" type="checkbox"/> Heavy eyelids <input type="checkbox"/> Glassy or red eyes <input type="checkbox"/> Smell alcohol <input type="checkbox"/> Unsteady movements <input type="checkbox"/> Others (can be list more than one)	Pharmacist remarks on current dose 11 Too High <input type="text"/>
--	--	--

Figure 3.2.3.6-4 Specific Details – Methadone

STEP 9

Select **Evidence of withdrawal** from the drop down box

- Runny nose
- Dilated pupils
- Nausea and/or vomiting
- Diarrhoea
- Cramps
- Others

STEP 10

Select **Evidence of intoxication** from the drop down box

- Pin point pupils
- Heavy eyelids
- Glassy or red eyes
- Smell alcohol
- Unsteady movements
- Others

Note

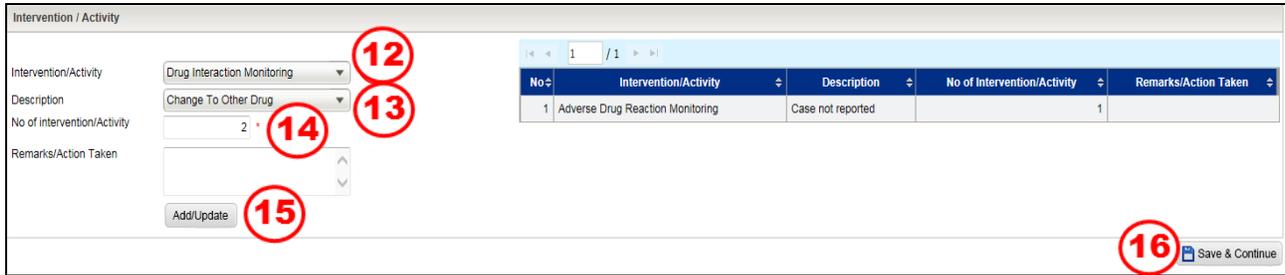
Blank fields will be enabled if user selects 'Other' from the drop down box of Evidence of withdrawal and Evidence of intoxication.

STEP 11

Select **Pharmacist remarks on current dose** from the drop down box

- Sufficient
- Too High
- Too Low

Intervention / Activity



No	Intervention/Activity	Description	No of Intervention/Activity	Remarks/Action Taken
1	Adverse Drug Reaction Monitoring	Case not reported	1	

Figure 3.2.3.6-5 Specific Details – Methadone

STEP 12

Select **Intervention / Activity** from the drop down box

- Adverse Drug Reaction Monitoring
- Drug Information
- Drug Interaction Monitoring
- Methadone Dose Modification
- Type of side affect

STEP 13

Select **Description** from the drop down box

STEP 14

Enter **No of Intervention/Activity**

Note

Description will be according to the Intervention/Activity selected from the drop down box

STEP 15

Click on the  button to add drug information on the list

STEP 16

Click on the  button to save and continue with reporting record

STEP 17

Click on the  button to confirm save order

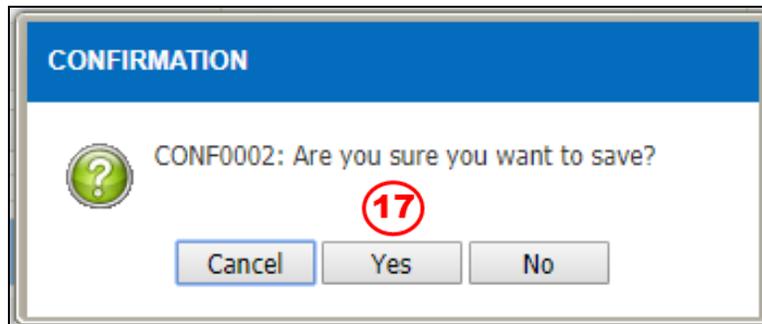


Figure 3.2.3.6-6 Confirmation Alert Message

STEP 18

Click on the  button to add record

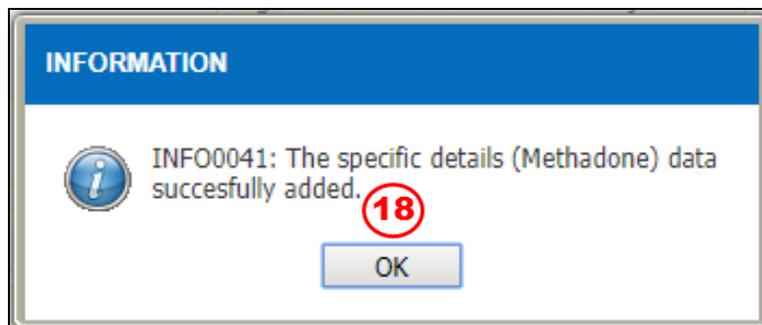


Figure 3.2.3.6-7 Information Alert Message

Note

For 'Reporting' section, repeat **Note (Page 28) to Step 32** as in 3.2.1 Create New MTAC Reporting with No Specific Details.

3.2.3.7 Renal Transplant

This function allow user to record Specific Details for Renal Transplant for MTAC patient.

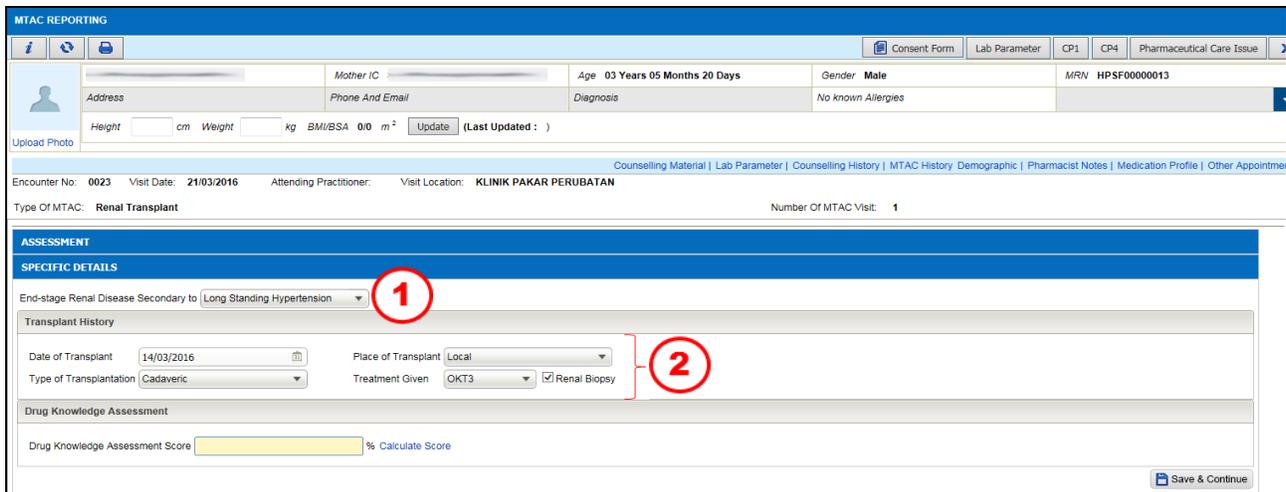


Figure 3.2.3.7-1 Specific Details - Renal Transplant

Note

Repeat **STEP 1 to 16** as in 3.2.1 Create New MTAC Reporting with No Specific Details before performing MTAC Reporting - Specific Details for Renal Transplant.

STEP 1

Select **End-stage Renal Disease Secondary to** from the drop down box

- Long Standing Hypertension
- Diabetic Nephropathy
- Lupus Nephritis
- Unknown

Transplant History

STEP 2

Click on the  button to select **Date of Transplant**

Select **Type of Transplantation** from the drop down box

- Cadaveric
- Living Non Related
- Living Related

Select **Place of Transplant** from the drop down box

- Local
- Overseas

Select **Treatment Given** from the drop down box

- Simulect
- OKT3
- Anti-Thymocyte

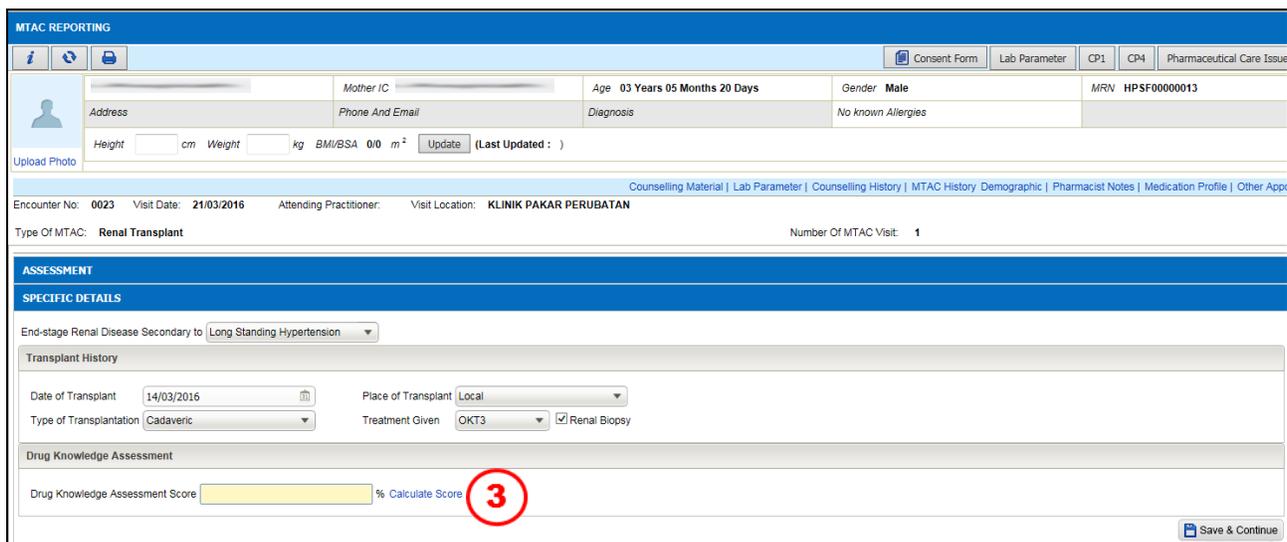
Note

User can check on the **Renal Biopsy** check box.

Drug Knowledge Assessment

STEP 3

Click on the [Calculate Score](#) hyperlink for **Drug Knowledge Assessment Score** and the 'Review of Patient's Understanding (Medication) DFIT' window will be displayed as shown in Figure 3.2.3.7-2



The screenshot shows the 'MTAC REPORTING' interface. At the top, there are navigation tabs: 'Consent Form', 'Lab Parameter', 'CP1', 'CP4', and 'Pharmaceutical Care Issue'. Below this is a patient information section with fields for 'Address', 'Phone And Email', 'Age' (03 Years 05 Months 20 Days), 'Gender' (Male), and 'M/RN' (HPSF0000013). There are also fields for 'Height', 'Weight', 'BMI/BSA', and an 'Update' button. Below the patient information, there are links for 'Counseling Material', 'Lab Parameter', 'Counseling History', 'MTAC History', 'Demographic', 'Pharmacist Notes', 'Medication Profile', and 'Other App'. The 'Encounter No' is 0023, 'Visit Date' is 21/03/2016, 'Attending Practitioner' is blank, and 'Visit Location' is 'KLINIK PAKAR PERUBATAN'. The 'Type Of MTAC' is 'Renal Transplant' and the 'Number Of MTAC Visit' is 1. The 'ASSESSMENT' section is expanded to show 'SPECIFIC DETAILS'. Under 'End-stage Renal Disease Secondary to', 'Long Standing Hypertension' is selected. The 'Transplant History' section includes 'Date of Transplant' (14/03/2016), 'Place of Transplant' (Local), 'Type of Transplantation' (Cadaveric), and 'Treatment Given' (OKT3). There is a checked box for 'Renal Biopsy'. The 'Drug Knowledge Assessment' section has a 'Drug Knowledge Assessment Score' field and a '% Calculate Score' button, which is circled in red with the number 3. A 'Save & Continue' button is at the bottom right.

Figure 3.2.3.7-2 Specific Details - Renal Transplant

STEP 4

Answer all questionnaire in the **Review of Patient's Understanding** window by selecting the radio button to answer every questions

Note

- Click on the  button to view in Malay language.
- Score will be automatically calculated and automatically displayed

STEP 5

Click on the  button to save record

REVIEW OF PATIENT'S UNDERSTANDING (MEDICATION) DFIT

i Malay [Print] [Close]

1. What does immunosuppressant medicines means?

a) Medicines that lowers the body immune system
 Yes No Not Sure

b) Medicines that prevent rejection of the transplanted organ
 Yes No Not Sure

c) Medicines that promotes graft cell production
 Yes No Not Sure

2. Why do you have to take immunosuppressant?

a) To protect myself from infections
 Yes No Not Sure

b) To prevent rejection of my newly transplanted organ
 Yes No Not Sure

c) To prolong the life of my newly transplanted organ
 Yes No Not Sure

3. How do I take immunosuppressant?

a) After meal
 Yes No Not Sure

b) Before meal
 Yes No Not Sure

c) Chew/Swallow with food
 Yes No Not Sure

4. What is the correct way to keep your immunosuppressant?

a) Keep in fridge
 Yes No Not Sure

b) Keep in a car for a long time
 Yes No Not Sure

c) Keep in an airtight container, at a dry place away from direct sunlight
 Yes No Not Sure

5. Why do you have to do regular blood tests while on immunosuppressant treatment?

a) To check the presence of infections
 Yes No Not Sure

b) To check the function of the transplanted organ
 Yes No Not Sure

c) To check the concentration of immunosuppressant in the blood
 Yes No Not Sure

6. What do you usually do when you MISSED a dose(s) of your immunosuppressant?

a) I will take it as soon as I remember. But, if its time for the next dose, I will omit the missed dose and continue with next scheduled dose
 Yes No Not Sure

b) Leave it out and continue with the next scheduled dose
 Yes No Not Sure

c) Accumulate the missed dose together with the next dose
 Yes No Not Sure

7. What to do if you have any side effects while taking immunosuppressant?

a) Stop taking without notify the doctor/pharmacist
 Yes No Not Sure

b) Stop take it and consult doctor immediately
 Yes No Not Sure

c) Take another medication to resolve it without notify the doctor/pharmacist
 Yes No Not Sure

8. What to do if you want to take supplement and traditional medication while taking immunosuppressant?

a) Notify doctor/pharmacist before taking it
 Yes No Not Sure

b) Take it together with immunosuppressant without notify doctor /pharmacist
 Yes No Not Sure

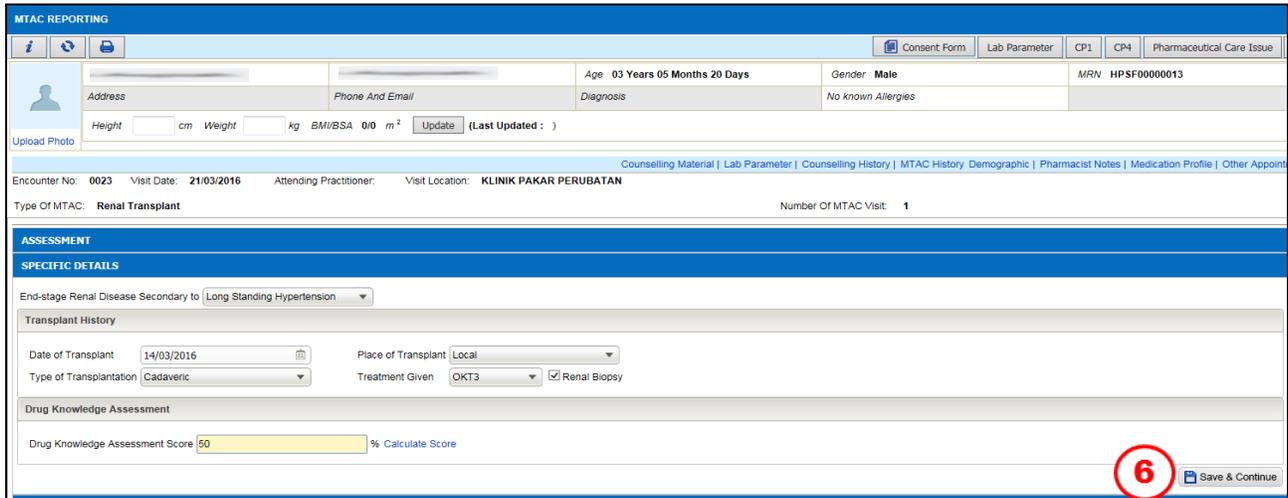
c) Take supplement and stop immunosuppressant
 Yes No Not Sure

SCORE:

Figure 3.2.3.7-3 Drug Knowledge Assessment

STEP 6

Click on the  button as shown in Figure 3.2.3.7-4 to save and continue with reporting section



MTAC REPORTING

Consent Form | Lab Parameter | CP1 | CP4 | Pharmaceutical Care Issue

Age: 03 Years 05 Months 20 Days | Gender: Male | MRN: HPSF00000013

Address | Phone And Email | Diagnosis | No known Allergies

Height: cm | Weight: kg | BMI/BSA: 0/0 m² | Update (Last Updated:)

Encounter No: 0023 | Visit Date: 21/03/2016 | Attending Practitioner: | Visit Location: KLINIK PAKAR PERUBATAN

Type Of MTAC: Renal Transplant | Number Of MTAC Visit: 1

ASSESSMENT

SPECIFIC DETAILS

End-stage Renal Disease Secondary to: Long Standing Hypertension

Transplant History

Date of Transplant: 14/03/2016 | Place of Transplant: Local

Type of Transplantation: Cadaveric | Treatment Given: OKT3 | Renal Biopsy

Drug Knowledge Assessment

Drug Knowledge Assessment Score: 50 % Calculate Score

6 Save & Continue

Figure 3.2.3.7-4 Specific Details - Renal Transplant

STEP 7

Click on the  button to confirm save record

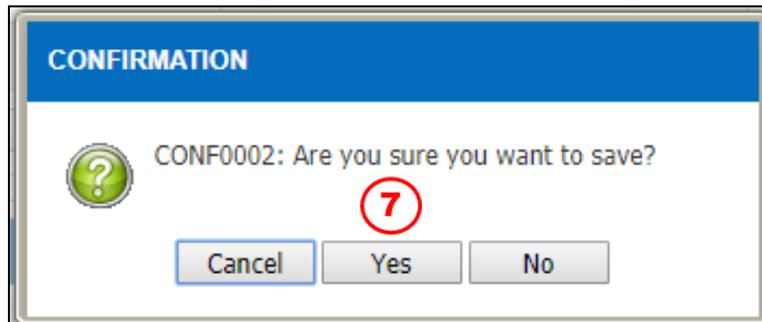


Figure 3.2.3.7-5 Confirmation Alert Message

STEP 8

Click on the  button to confirm record

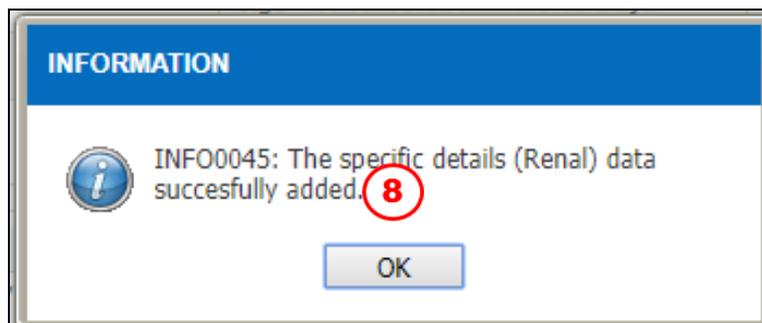


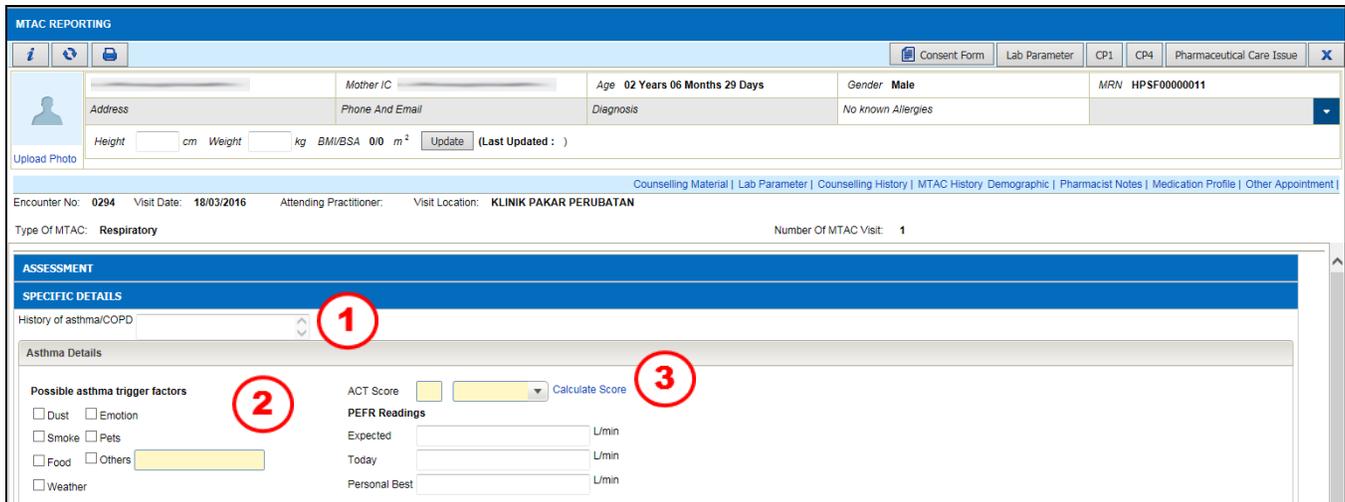
Figure 3.2.3.7-6 Information Alert Message

Note

For 'Reporting' section, repeat **Note (Page 28) to Step 32** as in 3.2.1 Create New MTAC Reporting with No Specific Details.

3.2.3.8 Respiratory

This function allow user to record Specific Details for Respiratory for MTAC patient



The screenshot shows the 'MTAC REPORTING' interface. At the top, there are navigation icons and buttons for 'Consent Form', 'Lab Parameter', 'CP1', 'CP4', and 'Pharmaceutical Care Issue'. Below this is a patient information section with fields for 'Mother IC', 'Age' (02 Years 06 Months 29 Days), 'Gender' (Male), and 'MRN' (HPSF00000011). There are also fields for 'Address', 'Phone And Email', 'Diagnosis', and 'No known Allergies'. A 'Height' and 'Weight' section is present with units 'cm' and 'kg', and a 'BMI/BSA' field with units '0/0 m²'. An 'Update' button and '(Last Updated :)' text are also visible. Below the patient information, there are tabs for 'Counselling Material', 'Lab Parameter', 'Counselling History', 'MTAC History', 'Demographic', 'Pharmacist Notes', 'Medication Profile', and 'Other Appointment'. The 'Encounter No: 0294', 'Visit Date: 18/03/2016', 'Attending Practitioner', and 'Visit Location: KLINIK PAKAR PERUBATAN' are displayed. The 'Type Of MTAC: Respiratory' and 'Number Of MTAC Visit: 1' are also shown. The 'ASSESSMENT' section is expanded to show 'SPECIFIC DETAILS'. Under 'SPECIFIC DETAILS', there is a dropdown menu for 'History of asthma/COPD' circled with a red '1'. Below this is the 'Asthma Details' section. It contains a 'Possible asthma trigger factors' section with checkboxes for 'Dust', 'Emotion', 'Smoke', 'Pets', 'Food', 'Others', and 'Weather'. The 'Others' checkbox is highlighted with a yellow background. To the right of this section is the 'ACT Score' section, which includes a dropdown menu, a 'Calculate Score' button circled with a red '3', and 'PEFR Readings' for 'Expected', 'Today', and 'Personal Best' with units 'L/min'.

Figure 3.2.3.8-1 Specific Details – Asthma Details

Note

Repeat **STEP 1 to 16** as in 3.2.1 Create New MTAC Reporting with No Specific Details before performing MTAC Reporting - Specific Details for Respiratory

STEP 1

Enter **History of asthma/COPD**

Asthma Details

STEP 2

Select **Possible asthma trigger factors** from the check box. User is allowed to select more than one (1)

- Dust
- Smoke
- Food
- Weather
- Emotion
- Pets
- Others

Note

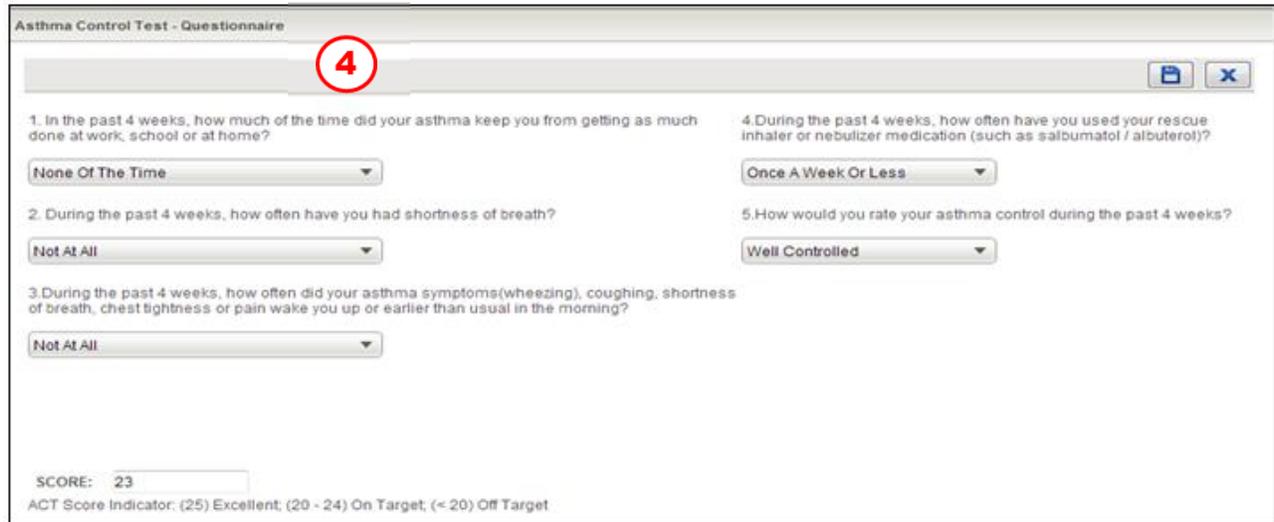
Blank field will be enabled only if user selects 'Others' from the check box.

STEP 3

Click on the [Calculate Score](#) hyperlink for **ACT Score** and the 'Asthma Control Test - Questionnaire' window will be displayed as shown in Figure 3.2.3.8-2

STEP 4

Select the drop down box to answer the questionnaire



Asthma Control Test - Questionnaire

1. In the past 4 weeks, how much of the time did your asthma keep you from getting as much done at work, school or at home?
None Of The Time

2. During the past 4 weeks, how often have you had shortness of breath?
Not At All

3. During the past 4 weeks, how often did your asthma symptoms(wheezing), coughing, shortness of breath, chest tightness or pain wake you up or earlier than usual in the morning?
Not At All

4. During the past 4 weeks, how often have you used your rescue inhaler or nebulizer medication (such as salbutamol / albuterol)?
Once A Week Or Less

5. How would you rate your asthma control during the past 4 weeks?
Well Controlled

SCORE: 23
ACT Score Indicator: (25) Excellent; (20 - 24) On Target; (< 20) Off Target

Figure 3.2.3.8-2 Asthma Control Test - Questionnaire

Note

Score will be automatically calculated and automatically displayed.

STEP 5

Click on the [Calculate Score](#) hyperlink and window of 'CAT Score – Questionnaire' will be display as per Figure 3.2.3.8-3



COPD Details

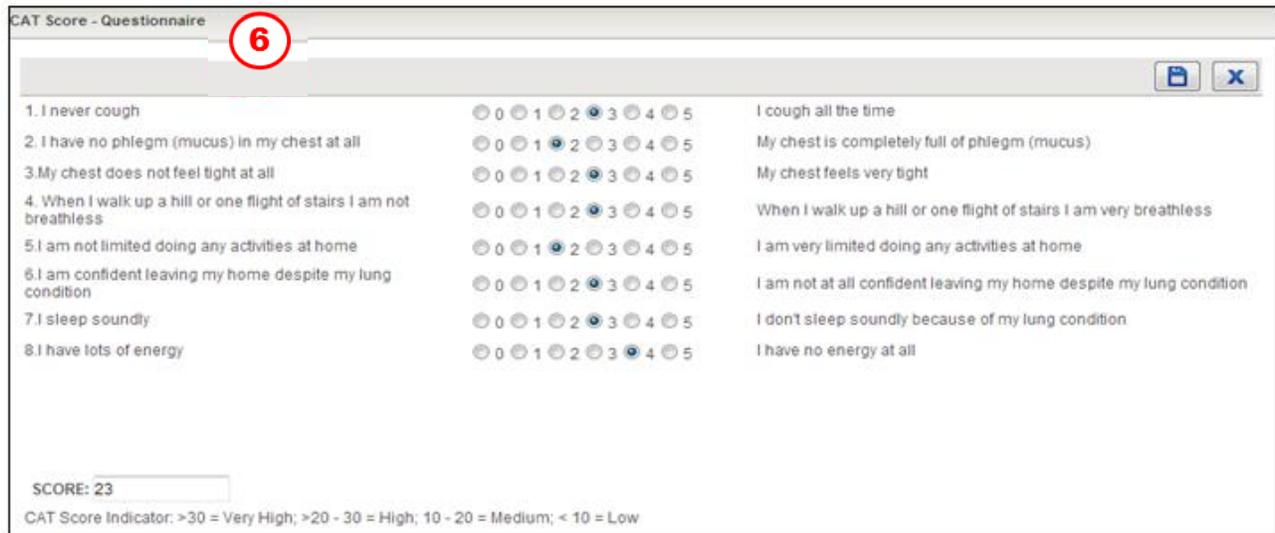
CAT Score

Calculate Score

Figure 3.2.3.8-3 Specific Details – COPD Details

STEP 6

Select **CAT Score – Questionnaire** check box and save record



The screenshot shows a window titled "CAT Score - Questionnaire" with a red circle '6' around the title bar. It contains 8 pairs of statements with radio button scales from 0 to 5. The statements are:

1. I never cough	0 1 2 3 4 5	I cough all the time
2. I have no phlegm (mucus) in my chest at all	0 1 2 3 4 5	My chest is completely full of phlegm (mucus)
3. My chest does not feel tight at all	0 1 2 3 4 5	My chest feels very tight
4. When I walk up a hill or one flight of stairs I am not breathless	0 1 2 3 4 5	When I walk up a hill or one flight of stairs I am very breathless
5. I am not limited doing any activities at home	0 1 2 3 4 5	I am very limited doing any activities at home
6. I am confident leaving my home despite my lung condition	0 1 2 3 4 5	I am not at all confident leaving my home despite my lung condition
7. I sleep soundly	0 1 2 3 4 5	I don't sleep soundly because of my lung condition
8. I have lots of energy	0 1 2 3 4 5	I have no energy at all

At the bottom, it shows "SCORE: 23" and a legend: "CAT Score Indicator: >30 = Very High; >20 - 30 = High; 10 - 20 = Medium; < 10 = Low".

Figure 3.2.3.8-4 CAT Score – Questionnaire

STEP 7

Click on the [Calculate Score](#) hyperlink of Before and After Counseling to do questionnaire as below:

- a) MDI Score
- b) Turbuhaler Score
- c) Accuhaler Score
- d) Handihaler Score
- e) MDI and Spacer Score



The screenshot shows a window titled "Inhaler Technique Understanding". It has two columns: "Before counselling" and "After counselling". Each column has five rows for different inhaler types: MDI Score, TURBUHALER Score, ACCUHALER Score, HANDIHALER Score, and MDI and SPACER Score. Each row has a dropdown menu and a "Calculate Score" button. A red circle '7' is around the "Calculate Score" buttons for the "After counselling" column. A red circle '8' is around the "Save & Continue" button at the bottom right.

Figure 3.2.3.8-5 Inhaler Technique Understanding

STEP 8

Click on the  button as shown in Figure 3.2.3.8-5 to save and continue with reporting section

STEP 9

Click on the  button to confirm save order

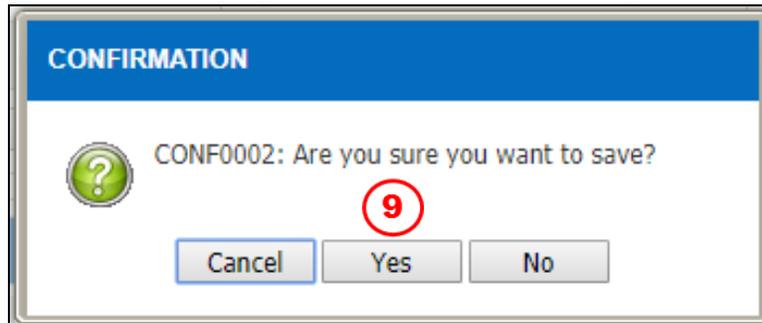


Figure 3.2.3.8-6 Confirmation Alert Message

STEP 10

Click on the  button to confirm record

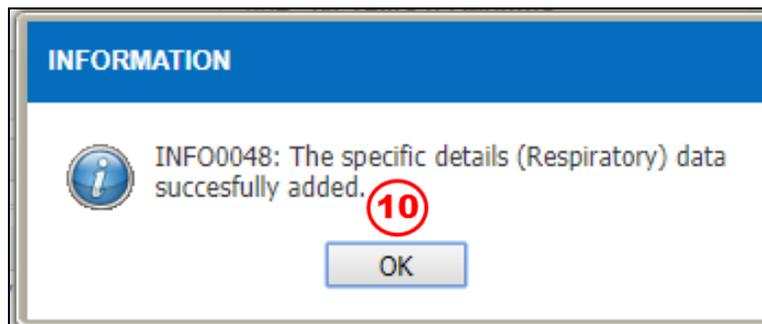


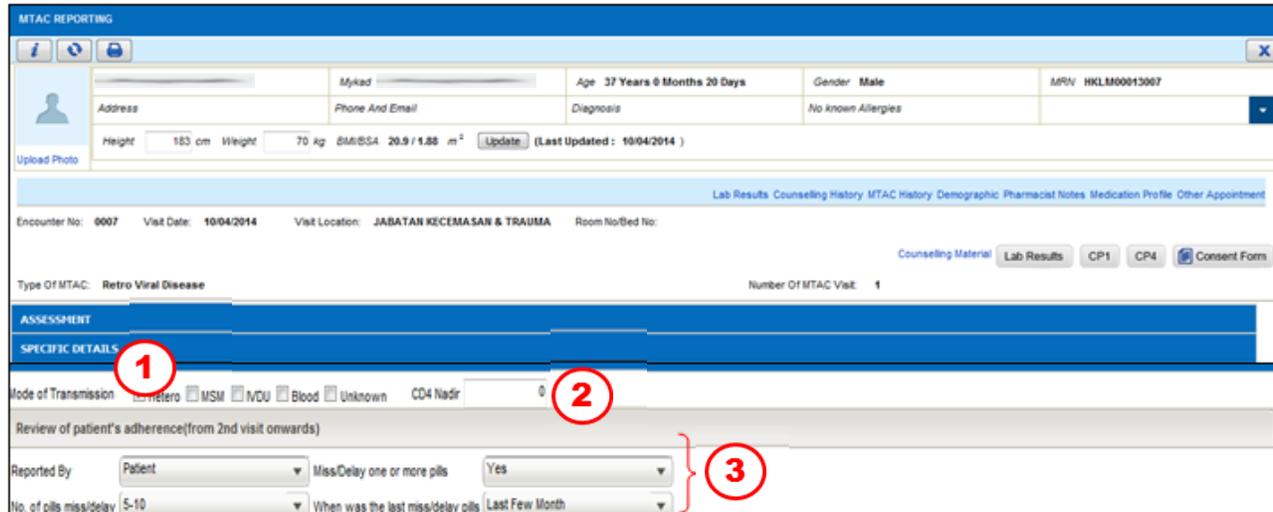
Figure 3.2.3.8-7 Information Alert Message

Note

For 'Reporting' section, repeat **Note (Page 28) to Step 32** as in 3.2.1 Create New MTAC Reporting with No Specific Details.

3.2.3.9 Retro Viral Disease

This function allows users to record Specific Details for Retro Viral Disease for MTAC patients.



The screenshot displays the 'MTAC REPORTING' interface. At the top, there is a patient information summary including name (Mykad), age (37 Years 0 Months 20 Days), gender (Male), and MRN (HKLM00013007). Below this, there are fields for address, phone/email, diagnosis, and allergies. A section for physical attributes shows height (183 cm), weight (70 kg), BMI/BSA (20.9 / 1.88 m²), and an 'Update' button. The interface includes navigation tabs for 'Lab Results', 'Counseling History', 'MTAC History', 'Demographic', 'Pharmacist Notes', 'Medication Profile', and 'Other Appointment'. Encounter details include number (0007), date (10/04/2014), location (JABATAN KECEMASAN & TRAUMA), and room/bed number. There are buttons for 'Counseling Material', 'Lab Results', 'CP1', 'CP4', and 'Consent Form'. The 'Type Of MTAC' is set to 'Retro Viral Disease' and the 'Number Of MTAC Visit' is 1. The 'ASSESSMENT' section is expanded to show 'SPECIFIC DETAILS'. This section contains a 'Mode of Transmission' row with radio buttons for Hetero, MSM, IVDU, Blood, and Unknown, and a 'CD4 Nadir' input field. Below this is a section for 'Review of patient's adherence (from 2nd visit onwards)' with a 'Reported By' dropdown menu, a 'Miss/Delay one or more pills' dropdown, and a 'Yes' dropdown. Further down are 'No. of pills miss/delay' and 'When was the last miss/delay pills' dropdowns. Red circles 1, 2, and 3 highlight the 'Mode of Transmission' checkboxes, the 'CD4 Nadir' input field, and the 'Reported By' dropdown menu, respectively.

Figure 3.2-3.9-1 Specific Details - Retro Viral Disease

Note

Repeat **Step 1 to Step 16** as in 3.2.1 Create New MTAC Reporting with No Specific Details before performing MTAC Reporting - Specific Details for Retro Viral Disease.

STEP 1

Select **Mode of Transmission** from the check box

- Hetero
- MSM
- IVDU
- Blood
- Unknown

STEP 2

Enter **CD4 Nadir**

Review of patient's adherence (from 2nd visit onwards)

STEP 3

Select **Reported By** from the drop down box

- Caregiver
- Patient

Select **Miss/Delay one or more pills** from the drop down box

- Yes
- No

Note

No. of pills miss/delay and when was the last miss/delay pills will be enabled only if user selects ‘Yes’ from the **Miss/Delay one or more pills** drop down box

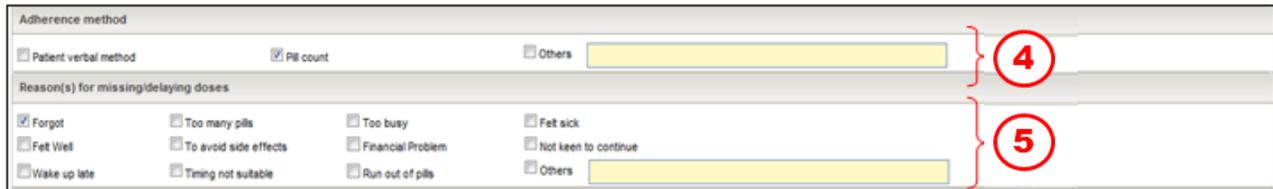


Figure 3.2.3.9-2 Specific Details - Retro Viral Disease

STEP 4

Select **Adherence Method** from the check box

- Patient verbal method
- Pill count
- Others

Note

Blank field will be enabled if user selects ‘Others’ from the check box.

STEP 5

Select **Reason(s) for missing/delaying doses** from the check box

- Forgot
- Felt Well
- Wake up late
- Too many pills
- To avoid side effects
- Timing not suitable
- Too busy
- Financial Problem
- Run out of pills
- Felt sick
- Not keen to continue
- Others

Note

Blank field will be enabled if user selects 'Others' from the check box.

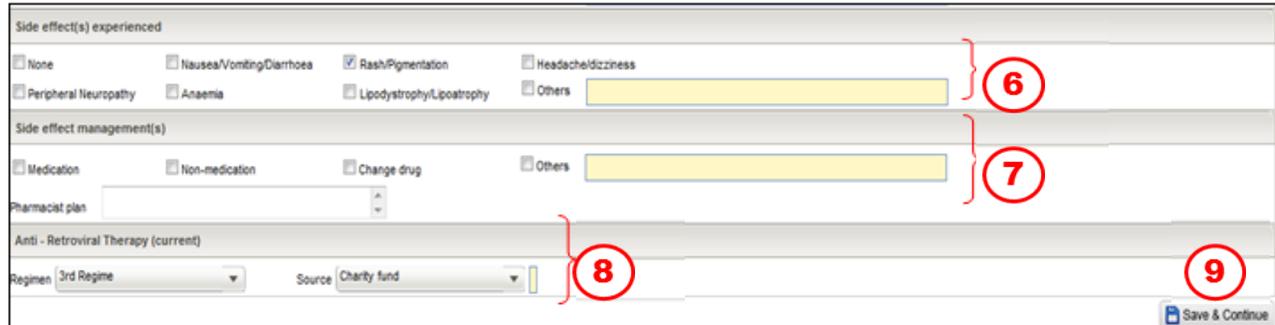


Figure 3.2.3.9-3 Specific Details - Retro Viral Disease

STEP 6

Select **Side effect(s) experienced** from the check box

- None
- Peripheral Neuropathy
- Nausea/Vomiting/Diarrhoea
- Anaemia
- Rash/Pigmentation
- Lipodystrophy/Lipoatrophy
- Headache/dizziness
- Others

Note

Blank field will be enabled if user selects 'Others' from the check box.

STEP 7

Select **Side effect management(s)** from the check box

- Medication
- Non-medication
- Change drug
- Others

Note

Blank field will be enabled if user selects 'Others' from the check box

Enter **Pharmacist plan** if necessary

Anti-Retroviral Therapy (current)

STEP 8

Select **Regimen** from the drop down box

- 1st line
- 2nd line
- 3rd line

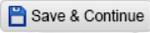
Select **Source** from the drop down box

- Baitulmal
- Charity fund
- Hospital
- NGO
- Others
- Self
- UNHCR

Note

Blank field will be enabled if user selects 'Others' from the check box.

STEP 9

Click on the  button as shown in Figure 3.2.3.9-3 to save and continue with reporting section

STEP 10

Click on the  button to confirm save record

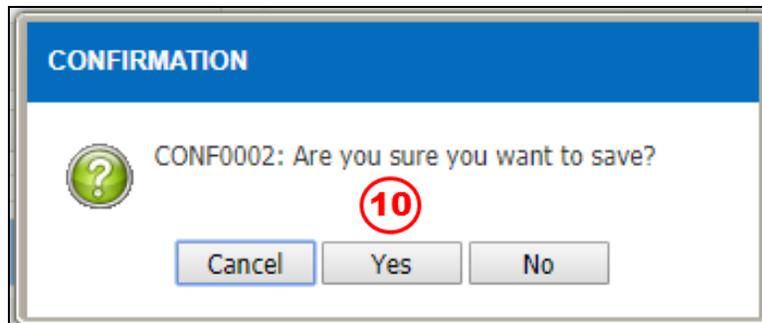


Figure 3.2.3.9-4 Confirmation Alert Message

STEP 11

Click on the  button to confirm record

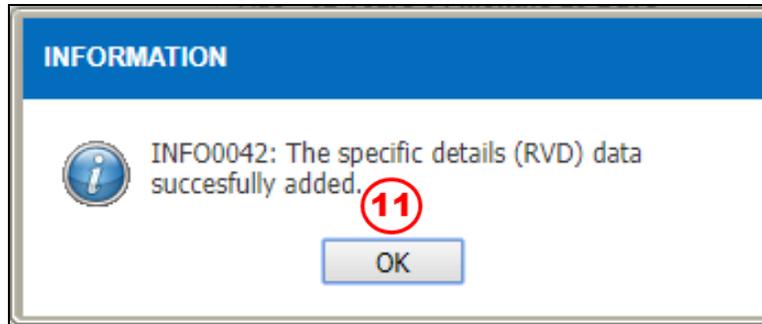


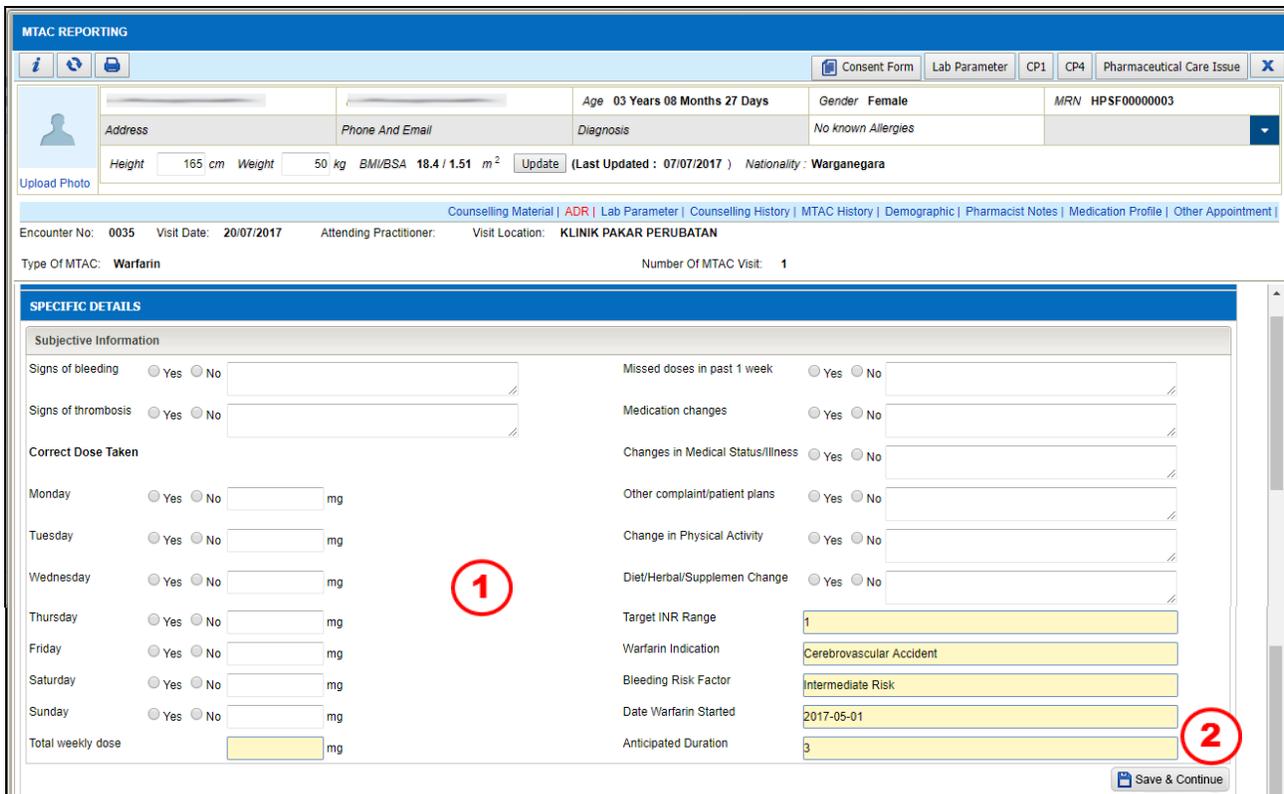
Figure 3.2.3.9-5 Information Alert Message

Note

For 'Reporting' section, repeat **Note (Page 28) to Step 32** as in 3.2.1 Create New MTAC Reporting with No Specific Details.

3.2.3.10 Warfarin

This function allow user to record Specific Details for Warfarin for MTAC patients.



MTAC REPORTING

Consent Form | Lab Parameter | CP1 | CP4 | Pharmaceutical Care Issue

Age 03 Years 08 Months 27 Days | Gender Female | MRN HPSF00000003

Address | Phone And Email | Diagnosis | No known Allergies

Height 165 cm | Weight 50 kg | BMI/BSA 18.4 / 1.51 m² | Update | (Last Updated : 07/07/2017) | Nationality : Warganegara

Counselling Material | ADR | Lab Parameter | Counselling History | MTAC History | Demographic | Pharmacist Notes | Medication Profile | Other Appointment

Encounter No: 0035 | Visit Date: 20/07/2017 | Attending Practitioner: | Visit Location: KLINIK PAKAR PERUBATAN

Type Of MTAC: Warfarin | Number Of MTAC Visit: 1

SPECIFIC DETAILS

Subjective Information

Signs of bleeding Yes No

Signs of thrombosis Yes No

Correct Dose Taken

Monday Yes No [] mg

Tuesday Yes No [] mg

Wednesday Yes No [] mg

Thursday Yes No [] mg

Friday Yes No [] mg

Saturday Yes No [] mg

Sunday Yes No [] mg

Total weekly dose [] mg

Missed doses in past 1 week Yes No

Medication changes Yes No

Changes in Medical Status/illness Yes No

Other complaint/patient plans Yes No

Change in Physical Activity Yes No

Diet/Herbal/Supplemen Change Yes No

Target INR Range 1

Warfarin Indication Cerebrovascular Accident

Bleeding Risk Factor Intermediate Risk

Date Warfarin Started 2017-05-01

Anticipated Duration 3

Save & Continue

Figure 3.2.3.10-1 Specific Details - Warfarin

Note

Repeat **STEP 1 to 16** as in 3.2.1 Create New MTAC Reporting with No Specific Details before performing MTAC Reporting - Specific Details for Warfarin.

STEP 1

For **Subjective Information**, select 'Yes' or 'No' radio buttons for below:

- **Signs of bleeding**
- **Correct Dose Taken**
- **Signs of thrombosis**
- **Missed doses in past 1 week**
- **Medication changes**
- **Changes in Medical Status/illness**
- **Other complaint/patient plans**
- **Change in Physical Activity**

Note

- Enter remark (if available) and dosage for **Correct Dose Taken** at the blank field provided
- **Total weekly dose, Target INR Range, Warfarin Indication, Bleeding Risk Factor, Date Warfarin Started** and **Anticipated Duration** will be automatically displayed based on what user key in in MTAC order details as shown in Figure 3.2.3.10-1.

STEP 2

Click on the  button to save and continue with reporting section

STEP 3

Click on the  button to confirm save record

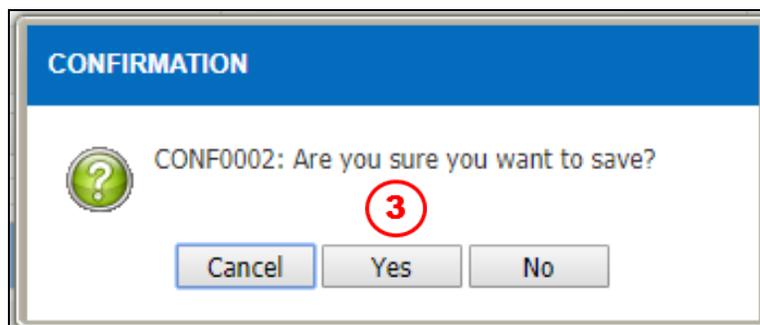


Figure 3.2.3.10-2 Confirmation Alert Message

STEP 4

Click on the  button to confirm record

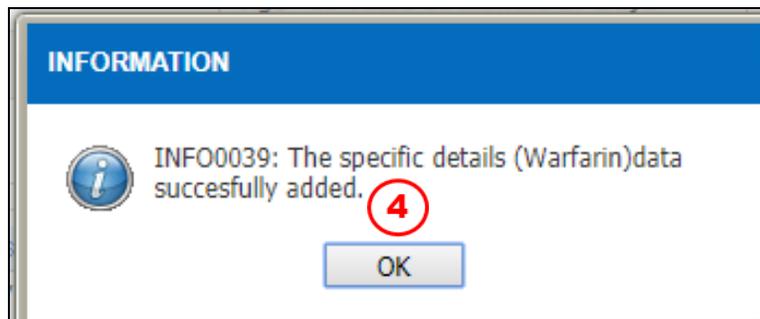


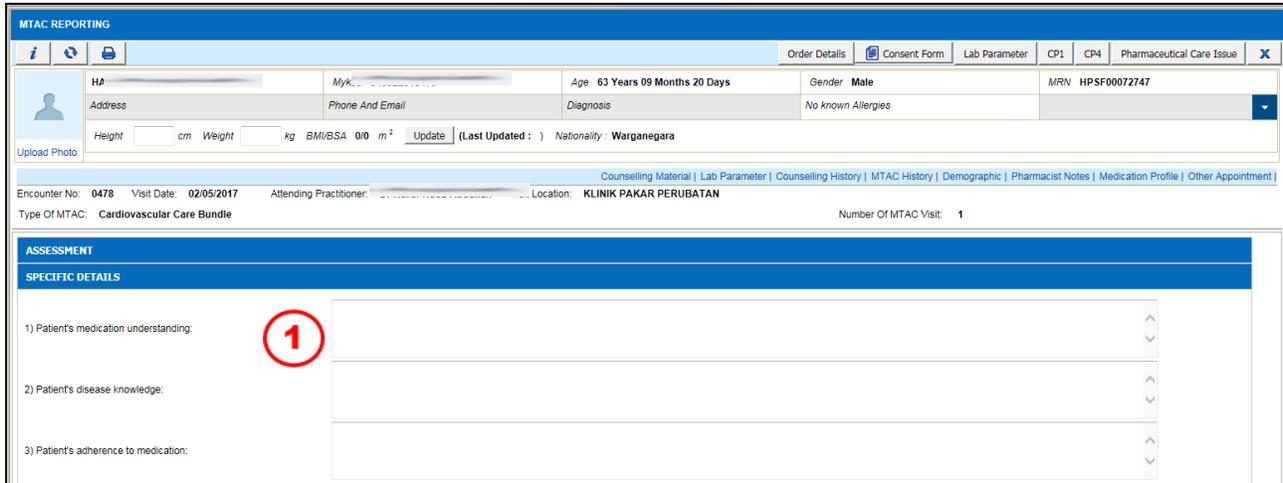
Figure 3.2.3.10-3 Information Alert Message

Note

- For 'Reporting' section, repeat **Note (Page 28) to Step 32** as in 3.2.1 Create New MTAC Reporting with No Specific Details.
- If patient has previous history, Target INR will appear in MTAC History

3.2.3.11 Cardiovascular Care Bundle

This function allow user to record Specific Details for Cardiovascular Care Bundle for MTAC patients.



The screenshot displays the 'MTAC REPORTING' interface. At the top, there are navigation tabs for 'Order Details', 'Consent Form', 'Lab Parameter', 'CP1', 'CP4', and 'Pharmaceutical Care Issue'. Below this, patient information is shown in a grid format, including fields for HA, Myk..., Age (63 Years 09 Months 20 Days), Gender (Male), MRN (HPSF00072747), Address, Phone And Email, Diagnosis, and No known Allergies. There are also input fields for Height (cm), Weight (kg), BMI/BSA (0/0 m²), and Nationality (Warganegara). A 'Counselling Material' tab is active, showing 'ASSESSMENT' and 'SPECIFIC DETAILS' sections. Under 'SPECIFIC DETAILS', there are three text input areas: '1) Patient's medication understanding:', '2) Patient's disease knowledge:', and '3) Patient's adherence to medication:'. A red circle with the number '1' is placed over the first input area.

Figure 3.2.3.11-1 Specific Details - Warfarin

Note

Repeat **STEP 1 to 16** as in 3.2.1 Create New MTAC Reporting with No Specific Details before performing MTAC Reporting - Specific Details for Warfarin.

STEP 1

For **Subjective Information**, user need to fill up the patient specific detail based on:

- **Patient medication understanding**
- **Patient disease knowledge**
- **Patient adherence to medication**

Note

- For 'Reporting' section, repeat **Note (Page 28) to Step 32** as in 3.2.1 Create New MTAC Reporting with No Specific Details.
- User can save the specific detail after doing reporting part.

4.0 Acronyms

Abbreviation	Definition
PhIS	Pharmacy Information System
MOH	Ministry of Health
CPS	Clinical Pharmacy System
PM	Patient Management
eGL	Electronic Guarantee Letter
HRMIS	Human Resource Management System
MRN	Medical Record Number
MTAC	Medication Therapy Adherence Clinic

5.0 Links to Clinical Modules

No	Module	PDF Links	No	Module	PDF Links
1	<i>Inpatient</i>	Click Here	12	<i>CDR Dispensing</i>	Click Here
2	<i>CDR Order</i>	Click Here	13	<i>Methadone Dispensing</i>	Click Here
3	<i>TDM Order</i>	Click Here	14	<i>PN Dispensing</i>	Click Here
4	<i>PN Order</i>	Click Here	15	<i>Order Management</i>	Click Here
5	<i>IV Order</i>	Click Here	16	<i>Patient Management</i>	Click Here
6	<i>Prepacking</i>	Click Here	17	<i>Radiopharmaceutical</i>	Click Here
7	<i>Galenical</i>	Click Here	18	<i>Outpatient</i>	Click Here
8	<i>MTAC</i>	Click Here	19	<i>Special Drug Request</i>	Click Here
9	<i>ADR & DAC</i>	Click Here	20	<i>MAR</i>	Click Here
10	<i>Medication Counselling</i>	Click Here	21	<i>DICE</i>	Click Here
11	<i>Ward Pharmacy</i>	Click Here	22		