

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

Full Based User Manual Medication Therapy Adherence Clinic (MTAC)

Version	: 10th EDITION
Document ID	: FB_U. MANUAL_MTAC



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Reference ID : FB_U. MANUAL_MTAC-10th EDITION

Application reference: PhIS & CPS v2.1 & v2.2

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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

























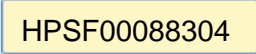
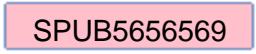


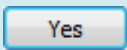

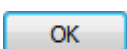


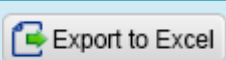




1.3 Organised Sections

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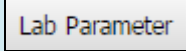
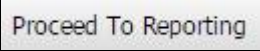
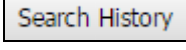
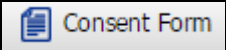


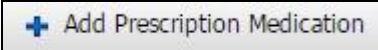
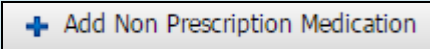

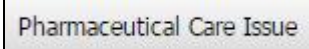

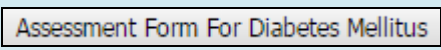


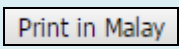
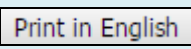
- Section 1 : Introduction
- Section 2 : Application Standard Features
- Section 3 : MTAC
- Section 4 : Acronyms
- Section 5 : Links to clinical modules

2.0 Application Standard Features

2.1 PhIS Legend

Standard Legend			
	Blank Field		Drop Down Box
	Reset Login		Login to PhIS
	Expand Menu		Collapse Menu
	Display Home Tab		Expand Module
	Collapse Module		Logout from PhIS
	Close All Tabs		Refresh
	Search First Page/ Previous Page		Search Next Page/Last Page
	Search Up/Down Button		Hyperlink
	Save		Show Help
	Search Icon		Add/Create New Record
	Calendar Icon		Search Record
	Close Window		Add/Update Button
	Auto generate an information by the system		Auto generate record no by the system
	Mandatory Field		Cancel Button
	Yes Button		No Button
	OK Button		Edit Record
	Print		Export report from PDF to Excel
	Check Box		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> <ol style="list-style-type: none"> Past Medication - CP1 Non-Prescription Medication (including Herbal/Vitamin/Herbal/Vitamin/Another Supplement) - CP1 <p>Column for i) and ii) should include:</p> <ol style="list-style-type: none"> Original Rx no. Order details (like in preparation screen) Supply details 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> <ol style="list-style-type: none"> 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
<ol style="list-style-type: none"> 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
New screen for TDM specific details ; Haemophilia, Psoriasis, Respiratory, Talasemia and warfarin	51-91

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

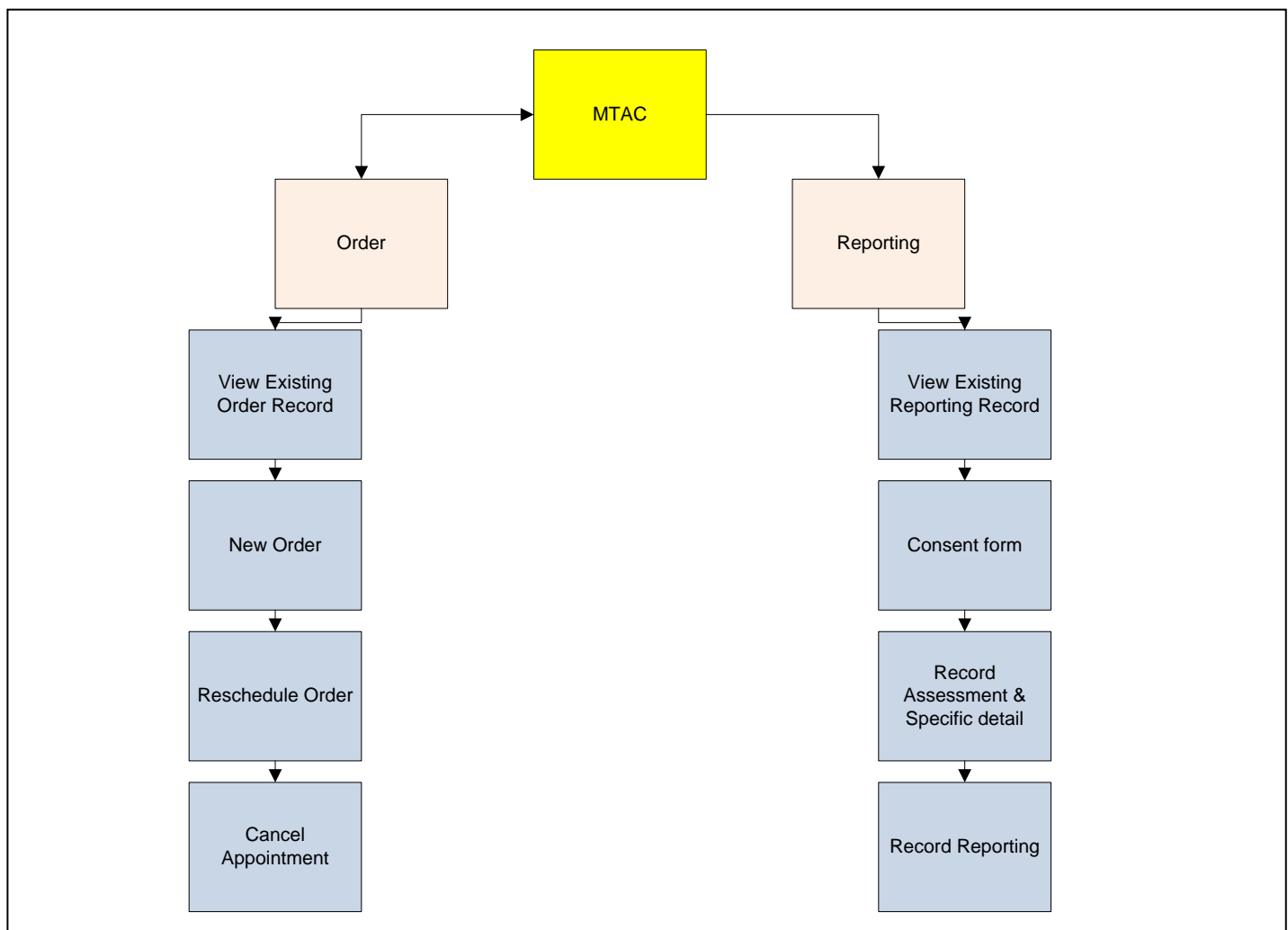


Figure 3.0-1

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 (8) types of MTAC with No Specific Details

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

There are ten (14) 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
12. Hemophilia
13. Psoriasis
14. Thalassemia

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.

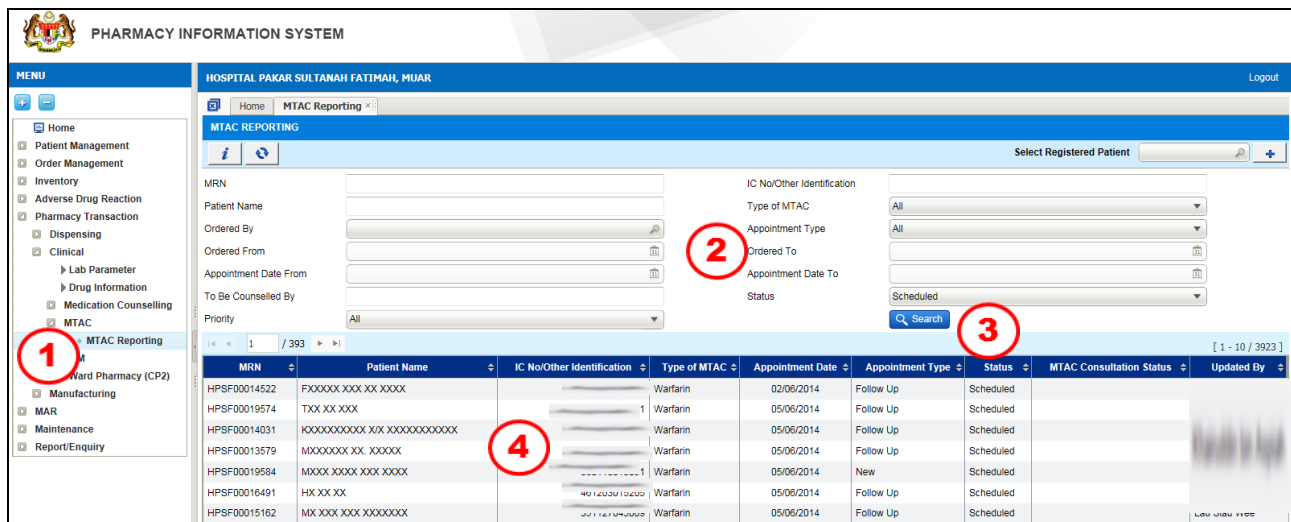


Figure 3.1.1-1 MTAC Reporting Listing Page

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 counselled 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 - Cardiac Rehab Program	Able to filter and search by type of MTAC order

	<ul style="list-style-type: none"> - 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 -Thalassemia 	
Appointment Type	<ul style="list-style-type: none"> - All - Follow Up - New 	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

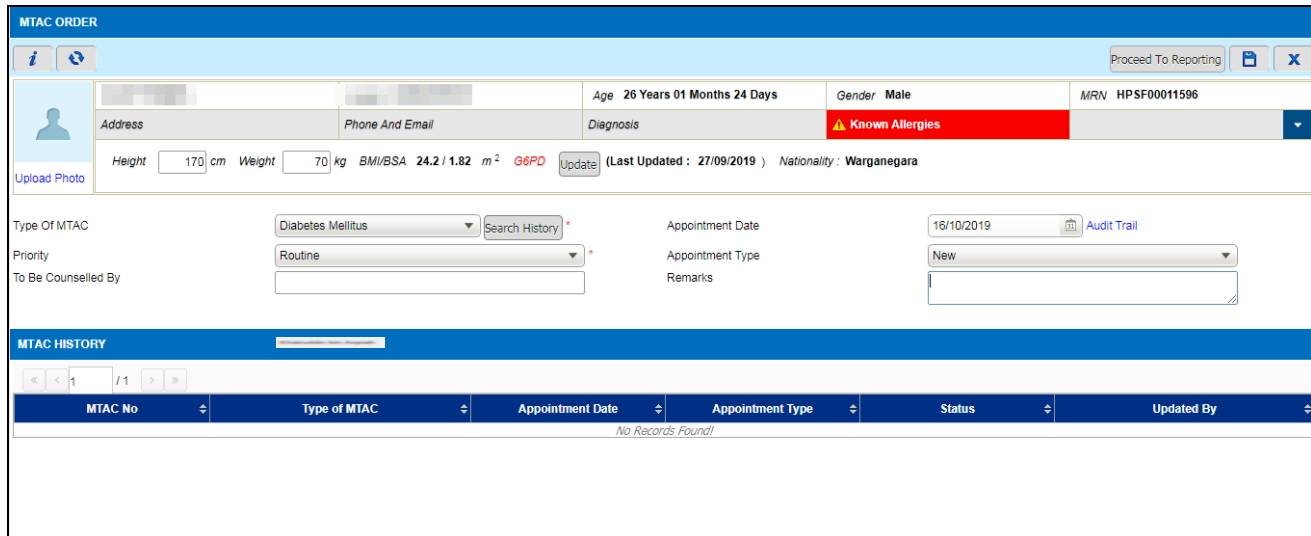
Note

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



The screenshot displays the 'MTAC ORDER' form. At the top, there is a header bar with 'MTAC ORDER' and navigation icons. Below this, a patient banner contains fields for Patient Name, Address, Phone And Email, Age (26 Years 01 Months 24 Days), Gender (Male), and MRN (HPSF00011596). A red 'Known Allergies' button is also present. Below the banner, there are fields for Height (170 cm), Weight (70 kg), BMI/BSA (24.2 / 1.82 m²), G6PD, and a 'Last Updated' date (27/09/2019). The 'Type Of MTAC' is set to 'Diabetes Mellitus', and the 'Priority' is 'Routine'. The 'Appointment Date' is '16/10/2019', and the 'Appointment Type' is 'New'. The 'Remarks' field is empty. Below the form, there is a table titled 'MTAC HISTORY' with columns: MTAC No, Type of MTAC, Appointment Date, Appointment Type, Status, and Updated By. The table currently shows 'No Records Found!'.

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) **Monitoring Parameter**
 - Patient's laboratory test results and standard parameter results for laboratory test
 - b) **Counselling History**
 - Patient's previous medication counselling history records
 - c) **MTAC History**
 - Patient's previous MTAC History records
 - d) **Demographic**
 - Patient's demographic details
 - e) **Pharmacist Notes**
 - Pharmacist notes according to type of service such as CP1, CP2, MTAC, TDM and etc
 - f) **Medication Profile**

- *Patient's current medication and previous medication history records*

g) **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*

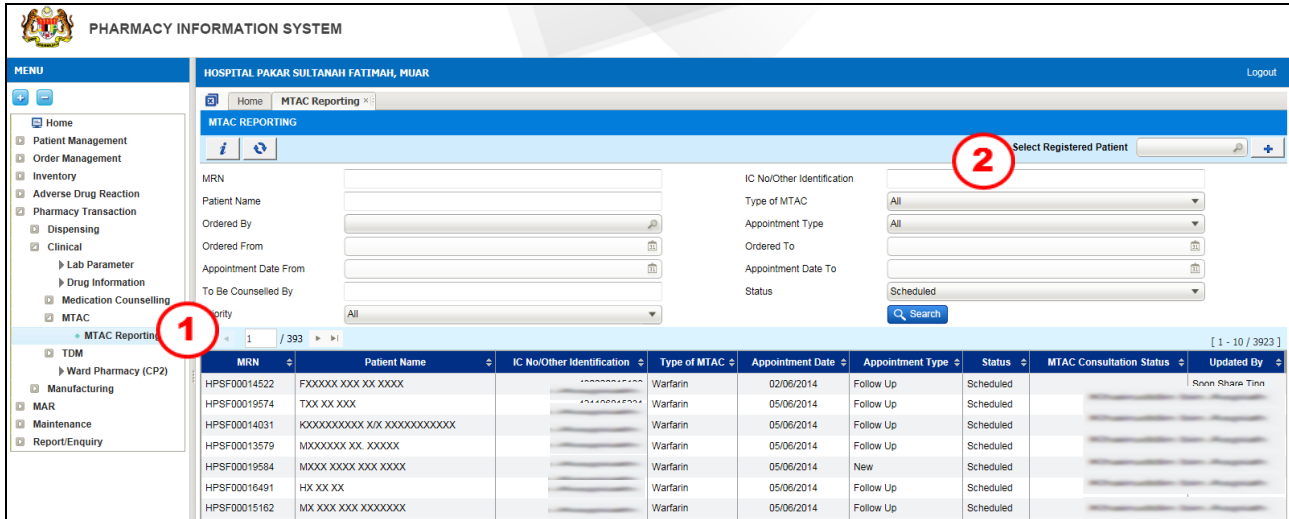
- Search result of MTAC History order list of the patient will be displayed:

- *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.



MRN	Patient Name	IC No/Other Identification	Type of MTAC	Appointment Date	Appointment Type	Status	MTAC Consultation Status	Updated By
HPSF00014522	FX000X XXX XX XXXX		Warfarin	02/06/2014	Follow Up	Scheduled		Roon Shara Tim
HPSF00019574	TX0X XX XXX		Warfarin	05/06/2014	Follow Up	Scheduled		
HPSF00014031	XXXXXXX XXX X/X XXXXXXXXXX		Warfarin	05/06/2014	Follow Up	Scheduled		
HPSF00013579	MX000XX XX XXXX		Warfarin	05/06/2014	Follow Up	Scheduled		
HPSF00019584	MX0X XXXX XXX XXXX		Warfarin	05/06/2014	New	Scheduled		
HPSF00016491	HX XX XX		Warfarin	05/06/2014	Follow Up	Scheduled		
HPSF00015162	MX XXX XXX XXXXXX		Warfarin	05/06/2014	Follow Up	Scheduled		



Figure 3.1.2-1 MTAC Reporting Listing Page

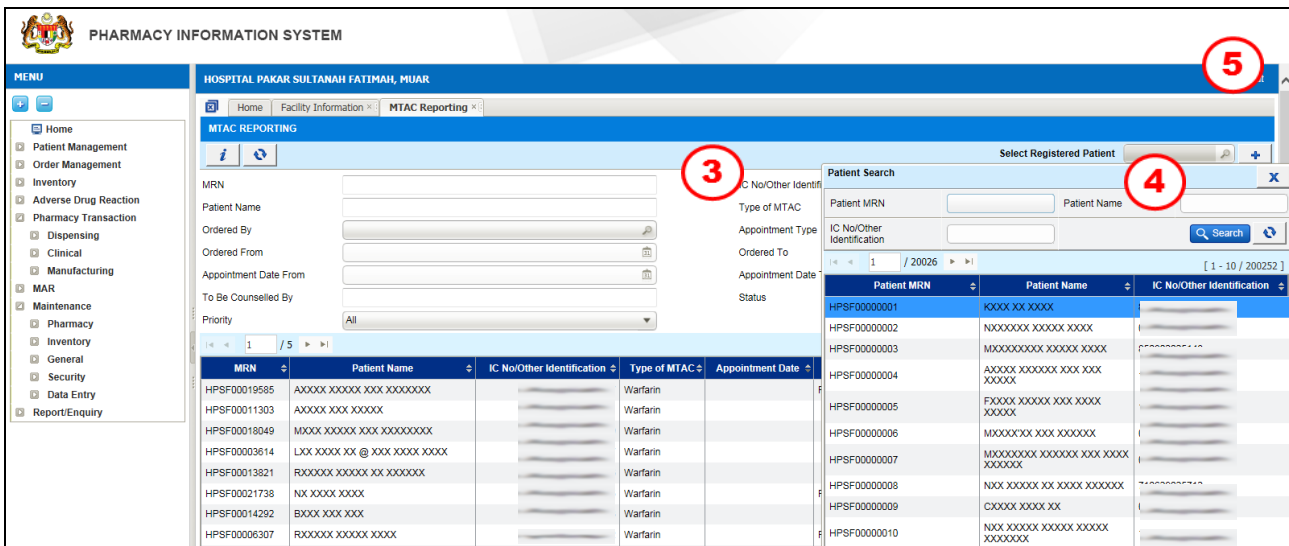
STEP 1

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  



Patient MRN	Patient Name	IC No/Other Identification	Type of MTAC	Appointment Date
HPSF00000001	XXXX XX XXXX		Warfarin	
HPSF00000002	XXXXXXXX XXXX XXXX		Warfarin	
HPSF00000003	XXXXXXXX XXXX XXXX		Warfarin	
HPSF00000004	XXXX XXXXXX XXX XXX XXXX		Warfarin	
HPSF00000005	FX00X XXXXX XXX XXXX XXXX		Warfarin	
HPSF00000006	MX000XX XX XXXXXX		Warfarin	
HPSF00000007	MX00000X XXXXXX XXX XXXX XXXXXX		Warfarin	
HPSF00000008	MX XXXX XX XXX XXXXXX		Warfarin	
HPSF00000009	XXXX XXXX XX		Warfarin	
HPSF00000010	MX XXXXXX XXXXXX XXXXXX		Warfarin	

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: <i>Example: HPSF00001234 or "1234"</i>
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

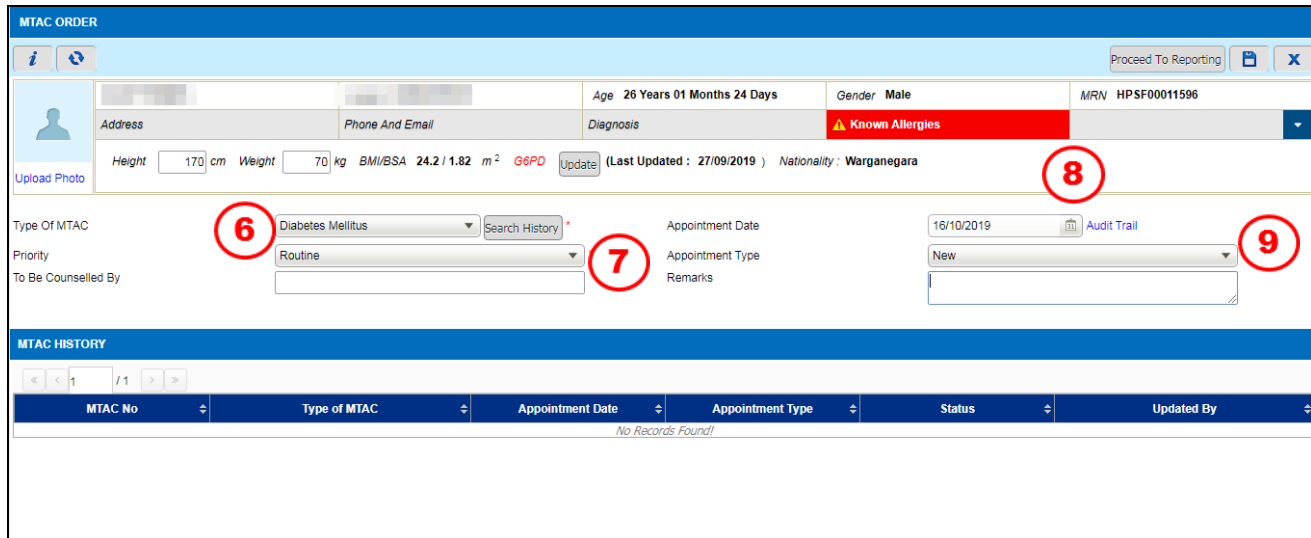
Table 3.1.2-1

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



MTAC ORDER

Proceed To Reporting [X]

Age 26 Years 01 Months 24 Days Gender Male MRN HPSF00011596

Address Phone And Email Diagnosis Known Allergies

Height 170 cm Weight 70 kg BMI/BSA 24.2 / 1.82 m² G6PD Update (Last Updated : 27/09/2019) Nationality : Warganegara

Type Of MTAC **6** Diabetes Mellitus Search History Appointment Date 16/10/2019 Audit Trail

Priority Routine **7** Appointment Type New **9**

To Be Counseled By Remarks

MTAC HISTORY

MTAC No	Type of MTAC	Appointment Date	Appointment Type	Status	Updated By
No Records Found!					

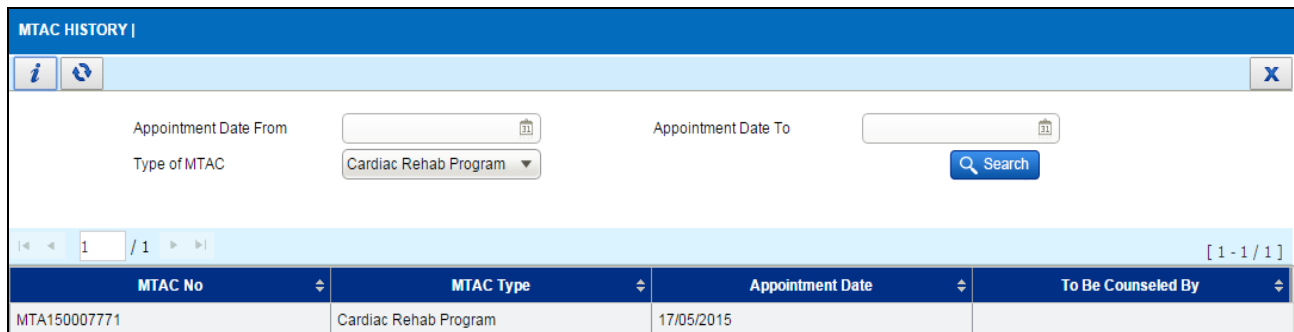
Figure 3.1.2-3 MTAC Order

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.



MTAC HISTORY |

Appointment Date From Appointment Date To

Type of MTAC Cardiac Rehab Program Search

1 / 1 [1 - 1 / 1]

MTAC No	MTAC Type	Appointment Date	To Be Counseled By
MTA150007771	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

Appointment Date

05/09/2016
Audit Trail

Sep 2016

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1


- 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**.

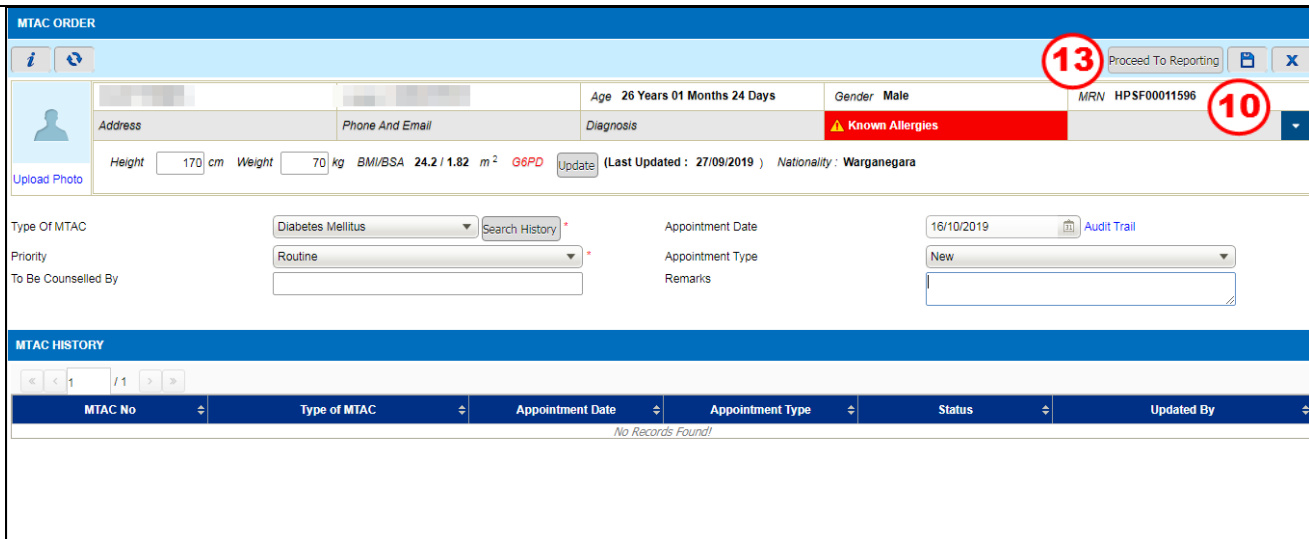
STEP 9

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

- New
- Follow Up

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' as below:
 - Target INR Range
 - Date Warfarin Started
 - Warfarin Indication
 - Anticipated Duration
 - Bleeding Risk Factor
 - Time in Therapeutic Range (TTR)
- 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**.



The screenshot shows the 'MTAC ORDER' form. At the top right, there is a 'Proceed To Reporting' button (13) and a save icon (10). The form contains patient details: Age (26 Years 01 Months 24 Days), Gender (Male), MRN (HPSF00011596), Address, Phone And Email, Diagnosis, and Known Allergies. Below this, there are fields for Height (170 cm), Weight (70 kg), BMI/BSA (24.2 / 1.82 m²), G6PD, and an 'Update' button. The 'Type Of MTAC' is set to 'Diabetes Mellitus' with a 'Search History' button. The 'Priority' is 'Routine'. The 'Appointment Date' is '16/10/2019' with an 'Audit Trail' button. The 'Appointment Type' is 'New'. The 'Remarks' field is empty. Below the form is the 'MTAC HISTORY' section, which shows a table with columns: MTAC No, Type of MTAC, Appointment Date, Appointment Type, Status, and Updated By. The table is currently empty with the message 'No Records Found!'.

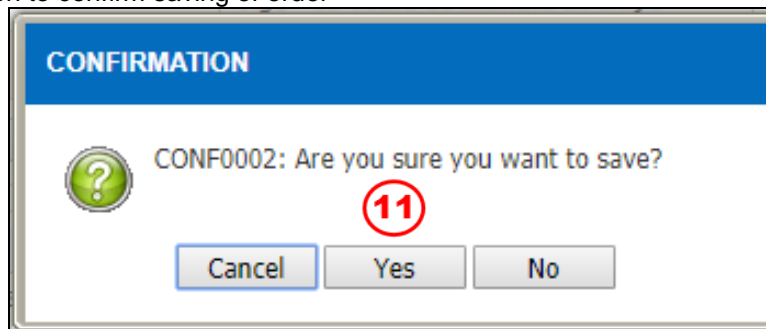
Figure 3.1.2-5 MTAC Order

STEP 10

Click on the  button to save the record

STEP 11


Click on the  button to confirm saving of order

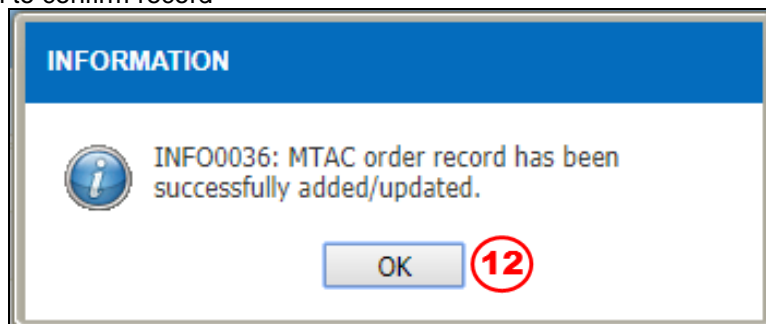


The screenshot shows a 'CONFIRMATION' dialog box. It contains a question mark icon and the text 'CONF0002: Are you sure you want to save?'. Below the text are three buttons: 'Cancel', 'Yes' (11), and 'No'.

Figure 3.1.2-6 Confirmation Alert Message

STEP 12

Click on the  button to confirm record



The screenshot shows an 'INFORMATION' dialog box. It contains an information icon and the text 'INFO0036: MTAC order record has been successfully added/updated.'. Below the text is an 'OK' button (12).

Figure 3.1.2-7 Information Alert Message

STEP 13

Click on the  button to proceed to reporting screen as shown in Figure 3.1.2-5

3.1.3 Reschedule MTAC Order

This function is used to reschedule MTAC appointment date

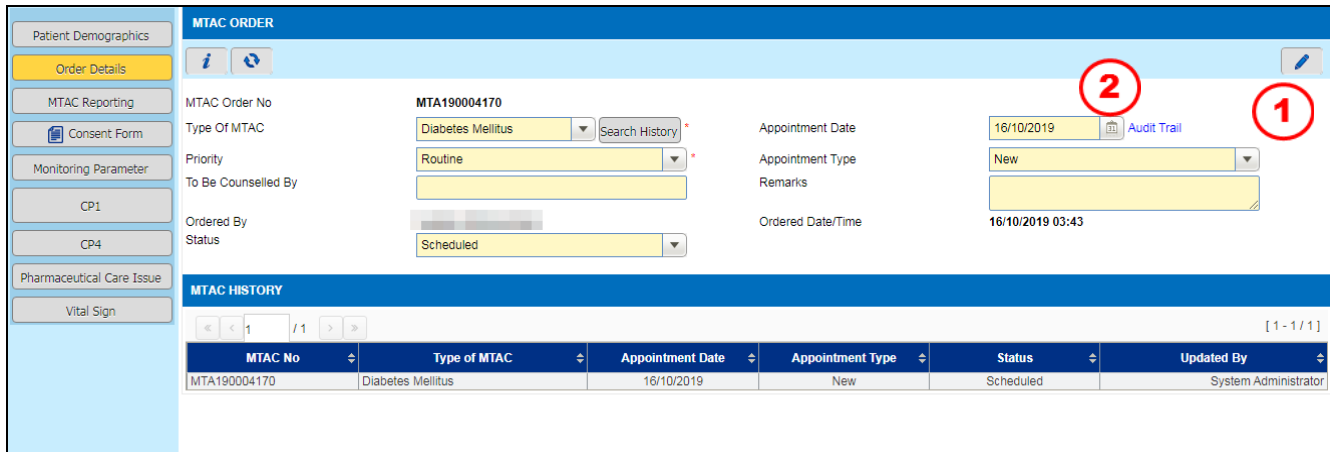


Figure 3.1.3-1 MTAC Order


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 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.

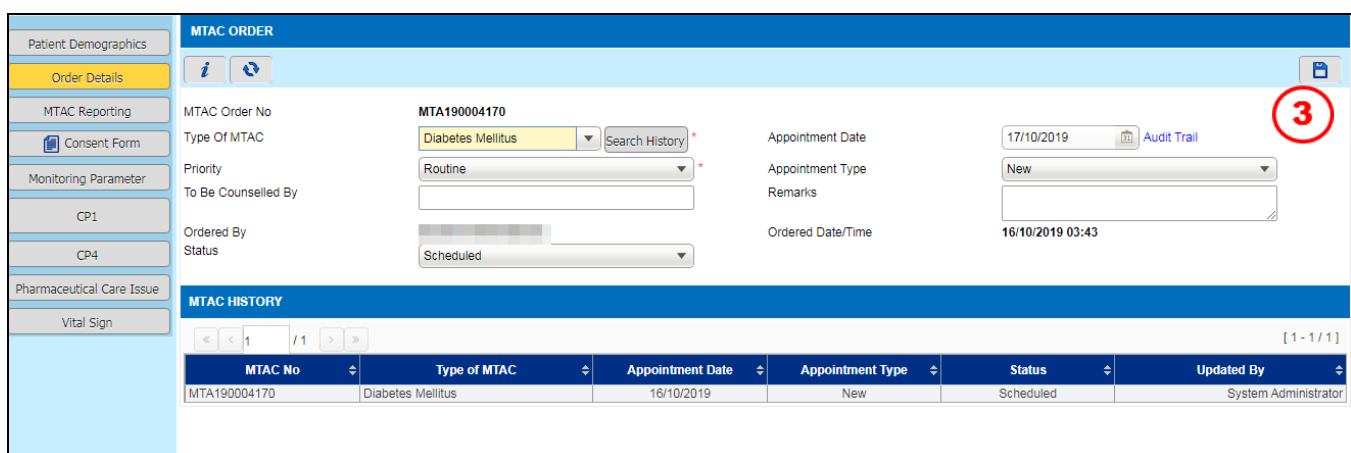


Figure 3.1.3-2 MTAC Order

STEP 3

Click on the  button to save the record

STEP 4

Click on the  button to confirm saving of order

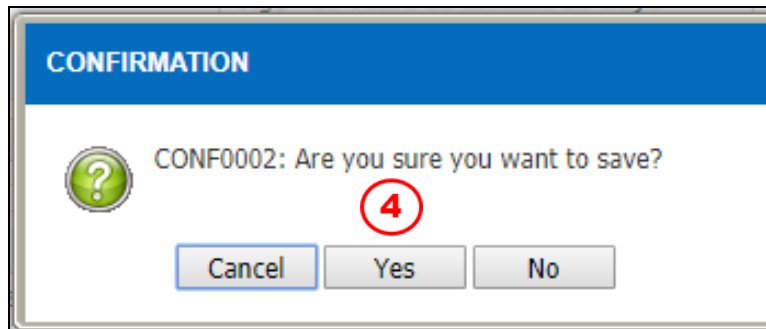



Figure 3.1.3-3 Confirmation alert message

STEP 5

Click on the  button to confirm record

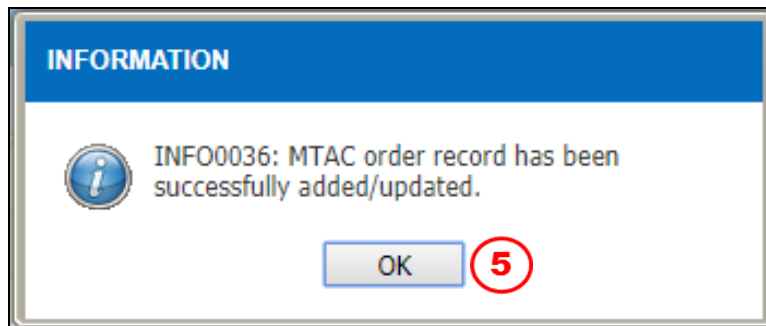

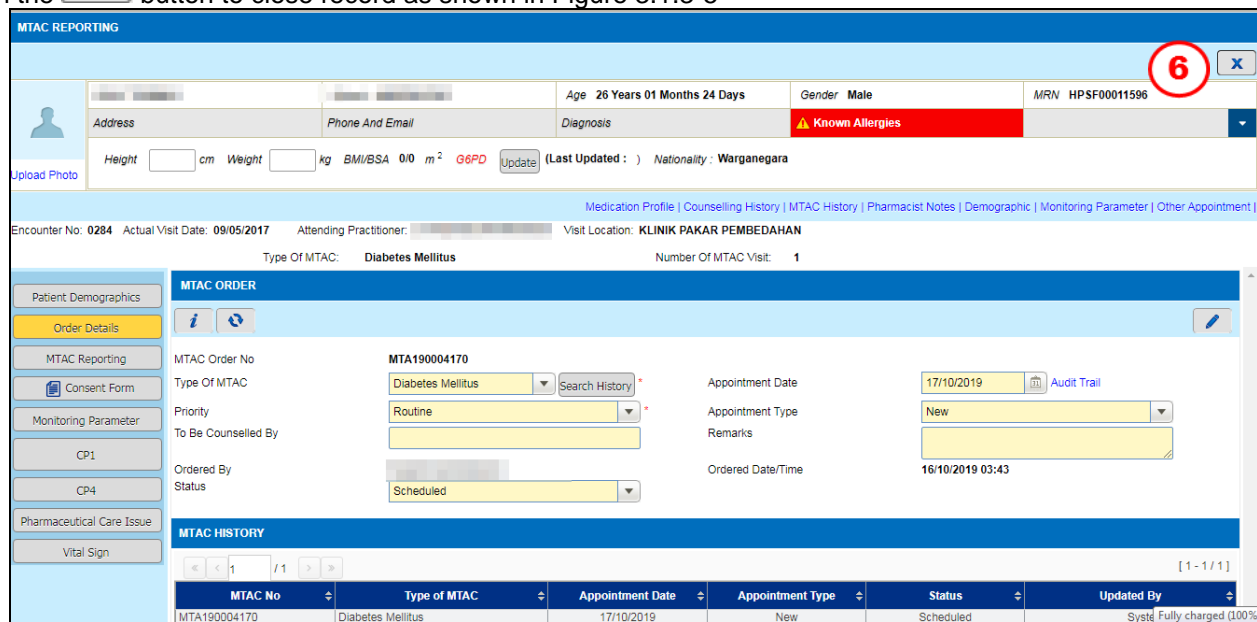


Figure 3.1.3-4 Information alert message

STEP 6

Click on the  button to close record as shown in Figure 3.1.3-5



A screenshot of the MTAC Reporting interface. The top bar is blue and says "MTAC REPORTING". Below it is a patient information section with fields for Age (26 Years 01 Months 24 Days), Gender (Male), MRN (HPSF00011596), Address, Phone And Email, Diagnosis, and Known Allergies. There are buttons for "Upload Photo", "Update", and "Last Updated". Below this is a section for "Encounter No: 0284", "Actual Visit Date: 09/05/2017", "Attending Practitioner", and "Visit Location: KLINIK PAKAR PEMBEDAHAN". The "Type Of MTAC" is "Diabetes Mellitus" and "Number Of MTAC Visit" is "1". The main section is titled "MTAC ORDER" and contains fields for "MTAC Order No" (MTA190004170), "Type Of MTAC" (Diabetes Mellitus), "Priority" (Routine), "Appointment Date" (17/10/2019), "Appointment Type" (New), "Remarks", "Ordered By", "Status" (Scheduled), and "Ordered Date/Time" (16/10/2019 03:43). There is an "Audit Trail" link. Below this is a section titled "MTAC HISTORY" with a table showing the order details. The table has columns for MTAC No, Type of MTAC, Appointment Date, Appointment Type, Status, and Updated By. The data row shows MTA190004170, Diabetes Mellitus, 17/10/2019, New, Scheduled, and System Fully charged (100%).

Figure 3.1.3-5 MTAC Order

3.1.4 Cancel MTAC Order

This function is used to cancel an existing MTAC order

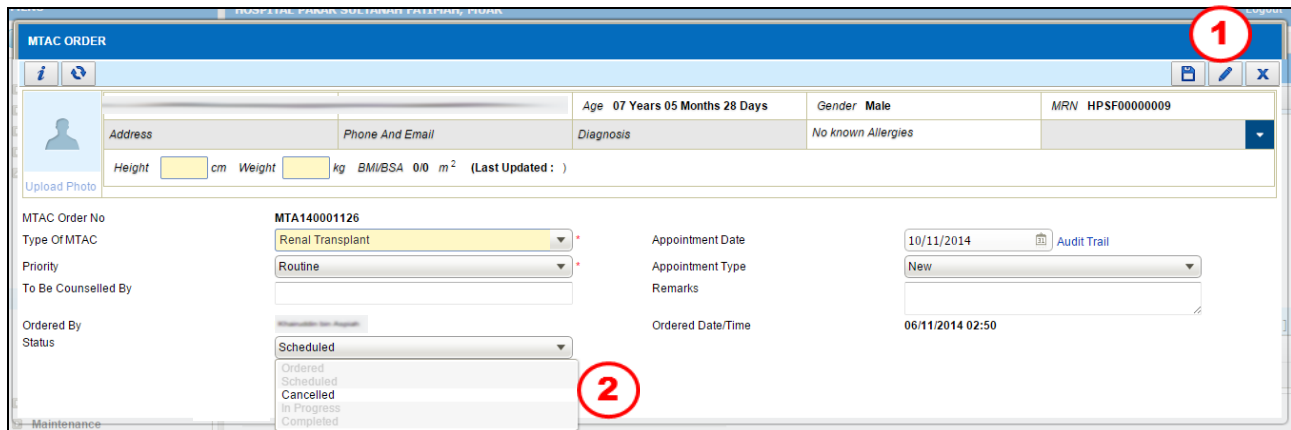


Figure 3.1.4-1 MTAC Order

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.

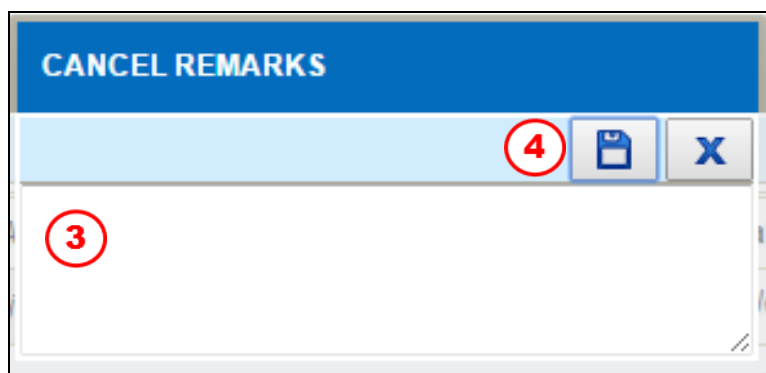


Figure 3.1.4-2 Cancel Remarks

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

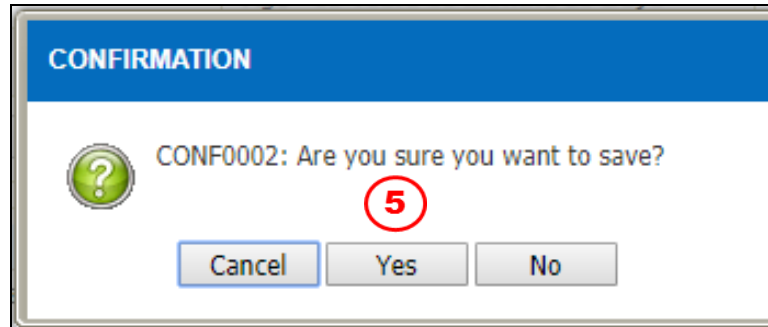



Figure 3.1.4-3 Confirmation Alert Message

STEP 6

Click on the  button to confirm record

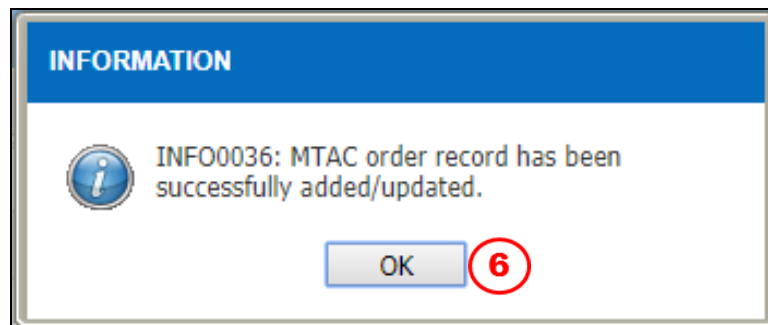


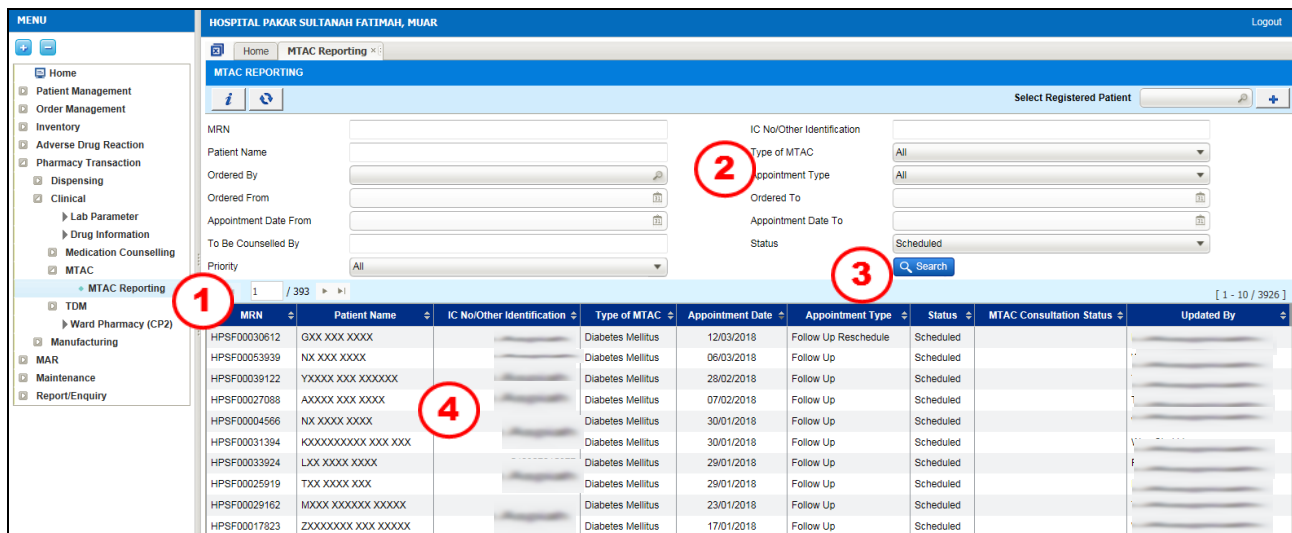
Figure 3.1.4-4 Information Alert Message

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



MRN	Patient Name	IC No/Other Identification	Type of MTAC	Appointment Date	Appointment Type	Status	MTAC Consultation Status	Updated By
HPSF00030612	GXX XXX XXXX		Diabetes Mellitus	12/03/2018	Follow Up Reschedule	Scheduled		
HPSF00053939	NX XXX XXXX		Diabetes Mellitus	06/03/2018	Follow Up	Scheduled		
HPSF00039122	YXXXX XXX XXXXXX		Diabetes Mellitus	29/02/2018	Follow Up	Scheduled		
HPSF00027088	AXXXX XXX XXXX		Diabetes Mellitus	07/02/2018	Follow Up	Scheduled		
HPSF00004566	NX XXXX XXXX		Diabetes Mellitus	30/01/2018	Follow Up	Scheduled		
HPSF00031394	KXXXXXXX XXX XXX		Diabetes Mellitus	30/01/2018	Follow Up	Scheduled		
HPSF00033924	LXX XXXX XXXX		Diabetes Mellitus	29/01/2018	Follow Up	Scheduled		
HPSF00025919	TX XXXX XXX		Diabetes Mellitus	29/01/2018	Follow Up	Scheduled		
HPSF00029162	XXXX XXXXXX XXXXX		Diabetes Mellitus	23/01/2018	Follow Up	Scheduled		
HPSF00017923	ZXXXXXX XXX XXXXX		Diabetes Mellitus	17/01/2018	Follow Up	Scheduled		

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 -Thalassemia 	Able to filter and search by type of MTAC order
Appointment Type	<ul style="list-style-type: none"> - All - Follow Up - New 	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 click at  and the 'Consent Form' window will be displayed as shown in Figure 3.2.1-2

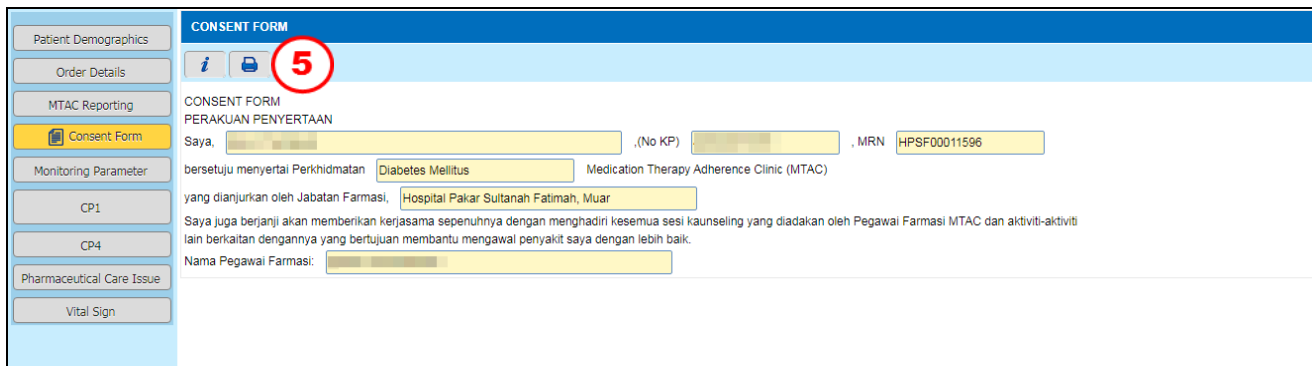




Figure 3.2.1-2 Consent Form

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

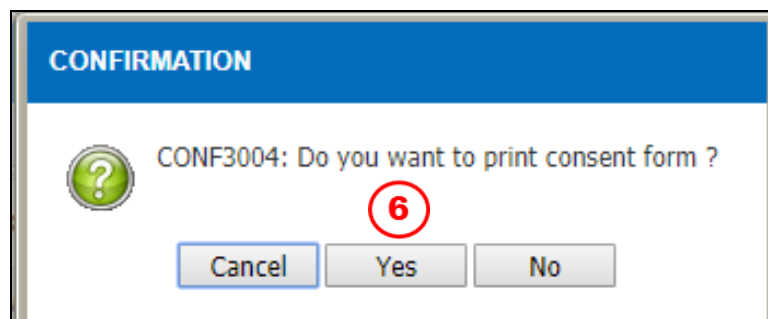


Figure 3.2.1-3 Print Report Alert Message



MEDICATION THERAPY ADHERENCE CLINIC (MTAC)

Jabatan Farmasi, Hospital Pakar Sultanah Fatimah, Muar

PERAKUAN PENYERTAAN

Saya, [REDACTED] (No KP) [REDACTED] MRN HPSE00186863 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: [REDACTED]

Tarikh: 16/10/2019

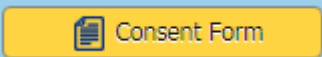
.....
Tandatangan

Nama Peg. Farmasi: [REDACTED]

Tarikh: 16/10/2019

Figure 3.2.1-4 Print Consent Form

Note

- Consent form details will automatically display:
 - Patient name
 - ID No
 - MRN
 - Type of MTAC
 - 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

Note

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

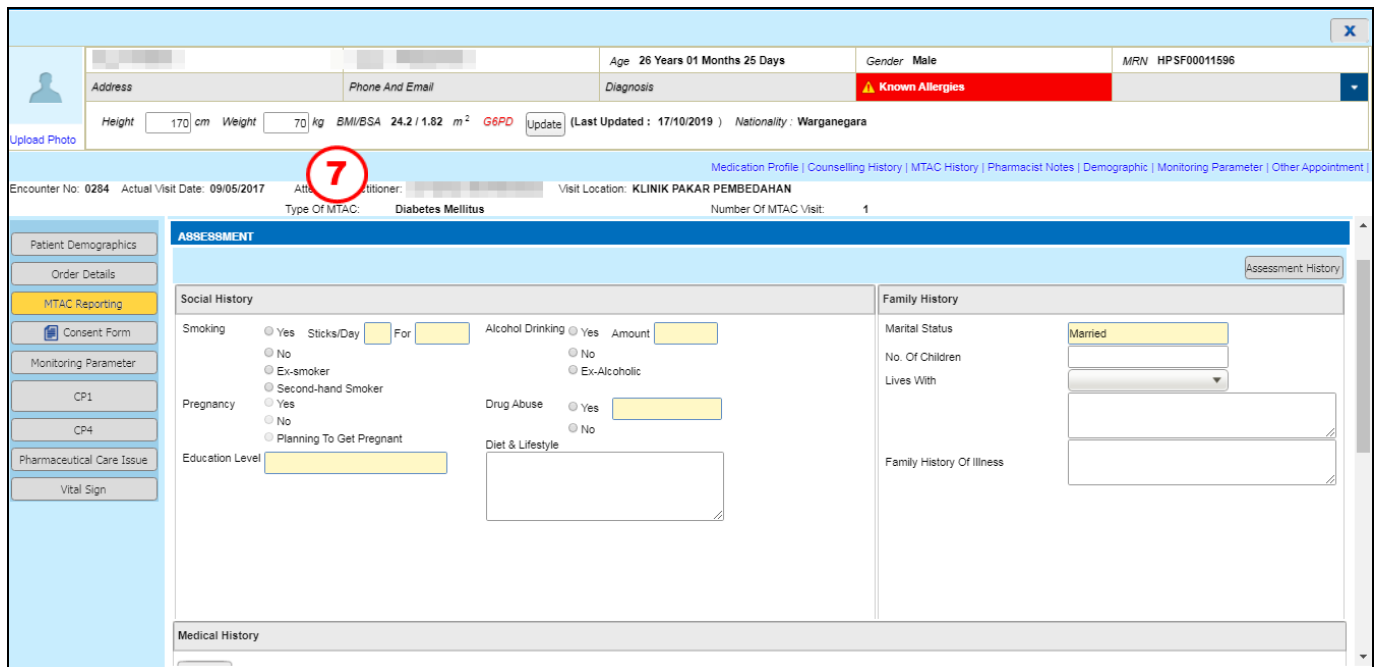


Figure 3.2.1-5 MTAC Reporting Screen

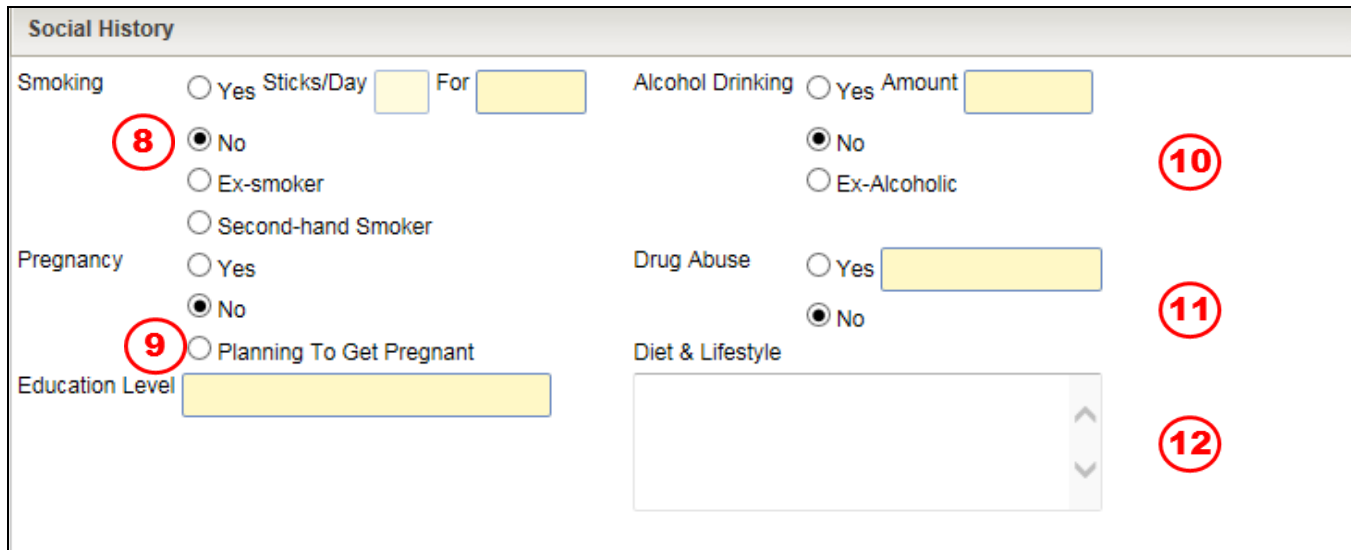
Assessment

- Click on the MTAC Reporting tab
- There are 4 sections under the Assessment tab as below:
 - Social History
 - Family History
 - Medical History
 - 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

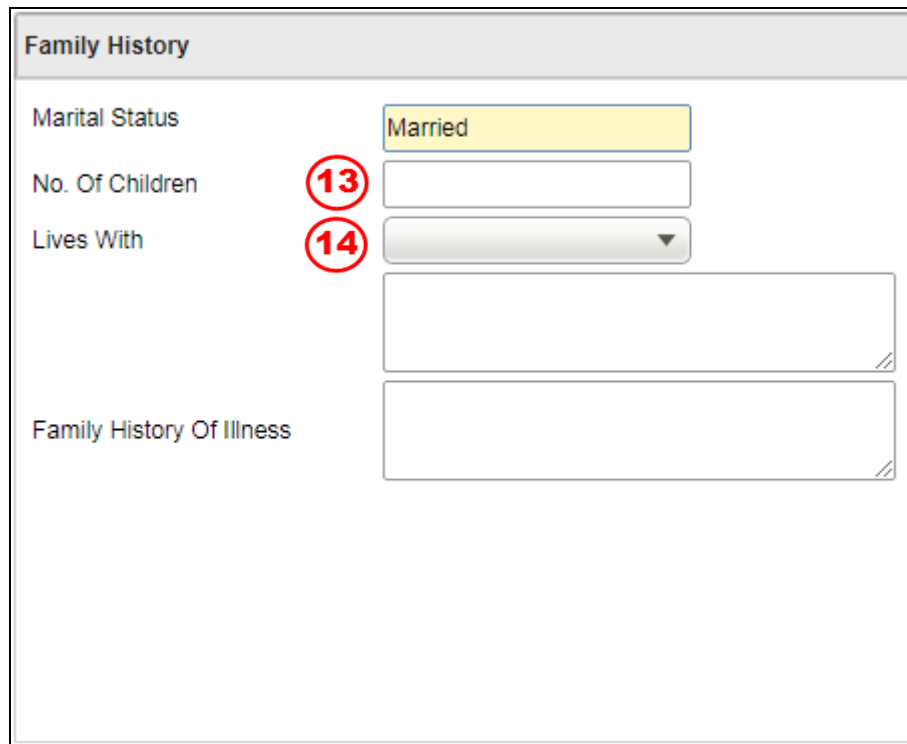


Figure 3.2.1-7 MTAC Reporting – Assessment on Family History

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 enable for all types of **Lives with** selected
- Enter **Family History of Illness** if available

Medical History

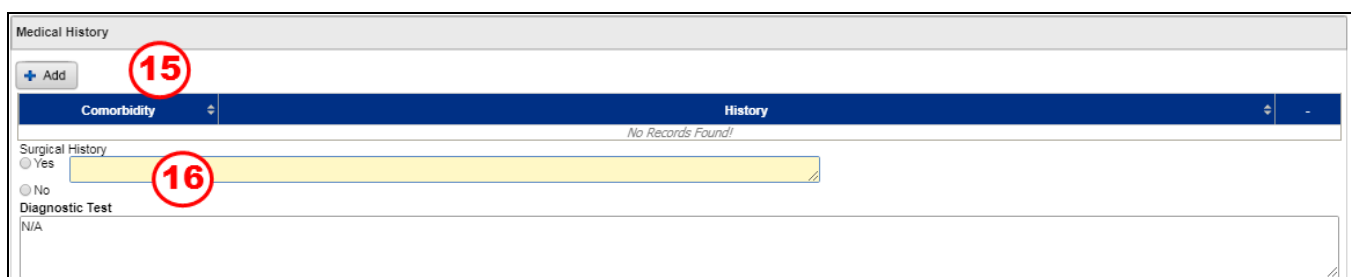




Figure 3.2.1-8 MTAC Reporting – Assessment on Medical History

STEP 15

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

Note

- User can enter multiple Comorbidity record by click  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**

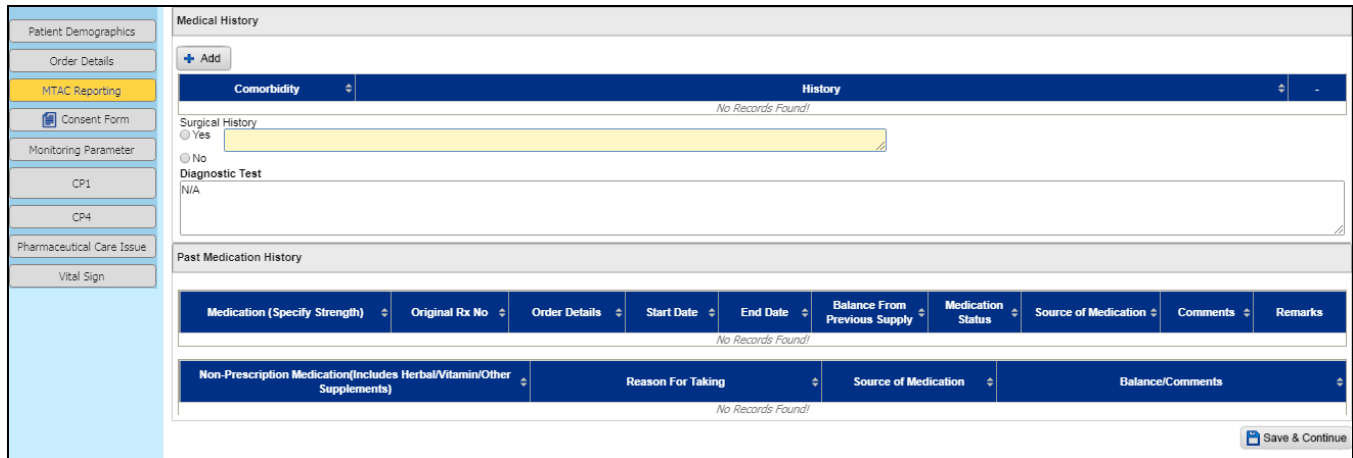
STEP 16

Select **Surgical History** radio button

- Yes
- No

Note

- If yes selected for Surgical History, user can enter remarks at free text column with maximum 500 characters
- User can enter Diagnosis Test that already change to 1 box only and can be fill up 2000 characters.



Medical History

+ Add

Comorbidity History

No Records Found!

Surgical History

☐ Yes

☐ No

Diagnostic Test

N/A

Past Medication History


Medication (Specify Strength)	Original Rx No	Order Details	Start Date	End Date	Balance From Previous Supply	Medication Status	Source of Medication	Comments	Remarks
No Records Found!									

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


Save & Continue

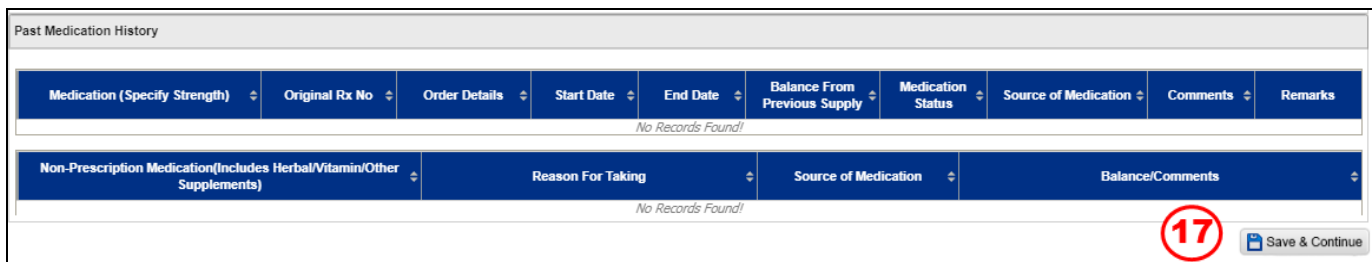
Figure 3.2.1-9 MTAC Reporting – Assessment on Past Medication History

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



Past Medication History

Medication (Specify Strength)	Original Rx No	Order Details	Start Date	End Date	Balance From Previous Supply	Medication Status	Source of Medication	Comments	Remarks
No Records Found!									

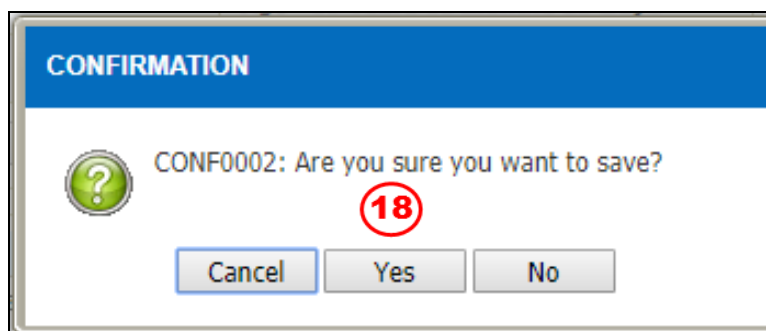
Non-Prescription Medication(Includes Herbal/Vitamin/Other Supplements)	Reason For Taking	Source of Medication	Balance/Comments
No Records Found!			

17 Save & Continue

Figure 3.2.1-10 MTAC Reporting – Assessment Past Medication History

STEP 18

Click on the  button to confirm



CONFIRMATION

CONF0002: Are you sure you want to save?

18

Cancel Yes No

Figure 3.2.1-11 Confirmation Alert Message

STEP 19

Click on the  button to confirm record

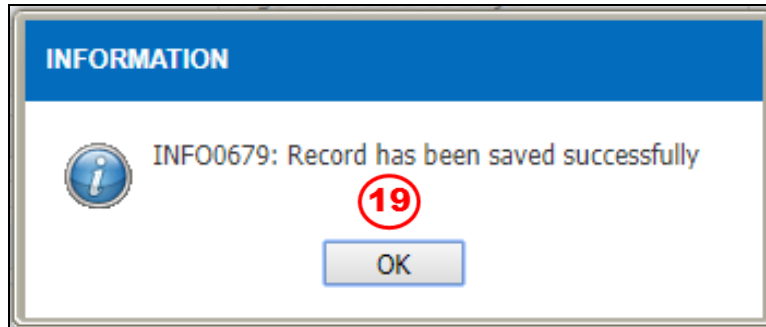
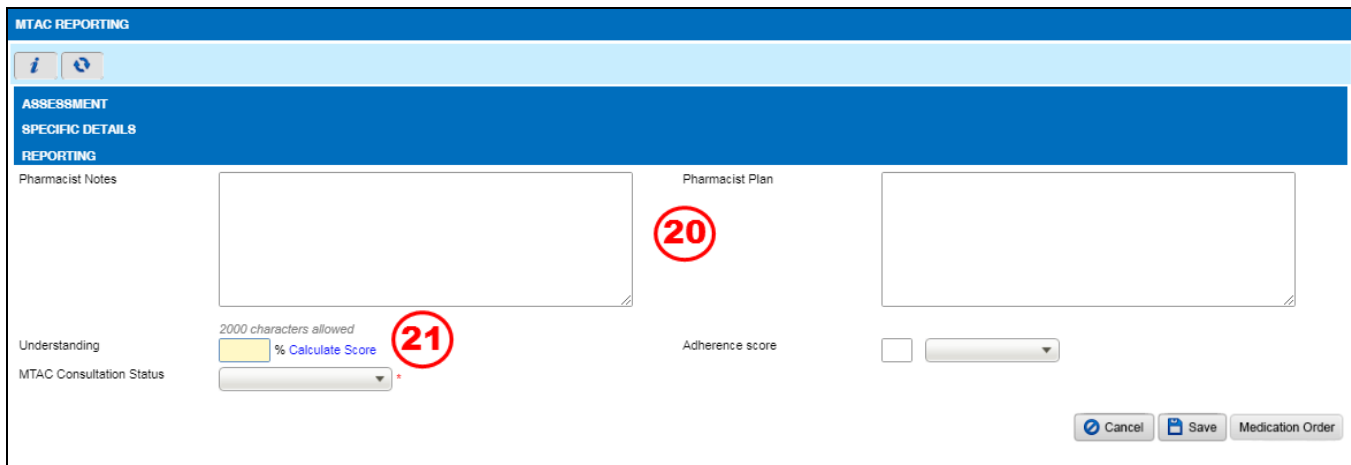


Figure 3.2.1-12 Information Alert Message

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”.



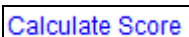
The form is titled "MTAC REPORTING" and has a blue header. Below the header, there are three tabs: "ASSESSMENT", "SPECIFIC DETAILS", and "REPORTING". The "REPORTING" tab is selected. The form is divided into two main sections: "Pharmacist Notes" and "Pharmacist Plan". The "Pharmacist Notes" section has a text area with a "2000 characters allowed" label and a "Calculate Score" button. A red circle with the number "21" is placed over the "Calculate Score" button. The "Pharmacist Plan" section has a text area. A red circle with the number "20" is placed over the text area. Below the text areas, there is an "Understanding" section with a "2000 characters allowed" label and a "Calculate Score" button. A red circle with the number "21" is placed over the "Calculate Score" button. Below the "Understanding" section, there is an "MTAC Consultation Status" dropdown menu. To the right of the "Pharmacist Plan" text area, there is an "Adherence score" section with a checkbox and a dropdown menu. At the bottom right of the form, there are three buttons: "Cancel", "Save", and "Medication Order".

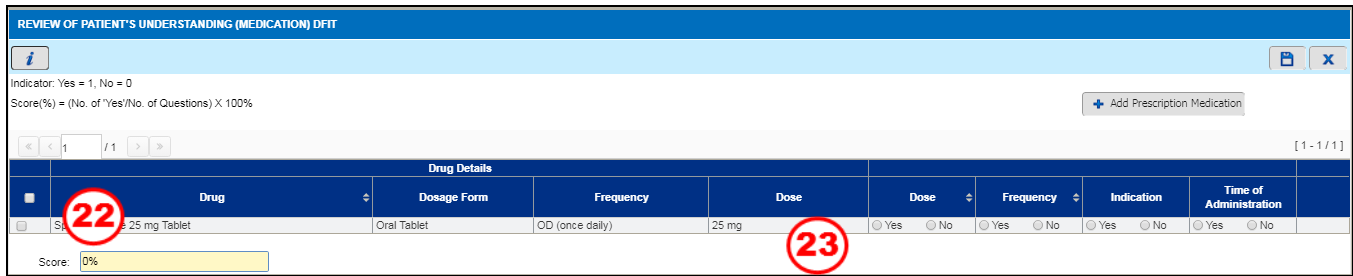
Figure 3.2.1-13 MTAC Reporting

STEP 20

Enter the **Pharmacist Notes** and **Pharmacist Plan**

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



REVIEW OF PATIENT'S UNDERSTANDING (MEDICATION) DFIT

Indicator: Yes = 1, No = 0
Score(%) = (No. of 'Yes'/No. of Questions) X 100%

+ Add Prescription Medication

[1 - 1 / 1]

Drug	Dosage Form	Frequency	Dose	Dose	Frequency	Indication	Time of Administration
25 mg Tablet	Oral Tablet	OD (once daily)	25 mg	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No

Score: 0%

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

STEP 22

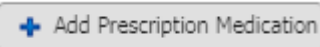
Click at the  checkbox to select drug

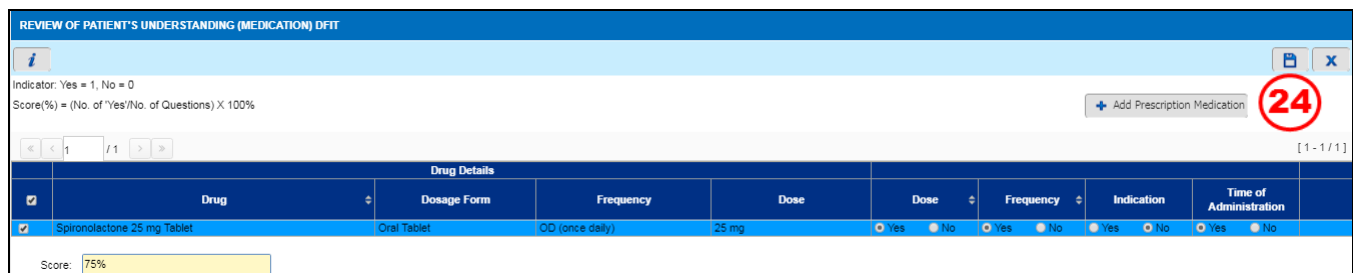
STEP 23

Select **Dose, Frequency, Indication and Time of Administration** from the radio button:

- Yes
- No

Note

- Score will be automatically calculated and displayed.
- Click at  button to add new Prescription medication



REVIEW OF PATIENT'S UNDERSTANDING (MEDICATION) DFIT

Indicator: Yes = 1, No = 0
Score(%) = (No. of 'Yes'/No. of Questions) X 100%

+ Add Prescription Medication


[1 - 1 / 1]

Drug	Dosage Form	Frequency	Dose	Dose	Frequency	Indication	Time of Administration
Spironolactone 25 mg Tablet	Oral Tablet	OD (once daily)	25 mg	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input checked="" type="radio"/> Yes <input type="radio"/> No

Score: 75%

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

STEP 24

Click on the  button to save the Understanding calculator record

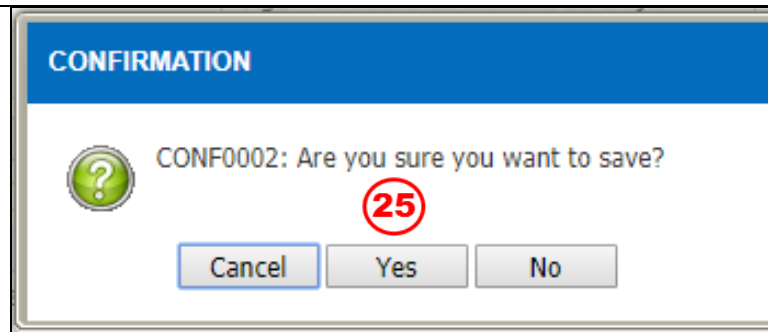


Figure 3.2.1-16 Confirmation alert message

STEP 25

Click on the  button to confirm save record

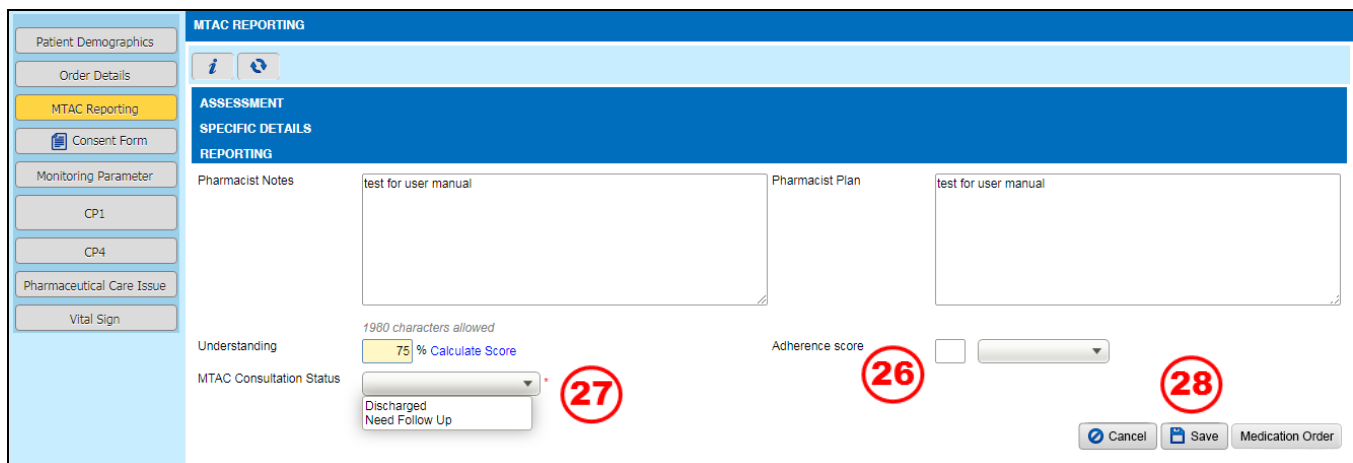


Figure 3.2.1-17 MTAC Reporting - Reporting

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

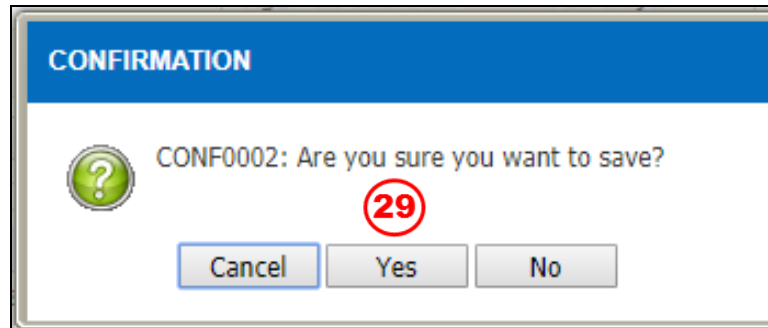


Figure 3.2.1-18 Confirmation Alert Message

STEP 29

Click on the  button to confirm save record

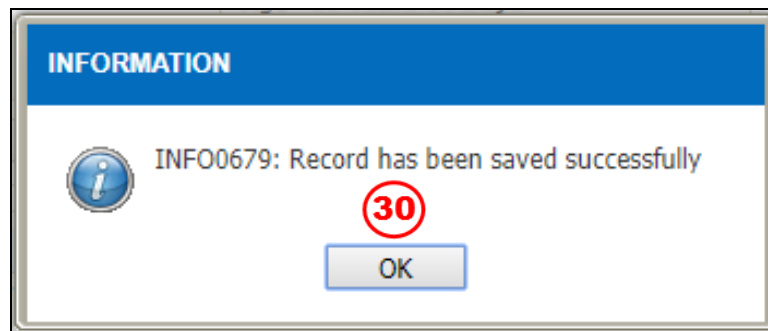



Figure 3.2.1-19 Information Alert Message

STEP 30

Click on the  button

Note

- User can cancel MTAC reporting by clicking at the  button as in Figure 3.2.1-17 and confirmation pop up will appear as shown in Figure 3.2.1-20

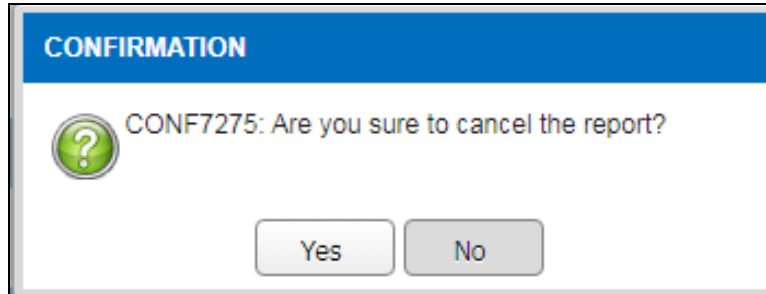
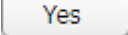


Figure 3.2.1-20 Confirmation Alert Message

- Click at  button to cancel MTAC Reporting

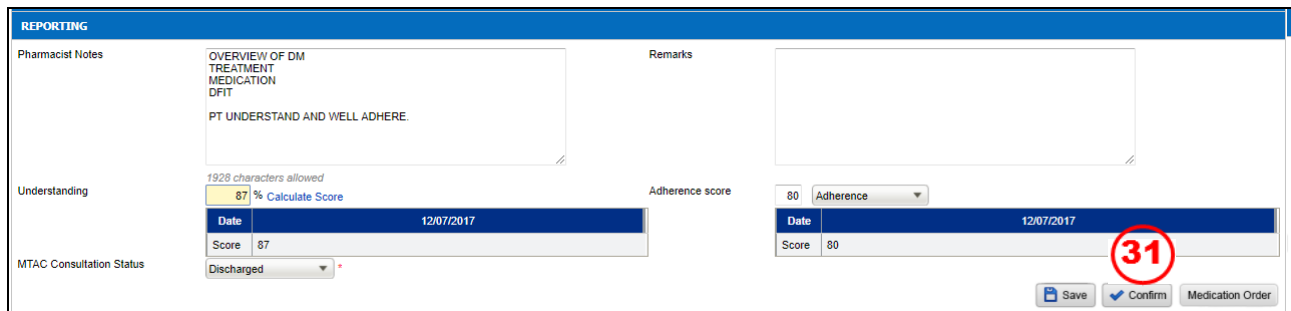


Figure 3.2.1-21 MTAC Reporting – Reporting

STEP 31

Click on the  button to confirm reporting

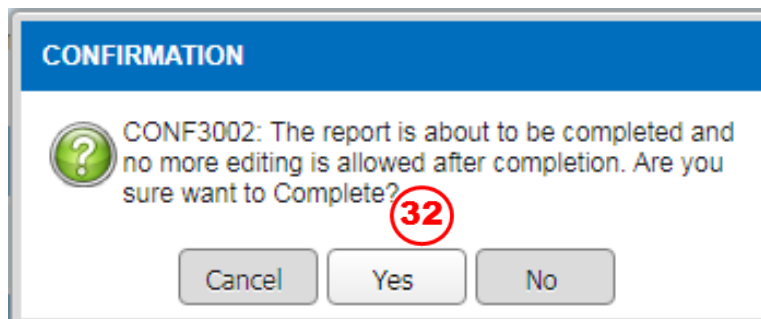


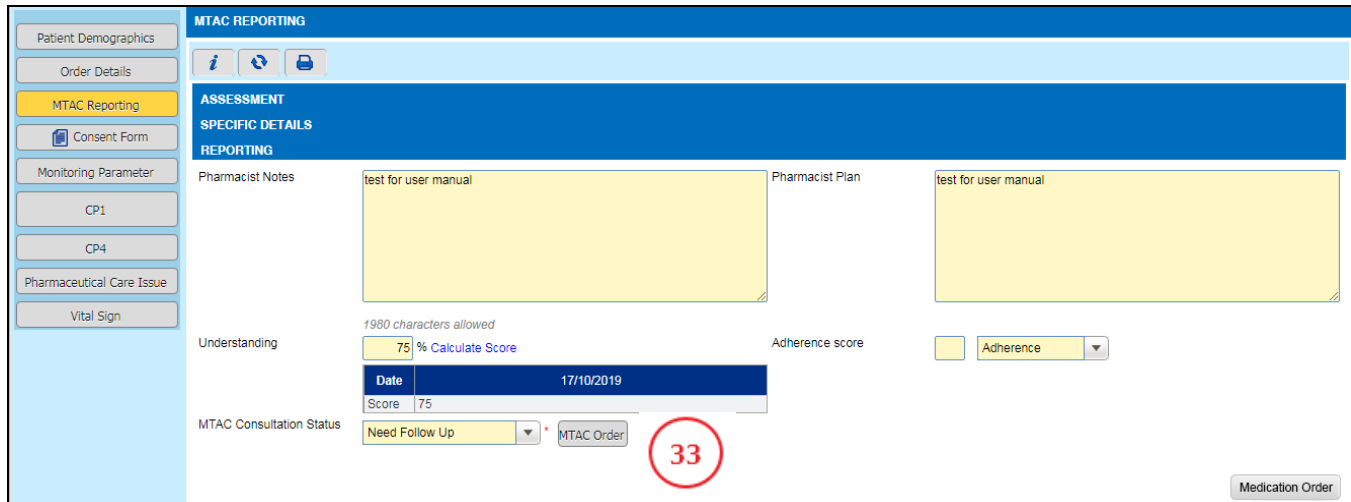
Figure 3.2.1-22 Confirmation Alert Message

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.
- Previous Adherence Score record from previous visit is display (if any – max 5 newest record).

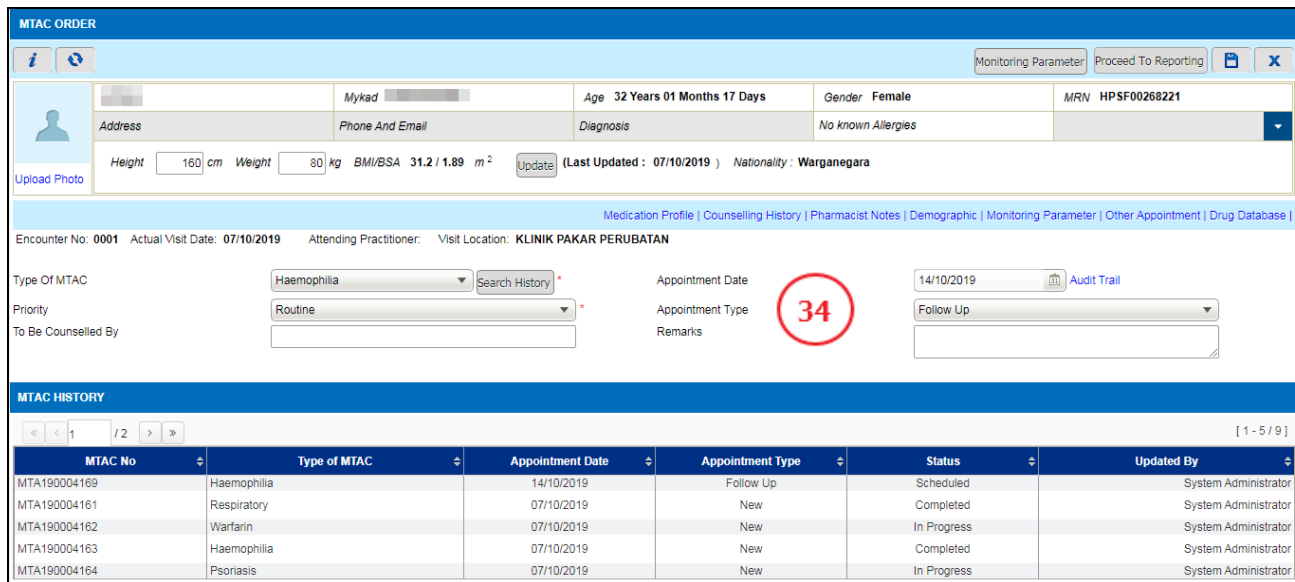


The screenshot shows the MTAC Reporting interface. On the left is a sidebar with navigation buttons: Patient Demographics, Order Details, MTAC Reporting (highlighted), Consent Form, Monitoring Parameter, CP1, CP4, Pharmaceutical Care Issue, and Vital Sign. The main area is titled 'MTAC REPORTING' and contains sections for 'ASSESSMENT', 'SPECIFIC DETAILS', and 'REPORTING'. Under 'REPORTING', there are text areas for 'Pharmacist Notes' and 'Pharmacist Plan', both containing 'test for user manual'. Below these are input fields for 'Understanding' (75%), 'Date' (17/10/2019), 'Score' (75), and 'Adherence score' (Adherence). A 'Need Follow Up' dropdown is set to 'Need Follow Up', and a 'MTAC Order' button is visible. A red circle with the number '33' is placed over the 'MTAC Order' button. At the bottom right is a 'Medication Order' button.

Figure 3.2.1-23 MTAC Reporting Screen

STEP 33

Click on the **MTAC Order** button to schedule for next follow up appointment as per Figure 3.2.1-23 and MTAC order screen will display as per Figure 3.2.1-24



The screenshot shows the MTAC Order interface. At the top is a header with 'MTAC ORDER' and navigation icons. Below is a patient information section with fields for Mykad, Age (32 Years 01 Months 17 Days), Gender (Female), MRN (HPSF00268221), Address, Phone And Email, Diagnosis, No known Allergies, Height (160 cm), Weight (80 kg), BMI/BSA (31.2 / 1.89 m²), and Nationality (Warganegara). Below this is a section for 'Encounter No: 0001', 'Actual Visit Date: 07/10/2019', 'Attending Practitioner', and 'Visit Location: KLINIK PAKAR PERUBATAN'. The 'Type Of MTAC' is set to 'Haemophilia', 'Priority' is 'Routine', and 'To Be Counseled By' is empty. The 'Appointment Date' is '14/10/2019', 'Appointment Type' is 'Follow Up', and 'Remarks' is empty. A red circle with the number '34' is placed over the 'Appointment Date' field. At the bottom is a table titled 'MTAC HISTORY' showing a list of MTAC records with columns for MTAC No, Type of MTAC, Appointment Date, Appointment Type, Status, and Updated By.

MTAC No	Type of MTAC	Appointment Date	Appointment Type	Status	Updated By
MTA190004169	Haemophilia	14/10/2019	Follow Up	Scheduled	System Administrator
MTA190004161	Respiratory	07/10/2019	New	Completed	System Administrator
MTA190004162	Warfarin	07/10/2019	New	In Progress	System Administrator
MTA190004163	Haemophilia	07/10/2019	New	Completed	System Administrator
MTA190004164	Psoriasis	07/10/2019	New	In Progress	System Administrator

Figure 3.2.1-24 MTAC Order Screen

STEP 34

Schedule the follow up in the MTAC Order screen and the follow up date will appear in the reporting screen as shown in Figure 3.2.1-25

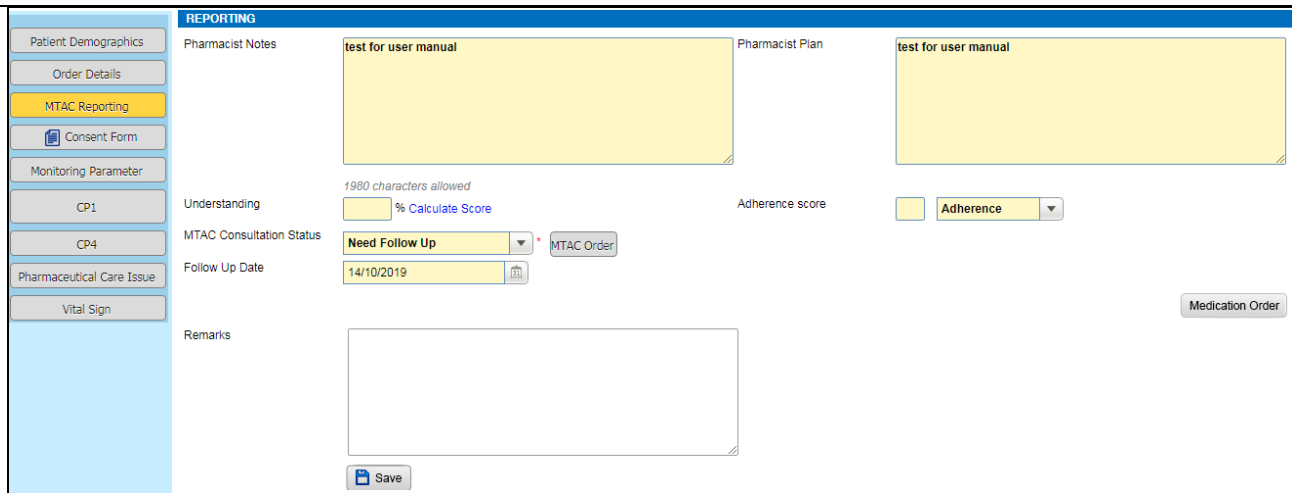


Figure 3.2.1-25 MTAC Reporting Screen

Note

User able to enter remarks after confirm / cancel MTAC Report and the remarks will appear in MTAC report printing

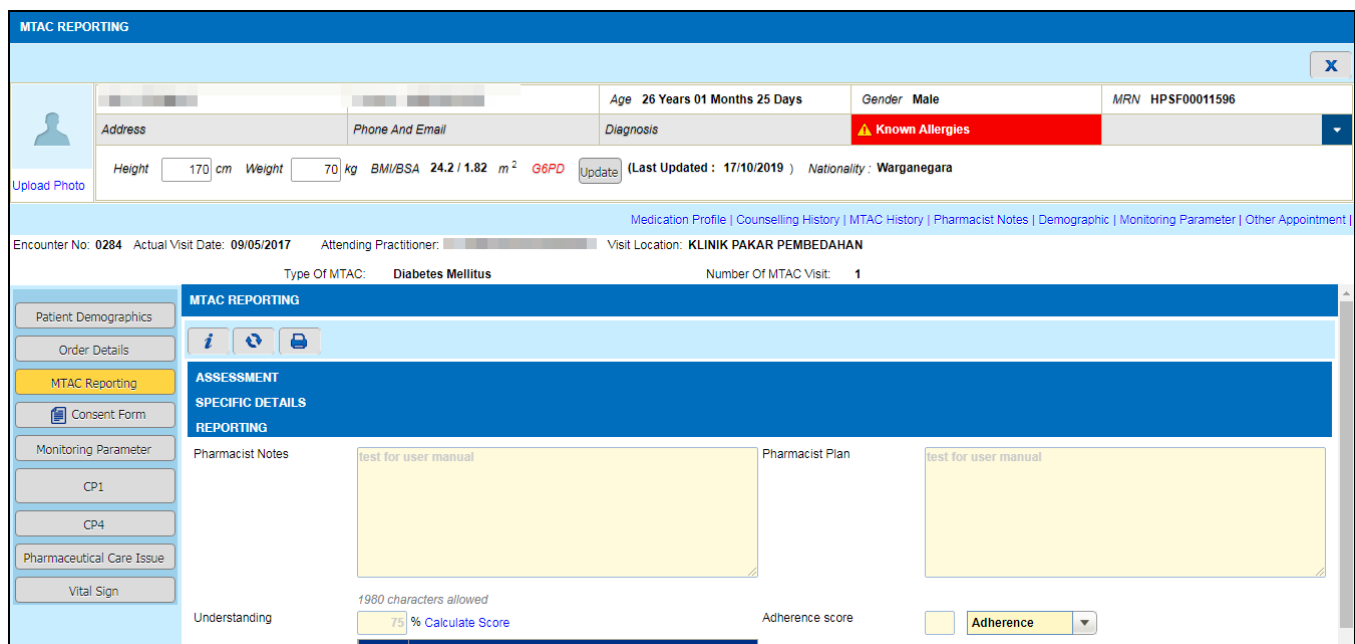



Figure 3.2.1-26 MTAC Reporting – Print

Note

- Click on the  button to print the MTAC report as per Figure 3.2.1-26 and the system will show the report as per Figure 3.2.1-27
- Default to "No history of taking Non-Prescription Medication" if no data in table (in printed report).
- Add "Prescriber Review" Column
- If there is no data in both table, please display as below:
 - No Prescribed Medication Related Issue
 - No Other Issue
- Show "Current Medication" in the report printing
- Add Intervention Date in PCI reporting screen for prescribed Medication issue.



MEDICATION THERAPY ADHERENCE REPORT

Hospital Pakar Sultanah Fatimah, Muar

Patient Name : [REDACTED] Diagnosis : TRO prostate ca , hcap, hematuria 2 to BPH tro prostate ca, bph, BPH TRO prostate CA

MRN : HPSF00011596 Allergy : Carbamazepine

ID No : [REDACTED] Number of MTAC Visit : 1

Type of MTAC : Diabetes Mellitus MTAC Visit Date : 17/10/2019

Assessment:

Social History	Smoking	: No	Family History	Marital Status	: Married		
	Alcohol Intake	: No		No of children	: 1		
	Diet & Lifestyle	: vegetarian		Family history of illness	: mom- BP And Diabetes Dad- Cholesterol		
				Lives with	: Family Members		
Medical History	Comorbidity	Asthma					
	Surgical History :- No						
	Diagnostic Test :- N/A						
Past Medication History	Medication (Specify Strength)	Order Detail	Start Date	End Date	Balance From Previous	Medication Status	Comment
	No history of taking Prescription Medication						
	Non-Prescription Medication (Includes Herbal/Vitamin/Other Supplement)			Reason For Taking	Balance/Comments		
	No history of taking Non-Prescription Medication						
Current Medication	Medication (Specify Strength)	Order Detail	Balance From Previous	Medication Status	Comment		
	Spironolactone 25 mg Tablet	25 mg ,OD (once daily), 120 Days, 16/08/2019 10:22:27 AM- 14/12/2019 10:22:27 AM	120 tablet	VERIFIED	WAD 2 L (MED/SURG/ORTO)/2017-05-23 21:58:30/		

Report:

MTAC Consultation Status: Need Follow Up

Pharmaceutical Care Issues:

Prescribed Medication Related Issues:

No.	Intervention Date	Prescription Start Date	Original Rx No.	Drug Name	Order Details	Modified Order Details	Intervention Remarks	Intervention Details		Prescriber Review
								Types	Description	
No Prescribed Medication Related Issues										

Other Issue:

No.	Intervention Date	Intervention Details		Pharmaceutical Care Issues	Pharmacist Recommendation	Outcome	Prescriber Review
		Types	Description				
No Other Issue							

Patient Understanding (medication) DFIT : 75%

Patient Adherence Score : -

Pharmacist Notes : test for user manual

Pharmacist Plan : test for user manual

Remarks :

Pharmacist Name: [REDACTED]

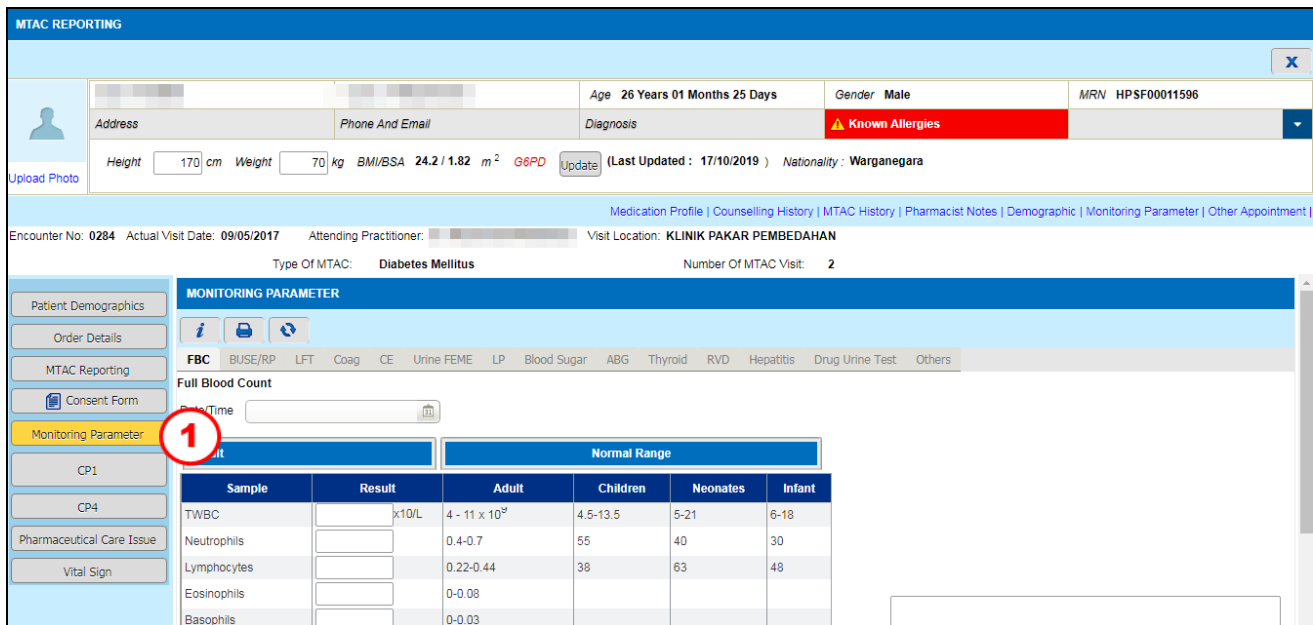
Date: 17/10/2019

Figure 3.2.1-27 MTAC Printed Report

3.2.2 Other Tabs

3.2.2-1 Monitoring Parameter

This function allows user to record lab results for MTAC patients.



MTAC REPORTING

Address: [Redacted] Phone And Email: [Redacted] Age: 26 Years 01 Months 25 Days Gender: Male MRN: HPSF00011596

Height: 170 cm Weight: 70 kg BMI/BSA: 24.2 / 1.82 m² G6PD: [Redacted] (Last Updated: 17/10/2019) Nationality: Warganegara

Encounter No: 0284 Actual Visit Date: 09/05/2017 Attending Practitioner: [Redacted] Visit Location: KLINIK PAKAR PEMBEDAHAN

Type Of MTAC: Diabetes Mellitus Number Of MTAC Visit: 2

MONITORING PARAMETER

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

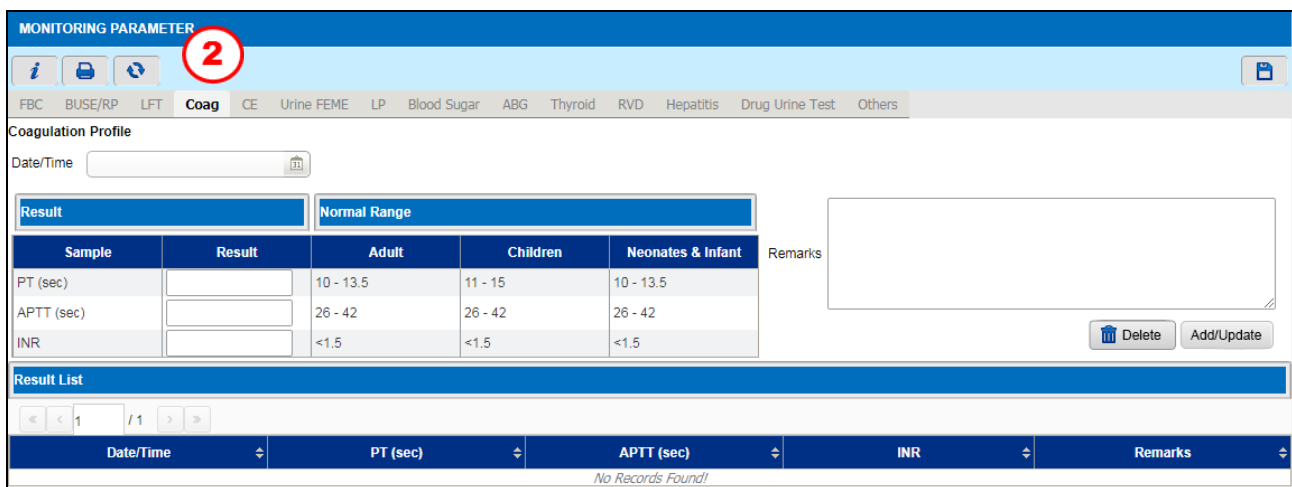
Full Blood Count

Sample	Result	Adult	Children	Neonates	Infant
TWBC	[Redacted] x10/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			

Figure 3.2.2-1 MTAC Reporting Screen

STEP 1

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



MONITORING PARAMETER

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

Coagulation Profile

Date/Time: [Redacted]

Sample	Result	Adult	Children	Neonates & Infant	Remarks
PT (sec)	[Redacted]	10 - 13.5	11 - 15	10 - 13.5	
APTT (sec)	[Redacted]	26 - 42	26 - 42	26 - 42	
INR	[Redacted]	<1.5	<1.5	<1.5	

Delete Add/Update

Result List

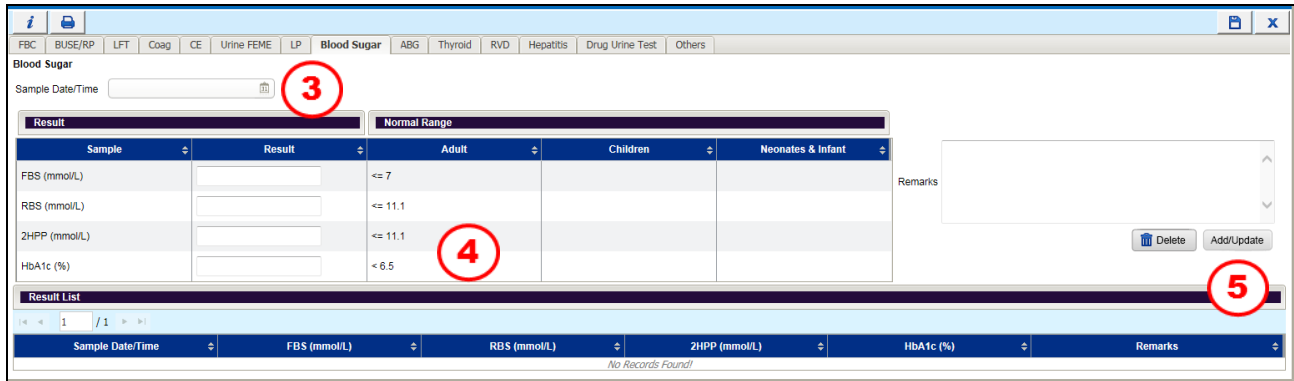
<< 1 / 1 >>

Date/Time	PT (sec)	APTT (sec)	INR	Remarks
No Records Found!				

Figure 3.2.2-2 Monitoring 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)		<= 7		
RBS (mmol/L)		<= 11.1		
2HPP (mmol/L)		<= 11.1		
HbA1c (%)		< 6.5		

Sample Date/Time	FBS (mmol/L)	RBS (mmol/L)	2HPP (mmol/L)	HbA1c (%)	Remarks
No Records Found!					

Figure 3.2.2-3 Monitoring Parameter Screen

STEP 3

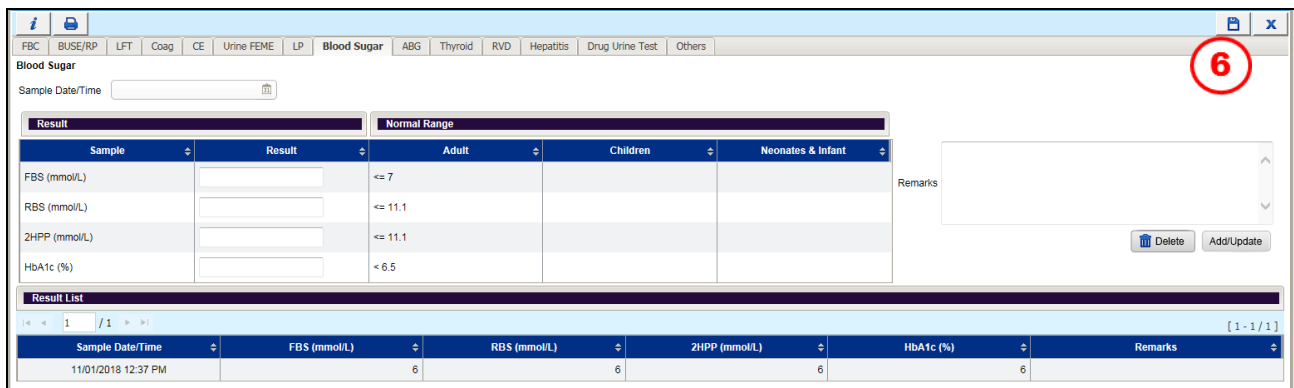
Click on the  calendar button to select the **Sample Date/Time**

STEP 4

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

STEP 5

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



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

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 Monitoring Parameter Screen

STEP 6

Click on the  button to save the record

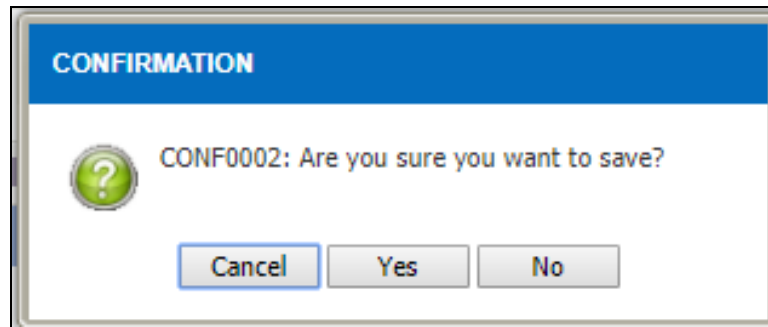
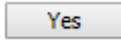
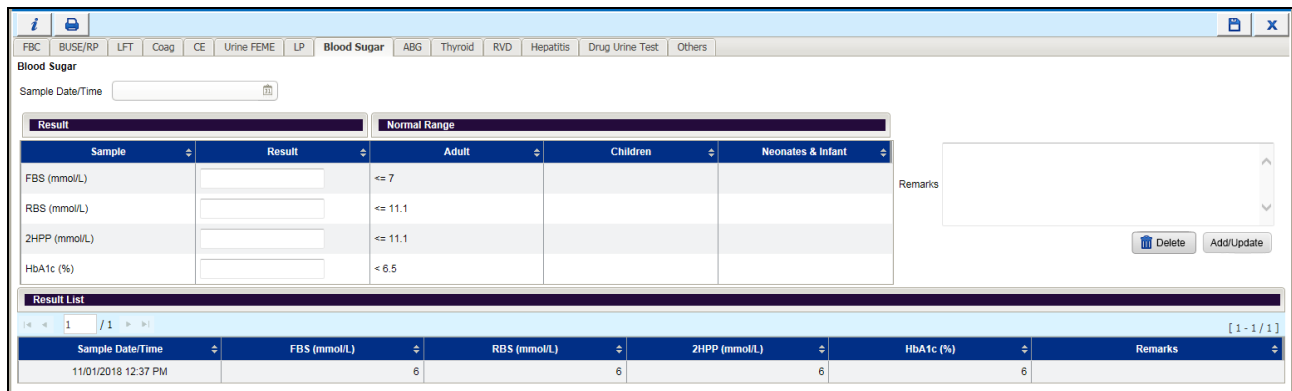


Figure 3.2.2-5 Confirmation Alert Message

STEP 7

Click on the  button to confirm





The Monitoring Parameter Screen shows a tabbed interface with "Blood Sugar" selected. It includes a "Sample Date/Time" field, a "Result" table, and a "Normal Range" table. The "Result" table has columns for Sample, Result, Adult, Children, and Neonates & Infant. The "Normal Range" table has columns for Adult, Children, and Neonates & Infant. The "Result" table contains data for FBS (mmol/L), RBS (mmol/L), 2HPP (mmol/L), and HbA1c (%). The "Normal Range" table contains data for FBS (mmol/L), RBS (mmol/L), 2HPP (mmol/L), and HbA1c (%). The "Result" table also includes a "Remarks" column. The "Normal Range" table also includes a "Remarks" column. The "Result" table also includes a "Delete" button and an "Add/Update" button. The "Normal Range" table also includes a "Delete" button and an "Add/Update" button.

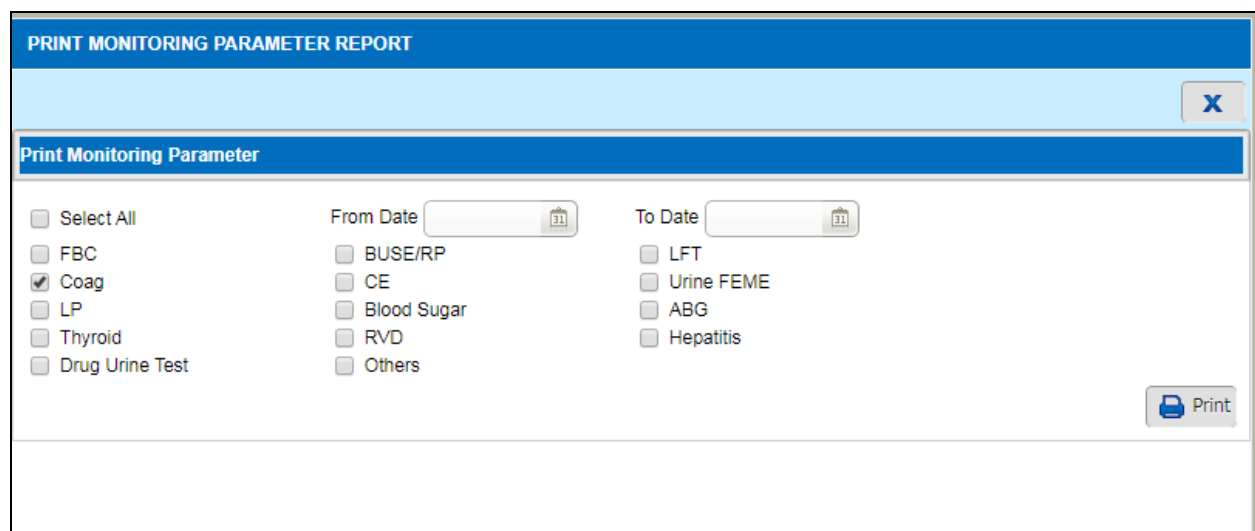
Sample	Result	Adult	Children	Neonates & Infant
FBS (mmol/L)		<= 7		
RBS (mmol/L)		<= 11.1		
2HPP (mmol/L)		<= 11.1		
HbA1c (%)		< 6.5		

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 3.2.2-6 Monitoring 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



The Print Monitoring Parameter Report dialog box has a title bar "PRINT MONITORING PARAMETER REPORT" and a close button. The main area is titled "Print Monitoring Parameter". It contains a list of checkboxes for selecting parameters to print: FBC, Coag (checked), LP, Thyroid, Drug Urine Test, BUSE/RP, CE, Blood Sugar, RVD, Others, LFT, Urine FEME, ABG, and Hepatitis. There are also "From Date" and "To Date" fields with calendar icons. A "Print" button is at the bottom right.

Figure 3.2.2-7 Print Monitoring 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 Monitoring Parameter Report as per Figure 3.2.2-7

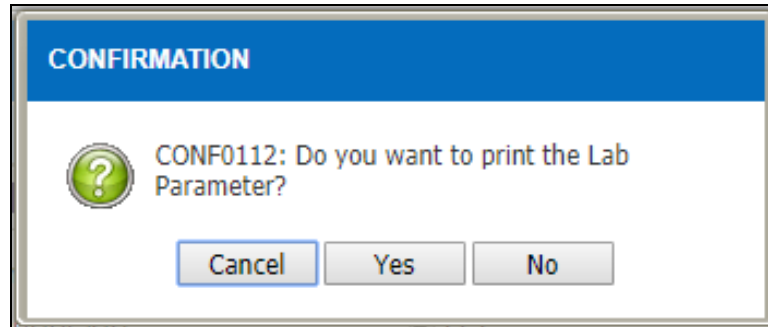
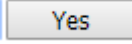



Figure 3.2.2-8 Confirmation Alert Message

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



KEMENTERIAN KESIHATAN MALAYSIA

LAB PARAMETER REPORT

Hospital Pakar Sultanah Fatimah, Muar

Lab Parameter

PATIENT NAME : 	IC NO : 	AGE : 32 Years 01 Months 17 Days
MRN NO : HPSF00268221	WEIGHT/HEIGHT : 80.00Kg /160.00 Cm	GENDER : Female
WARD/BED : KLINIK PAKAR PERUBATAN /	ADMISSION DATE : 07/10/2019	REASON FOR ADMISSION :

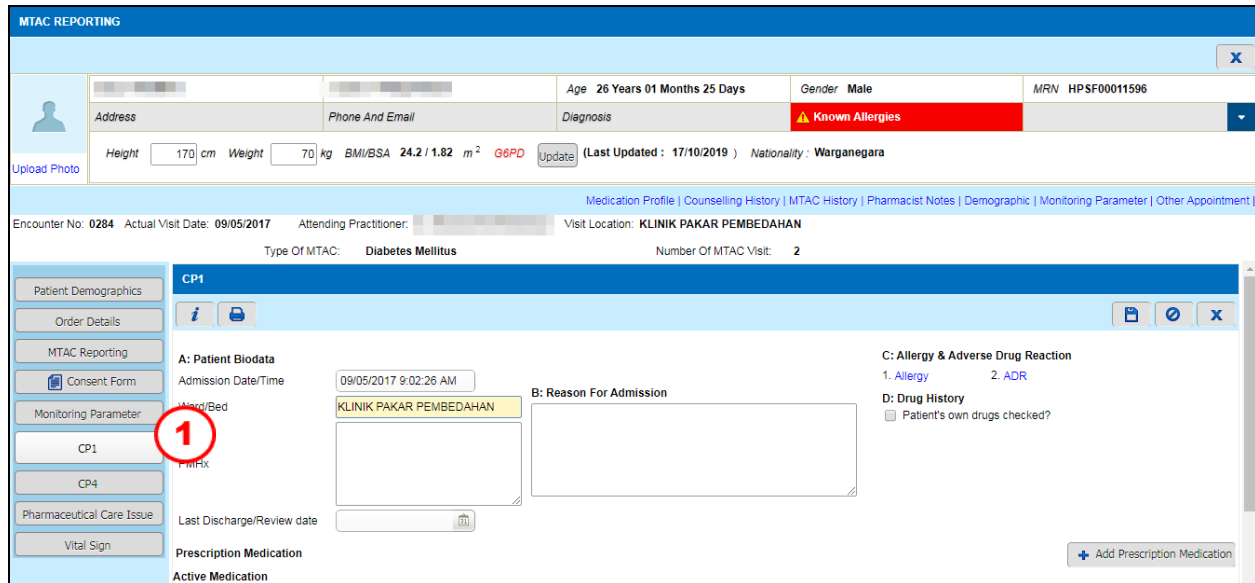
Coag

Date/Time	PT	APTT	INR	Remarks
07/10/2019 6:15 PM	11	27	0.8	test for user manual

Figure 3.2.2-9 Monitoring Parameter Printed Report

3.2.2.2 CP1

This function allows user to record past medication history under CP1 for MTAC patients



MTAC REPORTING

Age: 26 Years 01 Months 25 Days | Gender: Male | MRN: HPSF00011596

Address: | Phone And Email: | Diagnosis: | **Known Allergies**

Height: 170 cm | Weight: 70 kg | BMI/BSA: 24.2 / 1.82 m² | G6PD: | Update (Last Updated: 17/10/2019) | Nationality: Warganegara

Encounter No: 0284 | Actual Visit Date: 09/05/2017 | Attending Practitioner: | Visit Location: KLINIK PAKAR PEMBEDAHAN

Type Of MTAC: Diabetes Mellitus | Number Of MTAC Visit: 2

CP1

A: Patient Biodata
 Admission Date/Time: 09/05/2017 9:02:26 AM
 Ward/Bed: KLINIK PAKAR PEMBEDAHAN

B: Reason For Admission

C: Allergy & Adverse Drug Reaction
 1. Allergy | 2. ADR

D: Drug History
☐ Patient's own drugs checked?

PMHx

Last Discharge/Review date:

Prescription Medication

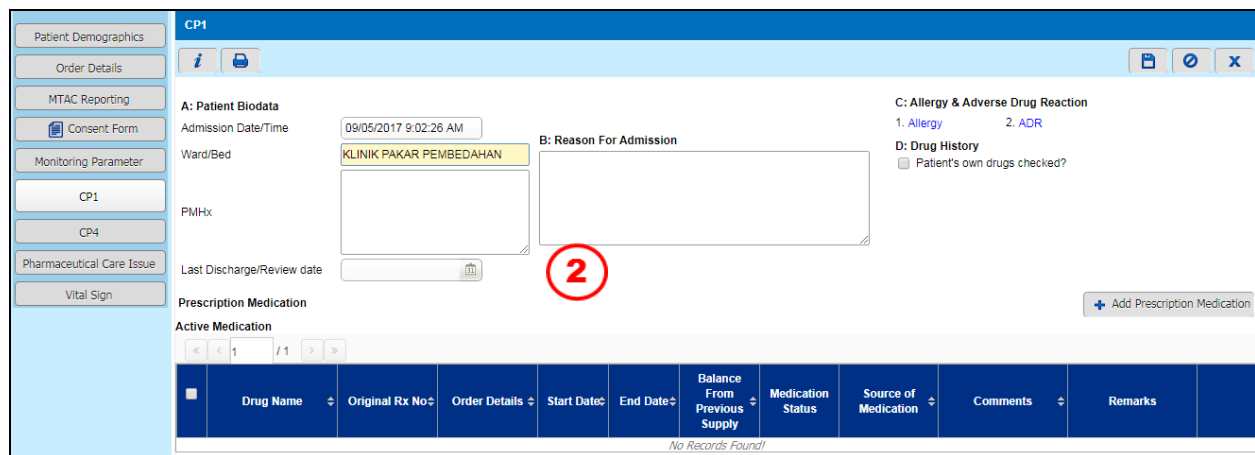
Active Medication

+ Add Prescription Medication

Figure 3.2.2.2-1 MTAC Reporting – Assessment on Past Medication History

STEP 1

Click on the **CP1** button to add 'Past Medication History' as shown in Figure 3.2.2.2-1



CP1

A: Patient Biodata
 Admission Date/Time: 09/05/2017 9:02:26 AM
 Ward/Bed: KLINIK PAKAR PEMBEDAHAN

B: Reason For Admission

C: Allergy & Adverse Drug Reaction
 1. Allergy | 2. ADR

D: Drug History
☐ Patient's own drugs checked?

PMHx

Last Discharge/Review date:

Prescription Medication

Active Medication

+ Add Prescription Medication

Drug Name	Original Rx No	Order Details	Start Date	End Date	Balance From Previous Supply	Medication Status	Source of Medication	Comments	Remarks
No Records Found!									

Figure 3.2.2.2-2 CP1

STEP 2


Fill in the patients details as below:

-A: Patient Biodata

- Admission date
- Ward/Bed

- PMHX
- Last Discharge/review Date
- B: Reason For Admission
- C: Allergy & Adverse Drug Reaction
 - Allergy
 - ADR
- D: Drug History
 - Patients own drug checked?

STEP 3

Click on the  button and the 'Prescription Medication' window will be displayed as shown in Figure 3.2.2.2-3. Enter the necessary information and save

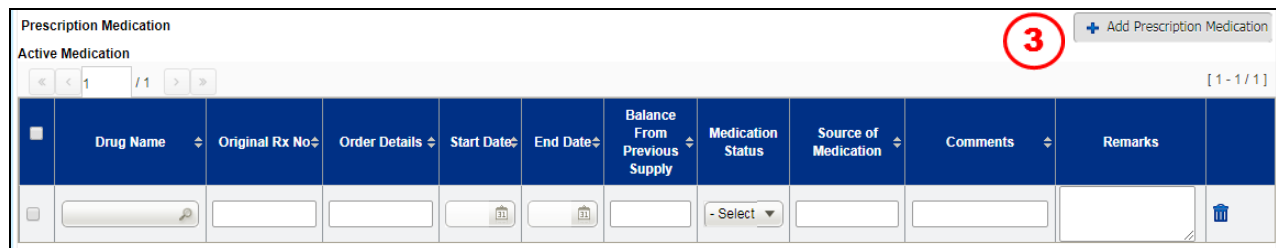



Figure 3.2.2.2-3 Prescription Medication

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, Start Date, End date, Balance from Previous Supply, Medication Status, Source of Medication, Comments and Remarks** at prescription medication

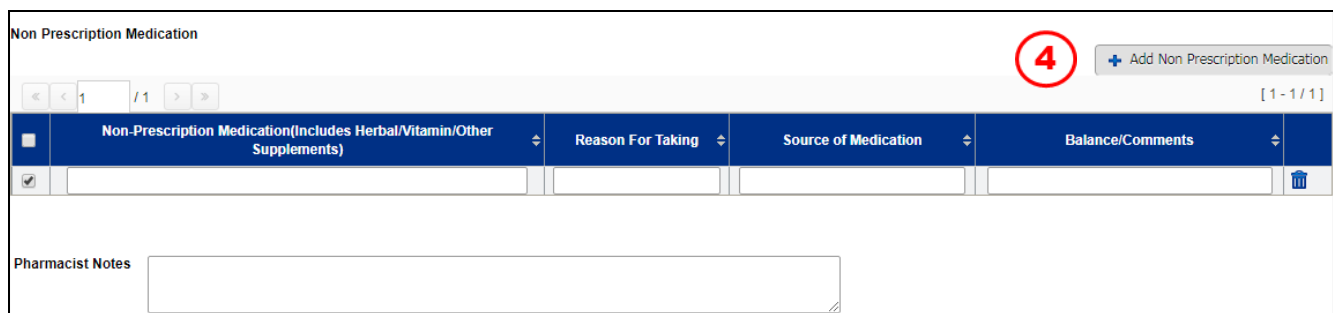
STEP 4

Click on the  button and the 'Non-Prescription Medication' window will be displayed as shown in Figure 3.2.2.2-4. Enter the necessary information and save

Note

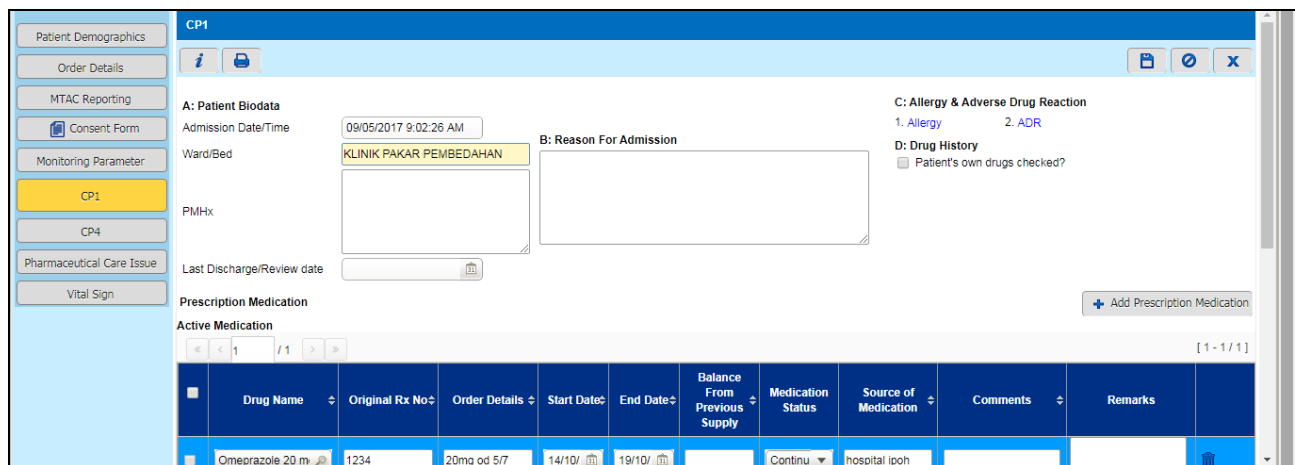
Past Medication History:

- Non-Prescription Medication.
 - User can add any none prescription medication that has been taken by patient in system
 - User can fill up **Non-Prescription Medication(Includes Herbal/Vitamin/Other Supplement), Reason For Taking, Source of Medication, Balance/Comments and Pharmacist Notes** at the Non-Prescription Medication field.



The screenshot shows the 'Non Prescription Medication' window. At the top right, there is a red circle with the number '4' next to the '+ Add Non Prescription Medication' button. Below this is a table with the following columns: 'Non-Prescription Medication(Includes Herbal/Vitamin/Other Supplements)', 'Reason For Taking', 'Source of Medication', and 'Balance/Comments'. The table has one row with a checkbox in the first column. Below the table is a 'Pharmacist Notes' text area.

Figure 3.2.2.2-4 Non-Prescription Medication



The screenshot shows the 'CP1' screen. On the left is a sidebar with buttons: 'Patient Demographics', 'Order Details', 'MTAC Reporting', 'Consent Form', 'Monitoring Parameter', 'CP1' (highlighted), 'CP4', 'Pharmaceutical Care Issue', and 'Vital Sign'. The main area is divided into sections: 'A: Patient Biodata' (Admission Date/Time: 09/05/2017 9:02:26 AM, Ward/Bed: KLINIK PAKAR PEMBEDAHAN, PMHx, Last Discharge/Review date), 'B: Reason For Admission' (text area), 'C: Allergy & Adverse Drug Reaction' (1. Allergy, 2. ADR), 'D: Drug History' (checkbox: Patient's own drugs checked?), and 'Prescription Medication' (Add Prescription Medication button). Below these is a table for 'Active Medication' with columns: Drug Name, Original Rx No, Order Details, Start Date, End Date, Balance From Previous Supply, Medication Status, Source of Medication, Comments, and Remarks. The first row shows 'Omeprazole 20 mg', '1234', '20mg od 5/7', '14/10/17', '19/10/17', 'Continu', 'hospital ipoh', and empty fields for Comments and Remarks.

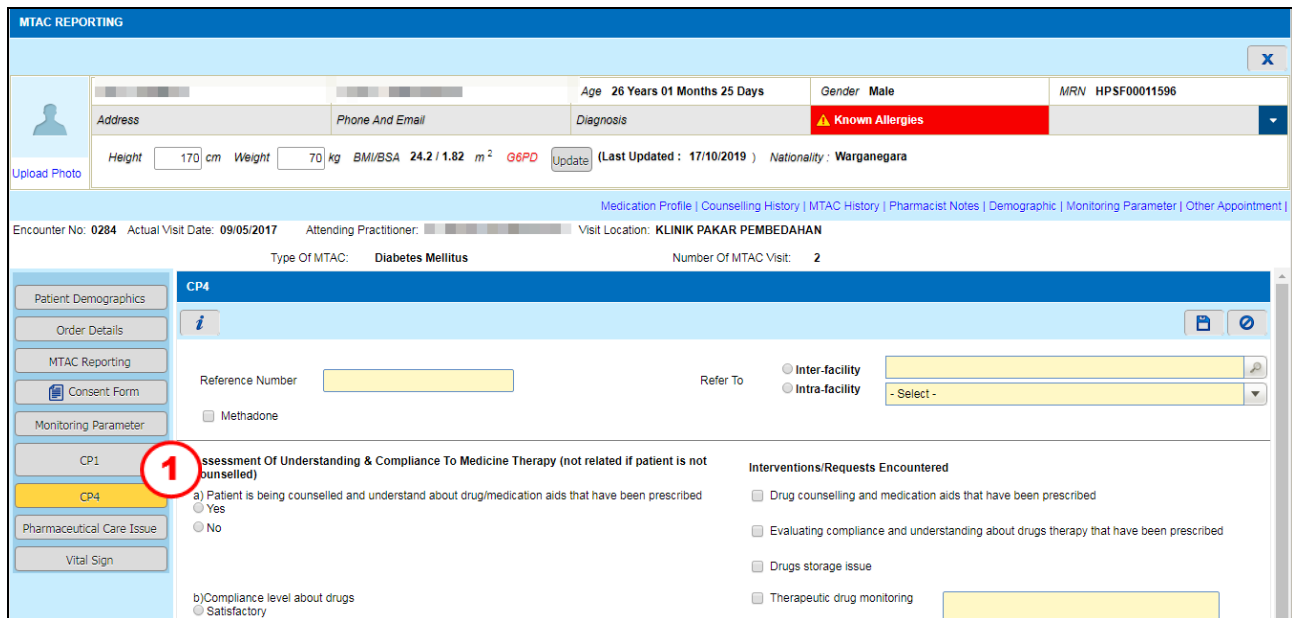
Figure 3.2.2.2-5 CP1 Screen

STEP 5

Click at the  button to save the CP1 record

3.2.2.3 CP4

This function allows user to record Intervention and other issues related to CP4 for MTAC patients



MTAC REPORTING

Age: 26 Years 01 Months 25 Days | Gender: Male | MRN: HPSF00011596

Address: [Redacted] | Phone And Email: [Redacted] | Diagnosis: [Redacted] | Known Allergies: [Redacted]

Height: 170 cm | Weight: 70 kg | BMI/BSA: 24.2 / 1.82 m² | G6PD: [Redacted] | Update: (Last Updated: 17/10/2019) | Nationality: Warganegara

Encounter No: 0284 | Actual Visit Date: 09/05/2017 | Attending Practitioner: [Redacted] | Visit Location: KLINIK PAKAR PEMBEDAHAN

Type Of MTAC: Diabetes Mellitus | Number Of MTAC Visit: 2

CP4

Reference Number: [Redacted] | Refer To: ☐ Inter-facility [Redacted] ☐ Intra-facility - Select -

☐ Methadone

Assessment Of Understanding & Compliance To Medicine Therapy (not related if patient is not counselled)

a) Patient is being counselled and understand about drug/medication aids that have been prescribed

☐ Yes ☐ No

b) Compliance level about drugs

☐ Satisfactory ☐ Not Satisfactory

c) Compliance Aids

☐ Yes ☐ No

☐ Pill Box ☐ Drug Leaflet ☐ Others [Redacted]

Interventions/Requests Encountered

☐ Drug counselling and medication aids that have been prescribed

☐ Evaluating compliance and understanding about drugs therapy that have been prescribed

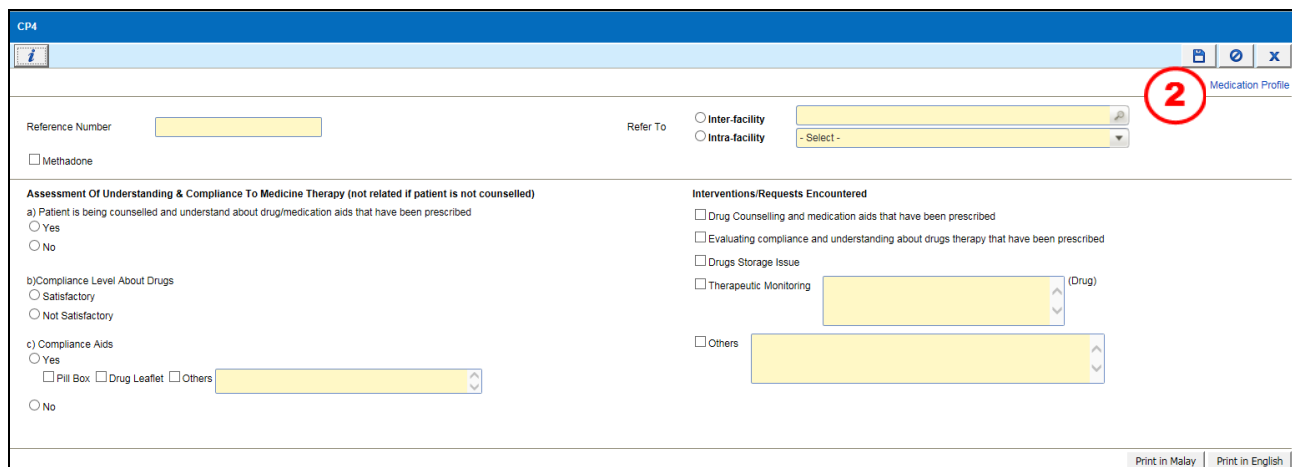
☐ Drugs storage issue

☐ Therapeutic drug monitoring [Redacted]

Figure 3.2.2.3-1 CP4 Screen

STEP 1

Click on the **CP4** button to enter the details



CP4

Reference Number: [Redacted] | Refer To: ☐ Inter-facility [Redacted] ☐ Intra-facility - Select -

☐ Methadone

Assessment Of Understanding & Compliance To Medicine Therapy (not related if patient is not counselled)

a) Patient is being counselled and understand about drug/medication aids that have been prescribed

☐ Yes ☐ No

b) Compliance Level About Drugs

☐ Satisfactory ☐ Not Satisfactory

c) Compliance Aids

☐ Yes ☐ No

☐ Pill Box ☐ Drug Leaflet ☐ Others [Redacted]

Interventions/Requests Encountered

☐ Drug Counselling and medication aids that have been prescribed

☐ Evaluating compliance and understanding about drugs therapy that have been prescribed

☐ Drugs Storage Issue

☐ Therapeutic Monitoring [Redacted] (Drug)

☐ Others [Redacted]

Print in Malay | Print in English

Figure 3.2.2.3-2 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**

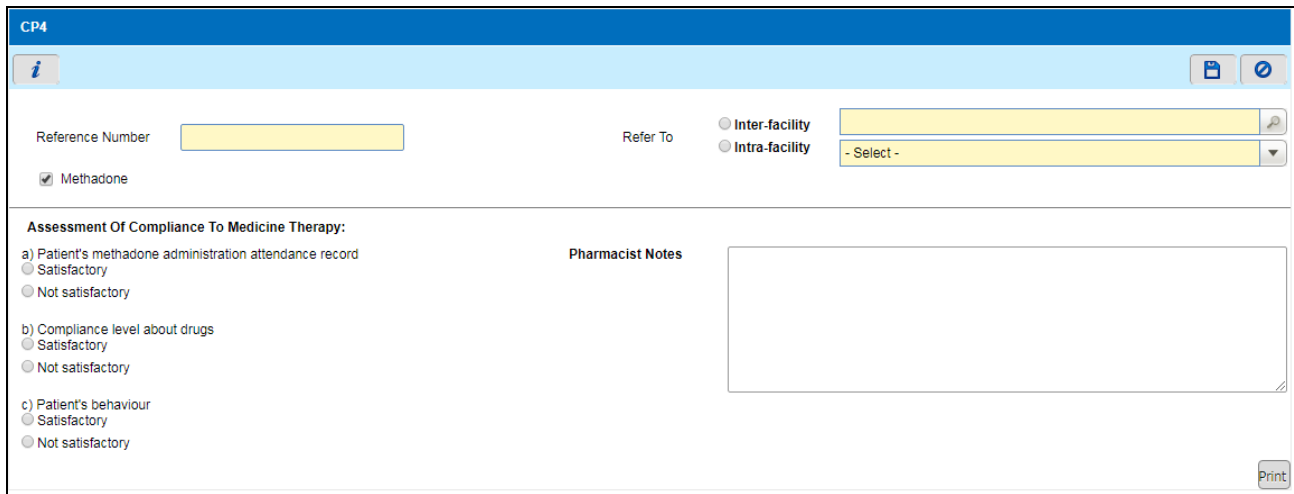


Figure 3.2.2.3-3 CP4 – Methadone Screen

STEP 2

Click on the  button to save the record

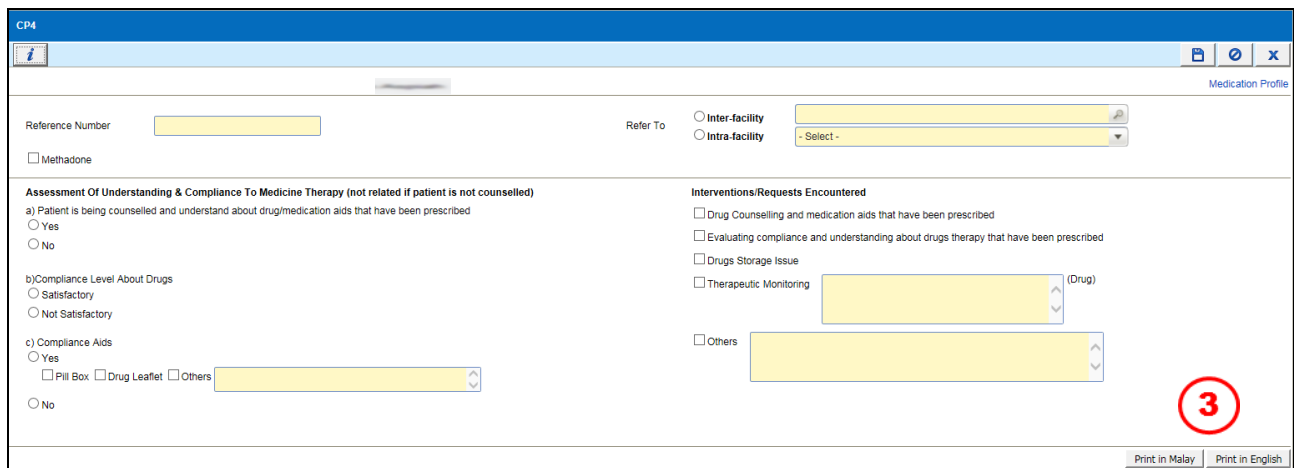
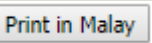
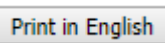


Figure 3.2.2.3-4 CP4 Print Report

STEP 3

Click on the  or  to print the CP4 as per Figure 3.2.2.3-4

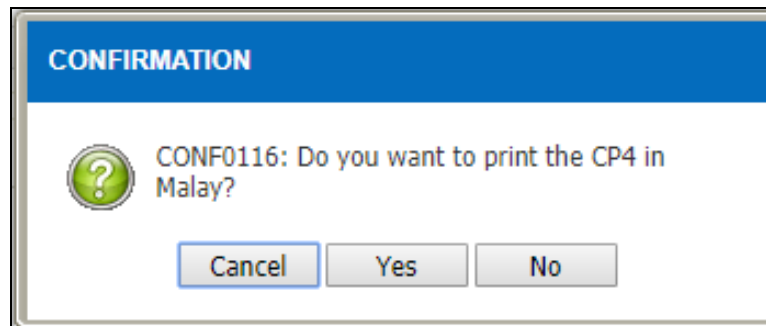


Figure 3.2.2.3-5 Confirmation Alert Message

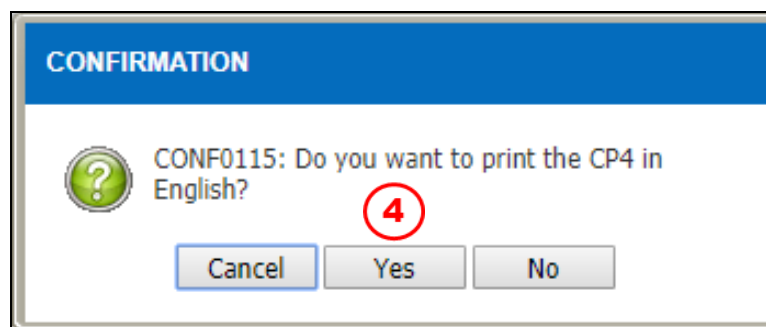


Figure 3.2.2.3-6 Confirmation Alert Message

STEP 4

Click on the  button to confirm and the Referral Note will be display as per Figure 3.2.2.3-7

KEMENTERIAN KESIHATAN MALAYSIA

Hospital Pakar Sultanah Fatimah, Muar

Pharmacy Department

REFERRAL NOTE

CP4/941

TO:

Medical Officer / Pharmacist : Hospital Sultanah Aminah, Johor Bahru

RE: PATIENT REFERRAL

 / **HPSF00011596** / 
 Name MRN IC No

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 :

Date	Diagnosis Description
09/05/2017	bph

3. LIST OF CURRENT DRUG :

Drug Name	Dose	Frequency	Start Date	End Date	Supply Period
Spironolactone 25 mg Tablet	25 mg	OD (once daily)	16/08/2019	14/12/2019	120 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]

✓	Drug counselling and medication aids that have been prescribed
	Evaluate compliance with and understanding of the prescribed drug therapy
	Therapeutic drug monitoring:
	Drug storage issues
	Other:

Thank You,

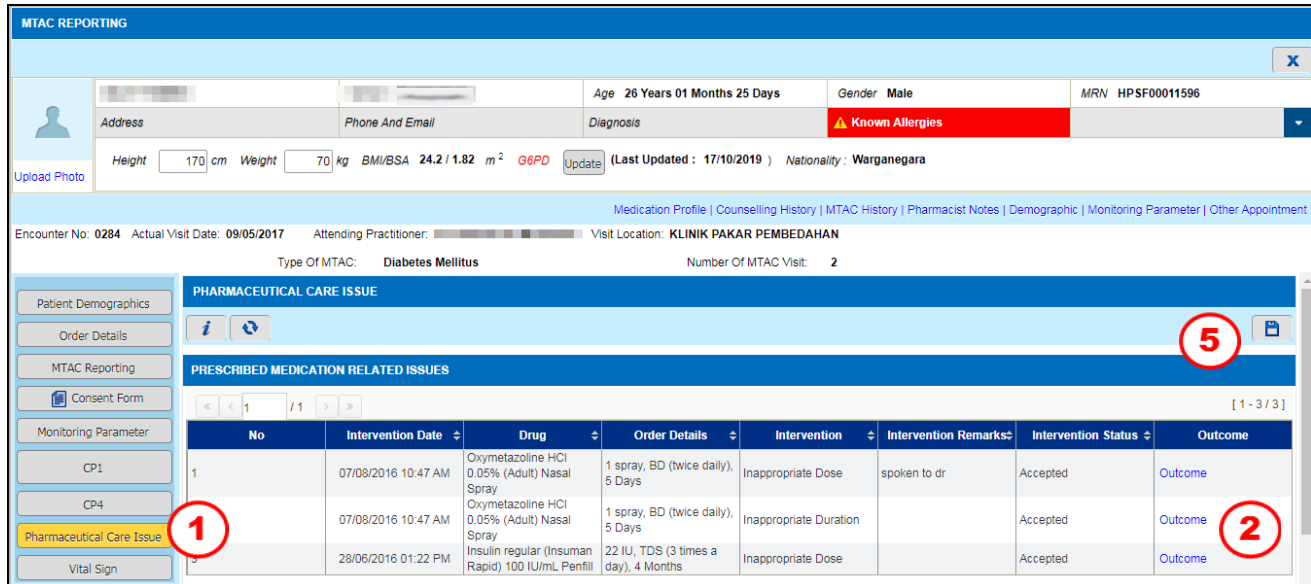
[illegible]

17/10/2019

Figure 3.2.2.3-7 CP4 / Referral Note Printed Report

3.2.2.4 Pharmaceutical Care Issue

This function allows user to record pharmaceutical care issues for MTAC patients



MTAC REPORTING

Age: 26 Years 01 Months 25 Days | Gender: Male | MRN: HPSF00011596

Address: [Redacted] | Phone And Email: [Redacted] | Diagnosis: [Redacted] | Known Allergies: [Redacted]

Height: 170 cm | Weight: 70 kg | BMI/BSA: 24.2 / 1.82 m² | G6PD: [Redacted] | (Last Updated: 17/10/2019) | Nationality: Warganegara

Encounter No: 0284 | Actual Visit Date: 09/05/2017 | Attending Practitioner: [Redacted] | Visit Location: KLINIK PAKAR PEMBEDAHAN

Type Of MTAC: Diabetes Mellitus | Number Of MTAC Visit: 2

PHARMACEUTICAL CARE ISSUE

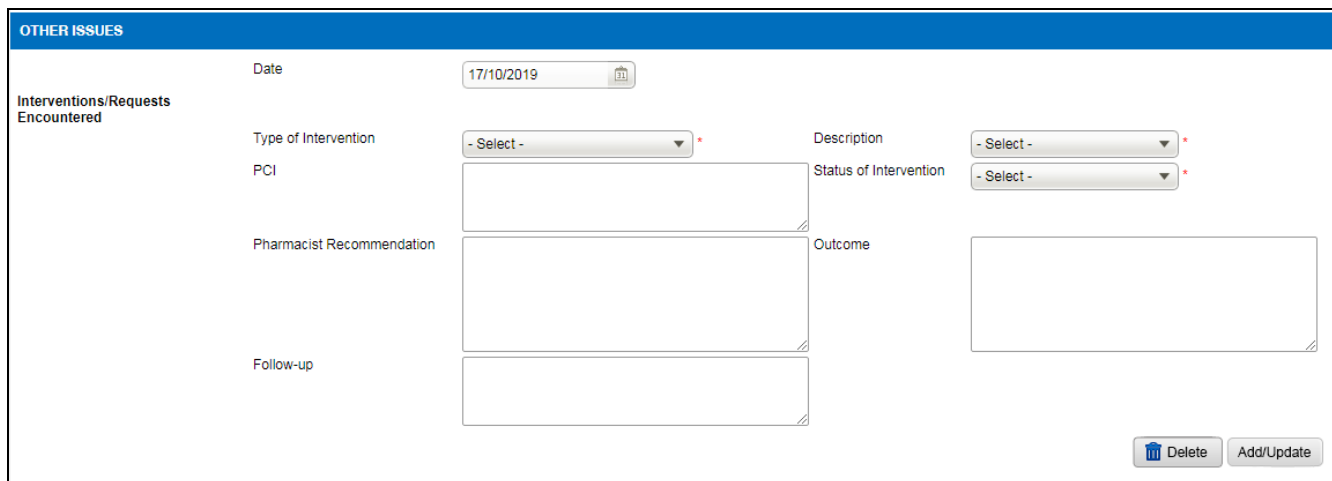
PRESCRIBED MEDICATION RELATED ISSUES

No	Intervention Date	Drug	Order Details	Intervention	Intervention Remarks	Intervention Status	Outcome
1	07/08/2016 10:47 AM	Oxymetazoline HCl 0.05% (Adult) Nasal Spray	1 spray, BD (twice daily), 5 Days	Inappropriate Dose	spoken to dr	Accepted	Outcome
2	07/08/2016 10:47 AM	Oxymetazoline HCl 0.05% (Adult) Nasal Spray	1 spray, BD (twice daily), 5 Days	Inappropriate Duration		Accepted	Outcome
3	28/06/2016 01:22 PM	Insulin regular (Insuman Rapid) 100 IU/mL Penfill	22 IU, TDS (3 times a day), 4 Months	Inappropriate Dose		Accepted	Outcome

Figure 3.2.2.4-1 MTAC Reporting Screen

STEP 1

Click on the **Pharmaceutical Care Issue** button and the system will display Prescribed Medication related Issues as in Figure 3.2.2.4-1 and Other issues as per Figure 3.2.2.4-2



OTHER ISSUES

Date: 17/10/2019

Interventions/Requests Encountered

Type of Intervention: - Select -

PCI: [Text Area]

Pharmacist Recommendation: [Text Area]

Follow-up: [Text Area]

Description: - Select -

Status of Intervention: - Select -

Outcome: [Text Area]

Buttons: Delete, Add/Update

Figure 3.2.2.4-2 Other Issues

Note

- The column for **Intervention Remarks** in PCI screen has been added.
- Other Details** was renamed to **Order Details** as per Figure 3.2.2.4-1

STEP 2

Click on the [Outcome](#) hyperlink to enter the details. The system will display as per Figure 3.2.2.4-3. Save when done.

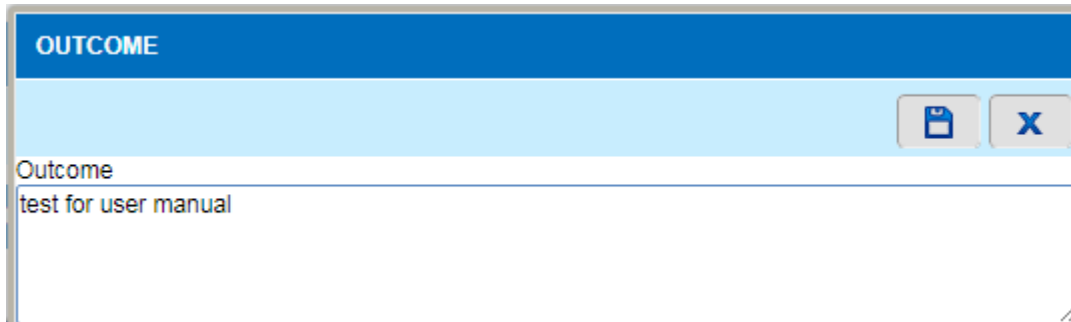


Figure 3.2.2.4-3 Outcome Screen

STEP 3

Fill up the **Interventions/Requests Encountered** under **Other Issues** section as per Figure 3.2.2.4-4

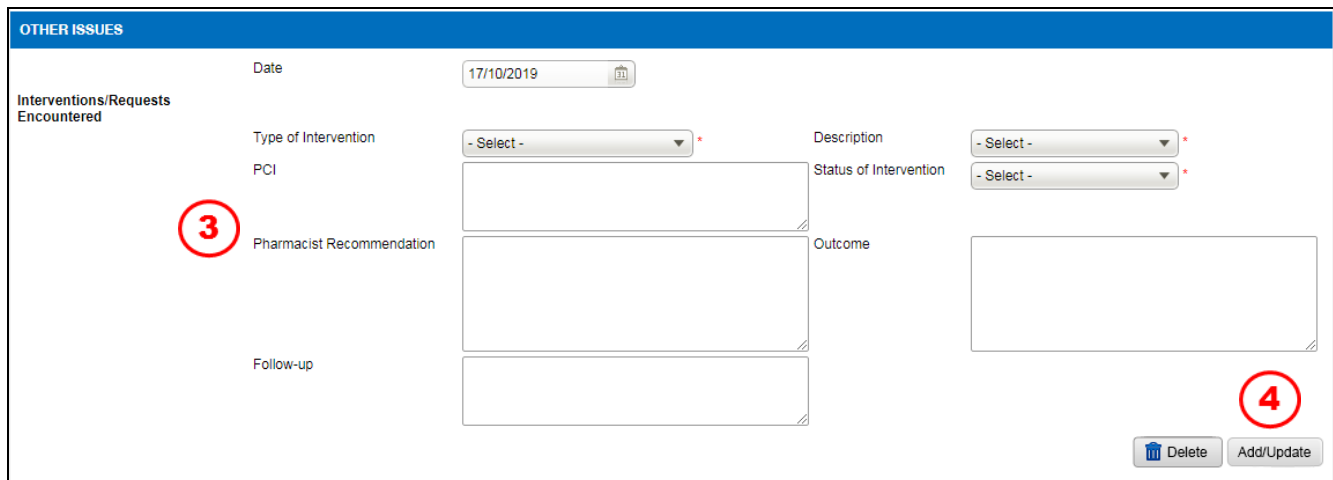


Figure 3.2.2.4-4 Other Issues Screen

STEP 4

Click on the [Add/Update](#) button to update and it will appear below under **Interventions** section as per Figure 3.2.2.4-5


INTERVENTIONS								
<div> <div> <div><<</div> <div><</div> <div>1</div> <div>></div> <div>>></div> </div> <div>/ 1</div> </div> <div>[1 - 1 / 1]</div>								
Date	Type of Intervention	Description	PCI	Pharmacist Recommendation	Status of Intervention	Outcome	Follow-up	Check list
17/10/2019	Incomplete Prescriptions	Frequency	Augmentin 625mg TDS 5/7 overdose	Change to Augmentin 625mg BD 5/7	Accepted	dose altered		<input type="checkbox"/>

Figure 3.2.2.4-5 Interventions Section

Note

Tick on the [Checklist](#) checkbox and click the [Delete](#) button to delete the intervention record as per Figure 3.2.2.4-5

STEP 5

Click on the  button to save the record as per Figure 3.2.2.4-1

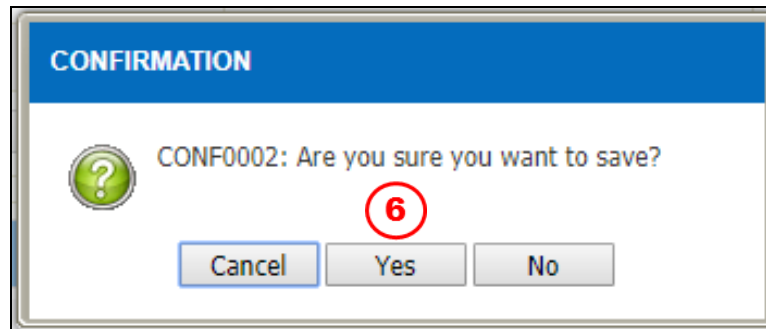
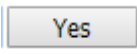


Figure 3.2.2.4-6 Confirmation Alert Message

STEP 6

Click on the  button to confirm

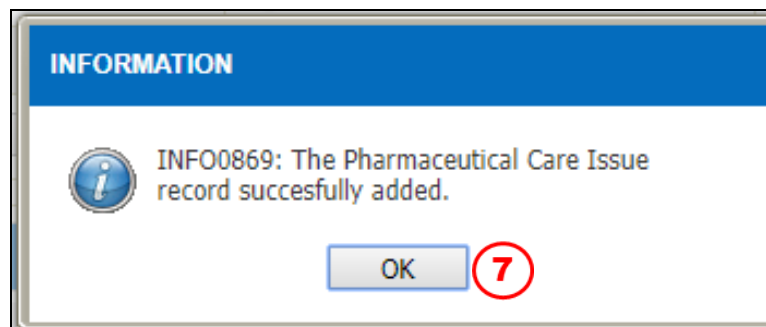


Figure 3.2.2.4.7 Information Alert Message

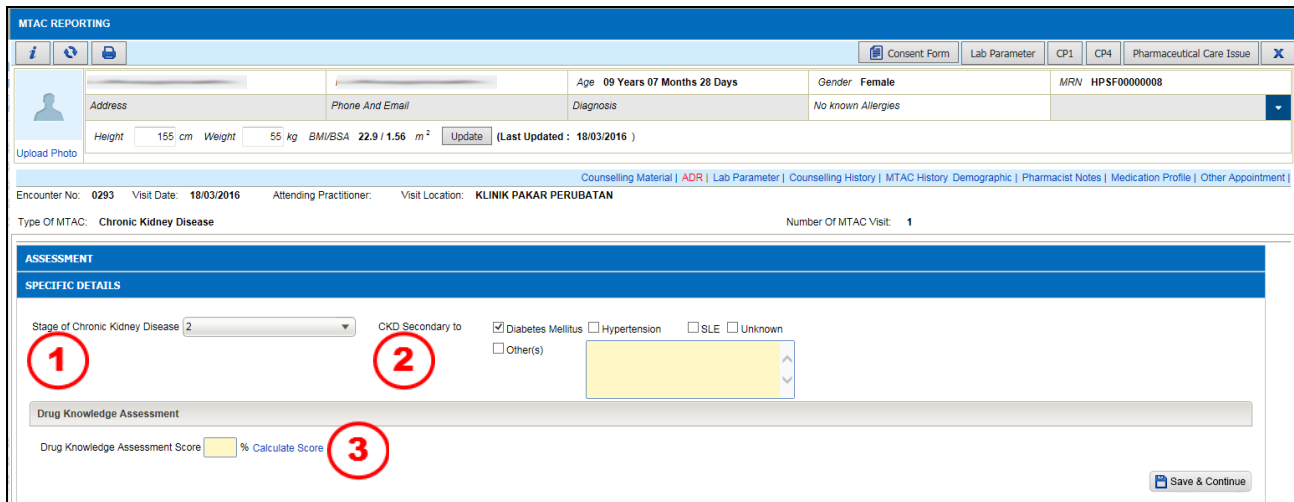
STEP 7

Click on the  button to successfully add PCI

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 shows the 'MTAC REPORTING' interface. At the top, there are tabs for 'Consent Form', 'Lab Parameter', 'CP1', 'CP4', and 'Pharmaceutical Care Issue'. Below this, patient information is displayed, including Age (09 Years 07 Months 28 Days), Gender (Female), and MRN (HPSF00000008). The 'Type Of MTAC' is set to 'Chronic Kidney Disease'. The 'ASSESSMENT' section is active, showing 'SPECIFIC DETAILS'. In this section, three red circles highlight specific fields: (1) 'Stage of Chronic Kidney Disease' dropdown menu, (2) 'CKD Secondary to' checkboxes for Diabetes Mellitus, Hypertension, SLE, and Unknown, and (3) the 'Calculate Score' button in the 'Drug Knowledge Assessment' section.

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

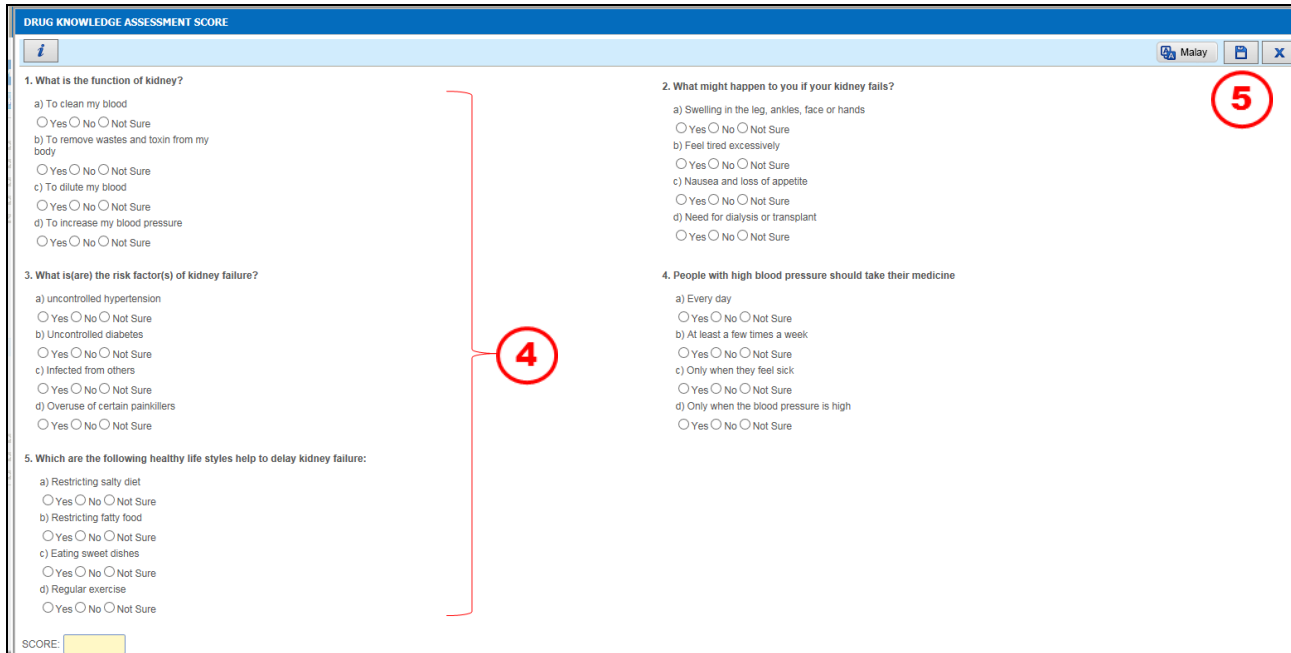



Figure 3.2.3.1-2 Drug Knowledge Assessment Score

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

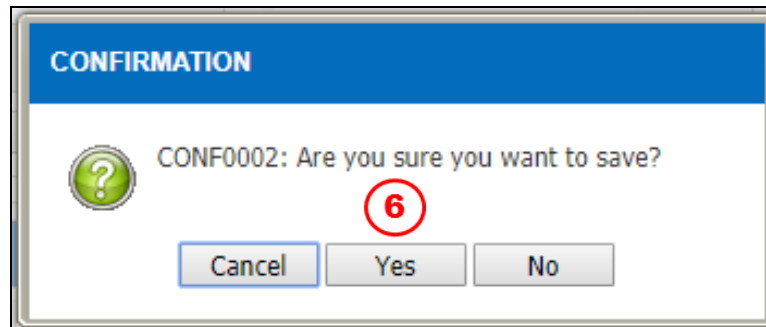
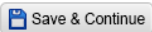


Figure 3.2.3.1-3 Confirmation Alert Message

STEP 7

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

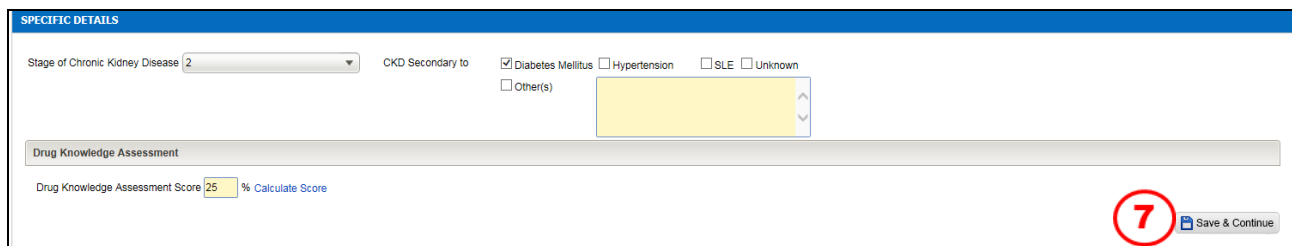
A form titled "SPECIFIC DETAILS" for Chronic Kidney Disease. It includes a dropdown for "Stage of Chronic Kidney Disease" (set to 2), a section for "CKD Secondary to" with checkboxes for "Diabetes Mellitus", "Hypertension", "SLE", "Unknown", and "Other(s)", and a "Drug Knowledge Assessment" section with a score of 25 and a "Calculate Score" link. A "Save & Continue" button is circled in red with the number 7.

Figure 3.2.3.1-4 Specific Details – Chronic Kidney Disease

STEP 8

Click on the  button to confirm save record

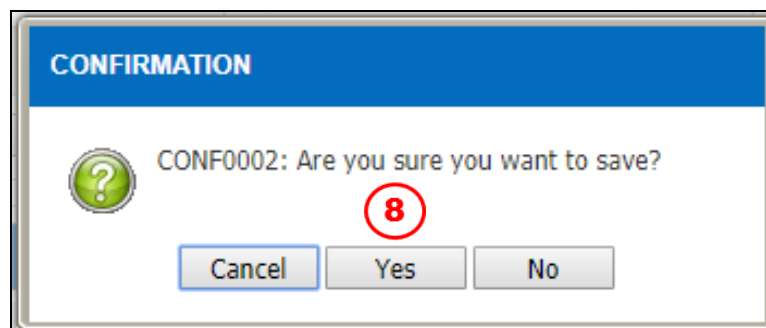



Figure 3.2.3.1-5 Confirmation Alert Message

STEP 9

Click on the  button to confirm record

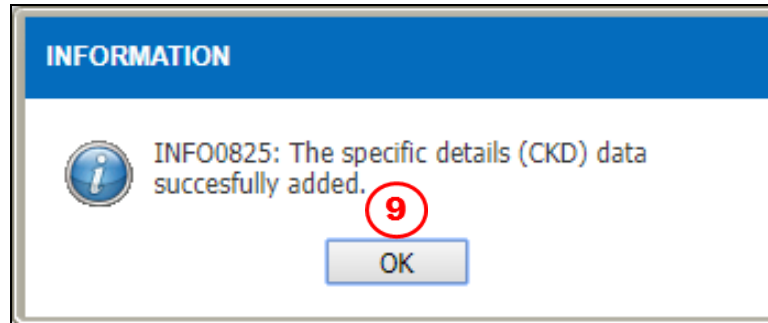


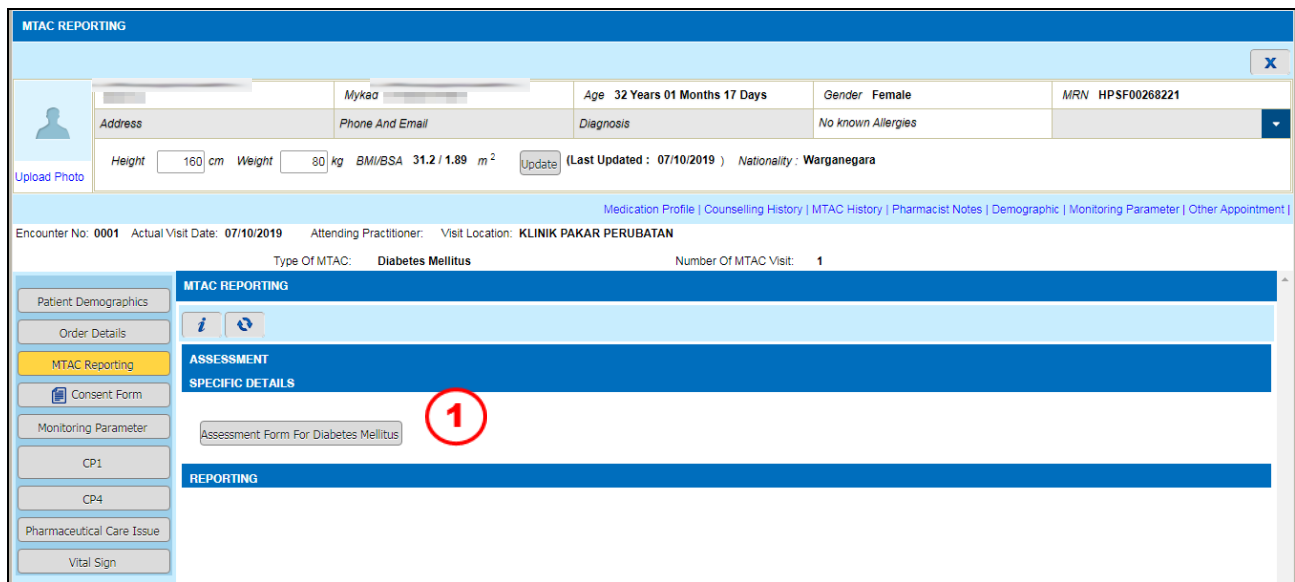
Figure 3.2.3.1-6 Information alert message

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



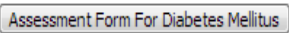
The screenshot displays the MTAC Reporting interface for Diabetes Mellitus. The top section shows patient demographics: Mykai, Age 32 Years 01 Months 17 Days, Gender Female, MRN HPSF00268221. Below this, there are fields for Address, Phone And Email, Diagnosis, and No known Allergies. A section for Height (160 cm), Weight (80 kg), BMI/BSA (31.2 / 1.89 m²), and an Update button (Last Updated: 07/10/2019) is also present. The Nationality is listed as Warganegara. The interface includes a sidebar with navigation options: Patient Demographics, Order Details, MTAC Reporting (highlighted), Consent Form, Monitoring Parameter, CP1, CP4, Pharmaceutical Care Issue, and Vital Sign. The main content area shows the MTAC Reporting section with a red circle and the number 1 highlighting the 'Assessment Form For Diabetes Mellitus' button.

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

☐ Kembung perut

☐ Loya / muntah

☐ Cirit-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 (0u00EFu00BFu00BDC)

☐ 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)

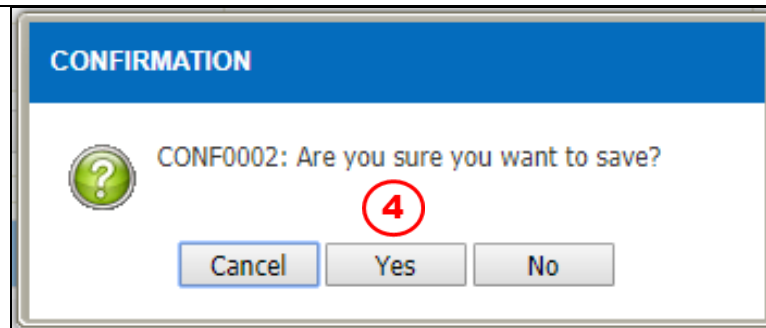


Figure 3.2.3.2-3 Confirmation Alert Message

STEP 4

Click on the  button to confirm save record

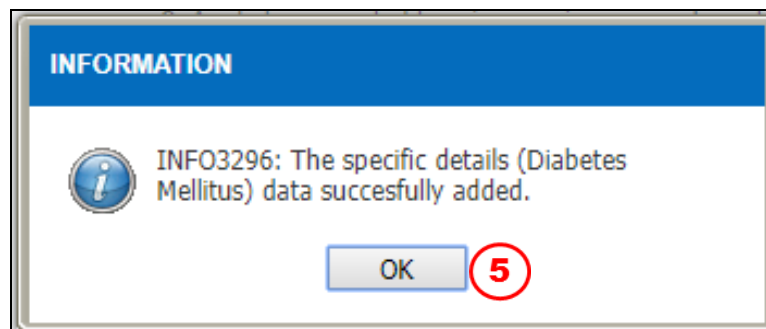



Figure 3.2.3.2-4 Information Alert Message

STEP 5

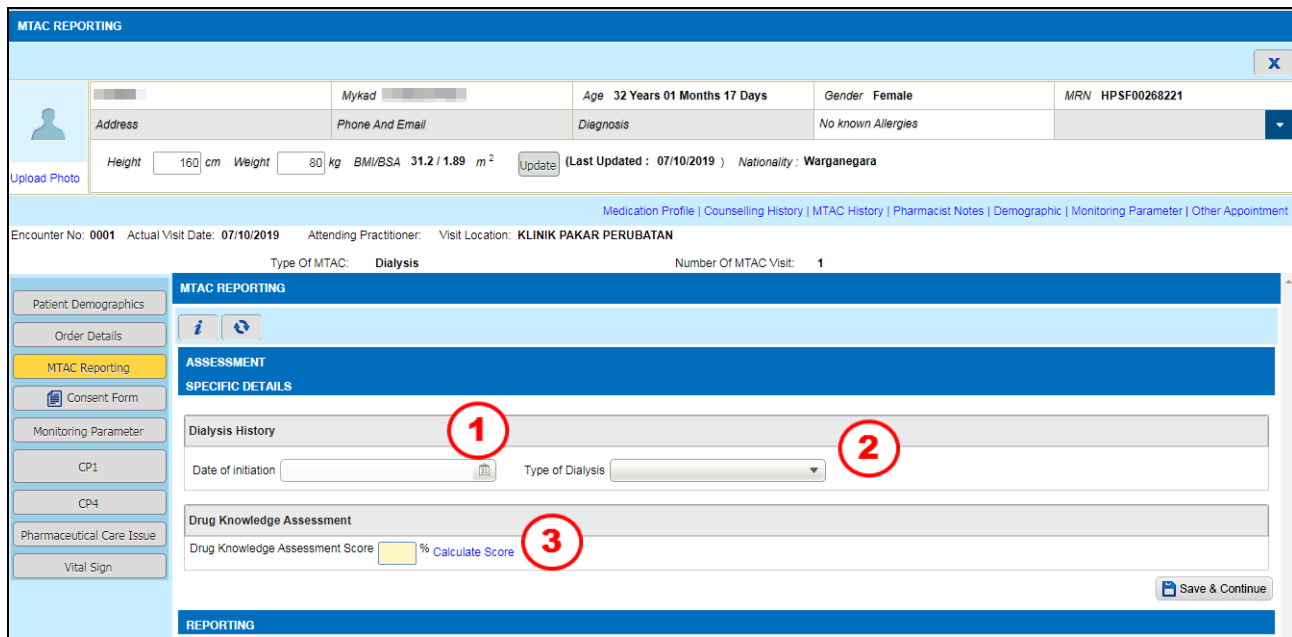
Click on the  button to confirm record

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's a patient profile with fields for Mykad, Age (32 Years 01 Months 17 Days), Gender (Female), MRN (HPSF00268221), Address, Phone And Email, Diagnosis, and No known Allergies. Below this, there's a section for 'Type Of MTAC: Dialysis' and 'Number Of MTAC Visit: 1'. The main content area is divided into 'ASSESSMENT' and 'SPECIFIC DETAILS'. Under 'SPECIFIC DETAILS', there's a 'Dialysis History' section with a 'Date of Initiation' button (highlighted with a red circle 1) and a 'Type of Dialysis' dropdown (highlighted with a red circle 2). Below this is a 'Drug Knowledge Assessment' section with a 'Drug Knowledge Assessment Score' field and a 'Calculate Score' button (highlighted with a red circle 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

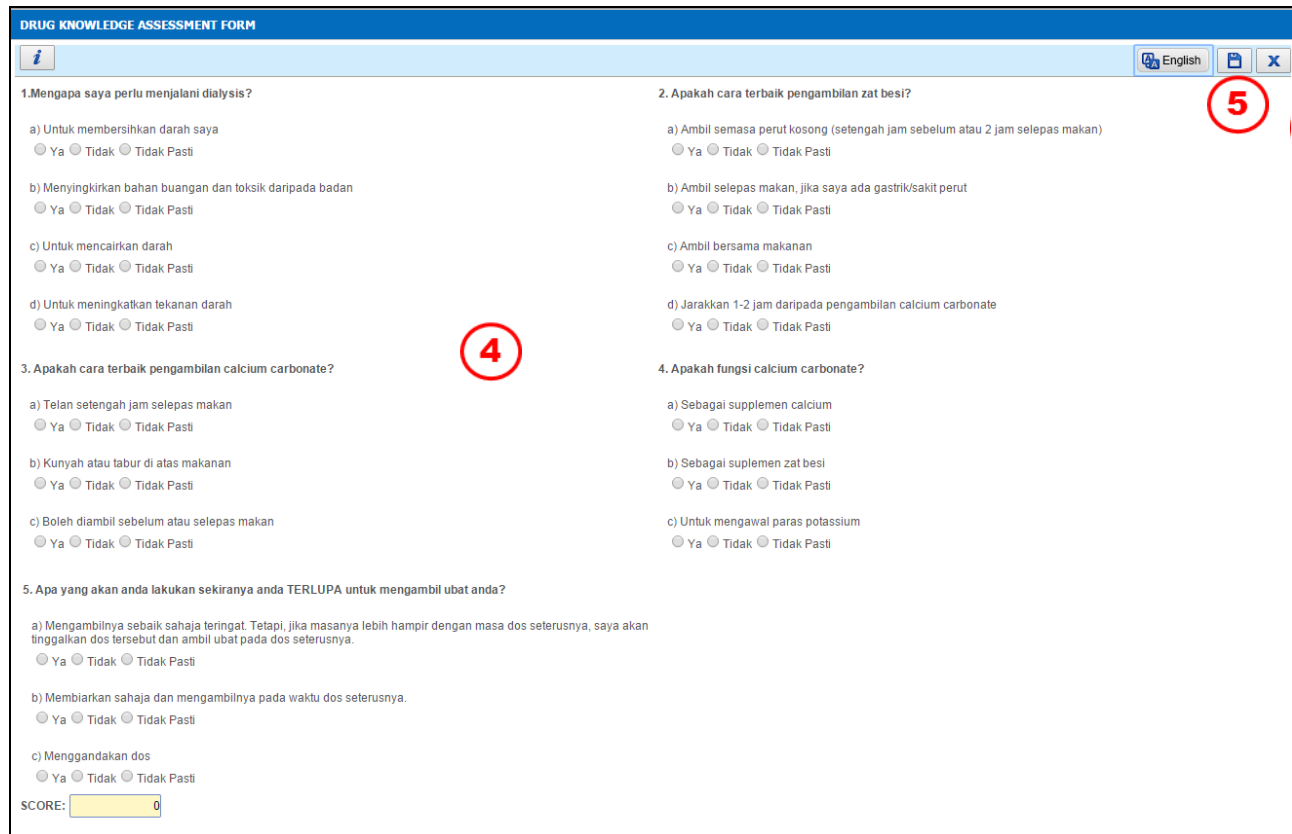
Select **Type of Dialysis** from the dropdown box

- 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

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)

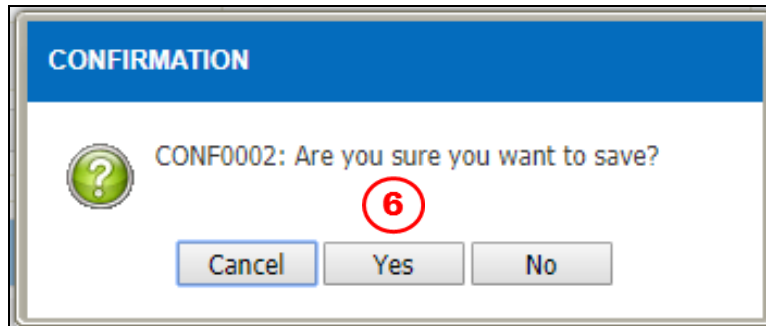



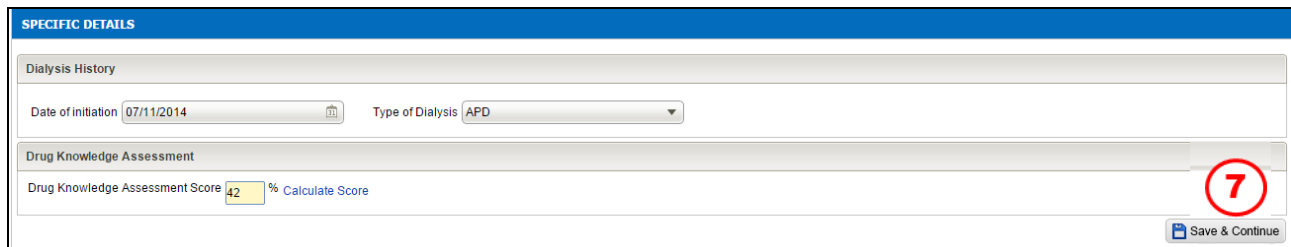
Figure 3.2.3.3-3 Confirmation Alert Message

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 the value "APD". The "Drug Knowledge Assessment" section has a "Drug Knowledge Assessment Score" field with the value "42" and a "Calculate Score" button. A red circle with the number "7" is positioned over the "Save & Continue" button at the bottom right of the form.

STEP 8

Click on the  button to confirm save record

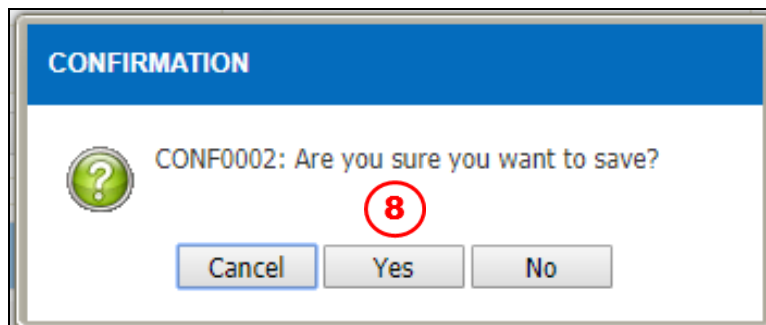



Figure 3.2.3.3-4 Confirmation Alert Message

STEP 9

Click on the  button to confirm record

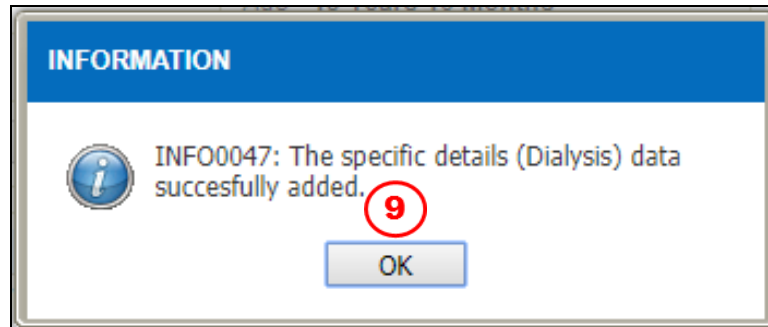


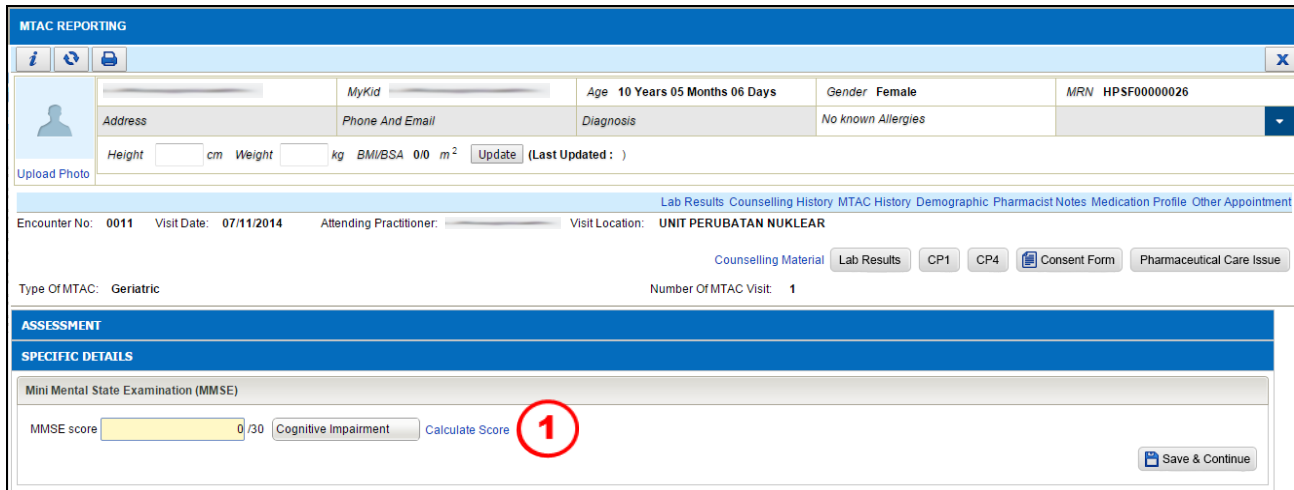
Figure 3.2.3.3-5 Information alert message

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 shows the 'MTAC REPORTING' interface. At the top, there's a header with 'MTAC REPORTING' and a close button. Below this is a patient information section with 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 fields for Height, Weight, BMI/BSA, and an 'Update' button. Below this is a section for 'Encounter No: 0011', 'Visit Date: 07/11/2014', 'Attending Practitioner', and 'Visit Location: UNIT PERUBATAN NUKLEAR'. 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 displayed. The 'ASSESSMENT' section is expanded, showing 'SPECIFIC DETAILS' for 'Mini Mental State Examination (MMSE)'. The 'MMSE score' is 0/30, and there is a 'Calculate Score' button circled with a red '1'. A 'Save & Continue' button is at the bottom right.

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

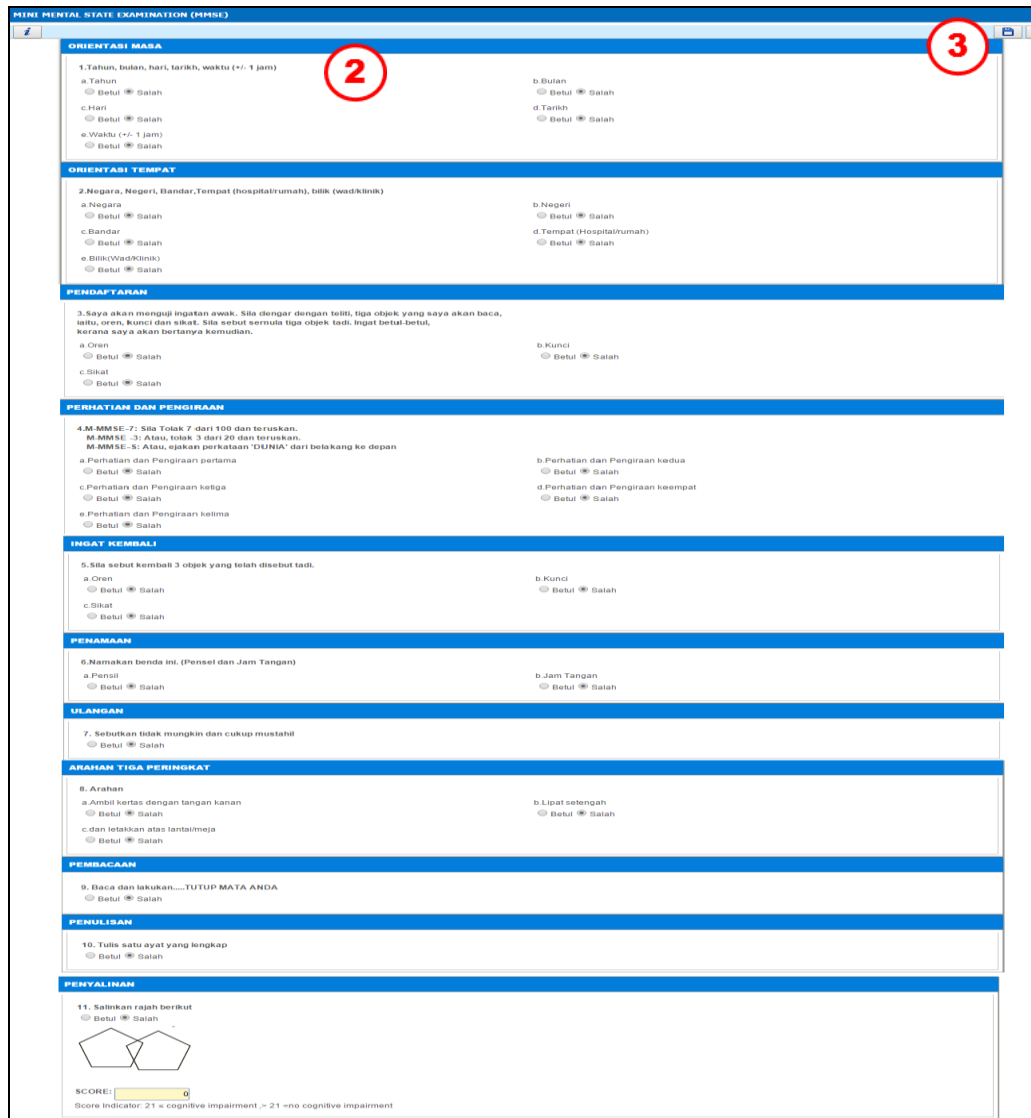
Click on the [Calculate Score](#) hyperlink for **MMSE Score** and 'Mini Mental State Examination (MMSE) – Orientasi Masa' window will be displayed as shown in Figure 3.2.3.4-2

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.



MINI MENTAL STATE EXAMINATION (MMSE)

ORIENTASI MASA

1. Tahun, bulan, hari, tarikh, waktu (+/- 1 jam)

a. Tahun ☐ Betul ☒ Salah

b. Bulan ☐ Betul ☒ Salah

c. Hari ☐ Betul ☒ Salah

d. Tarikh ☐ Betul ☒ Salah

e. Waktu (+/- 1 jam) ☐ Betul ☒ Salah

ORIENTASI TEMPAT

2. Negara, Negeri, Bandar, Tempat (hospital/umah), bilik (ward/klinc)

a. Negara ☐ Betul ☒ Salah

b. Negeri ☐ Betul ☒ Salah

c. Bandar ☐ Betul ☒ Salah

d. Tempat (Hospital/umah) ☐ Betul ☒ Salah

e. Bilik (Vad/Klinc) ☐ Betul ☒ Salah

PENDAFTARAN

3. Saya akan menguji ingatan awak. Sila dengar dengan teliti, tiga objek yang saya akan baca, tulis, oron, kunci dan sikat. Sila sebut semula tiga objek tadi. Ingat betul betul kerana saya akan bertanya kemudian.

a. Oren ☐ Betul ☒ Salah

b. Kunci ☐ Betul ☒ Salah

c. Sikat ☐ Betul ☒ Salah

PERHATIAN DAN PENGIRAAN

4. M MMSE-7: Sila Tolak 7 dari 100 dan teruskan.
M MMSE-3: Atau, tolak 3 dari 20 dan teruskan.
M MMSE-5: Atau, ejakan perkataan "DUNIA" dari belakang ke depan

a. Perhatian dan Pengiraan pertama ☐ Betul ☒ Salah

b. Perhatian dan Pengiraan kedua ☐ Betul ☒ Salah

c. Perhatian dan Pengiraan ketiga ☐ Betul ☒ Salah

d. Perhatian dan Pengiraan keempat ☐ Betul ☒ Salah

e. Perhatian dan Pengiraan kelima ☐ Betul ☒ Salah

INGAT KEMBALI

5. Sila sebut kembali 3 objek yang telah disebut tadi.

a. Oren ☐ Betul ☒ Salah

b. Kunci ☐ Betul ☒ Salah

c. Sikat ☐ Betul ☒ Salah

PENAMAAN

6. Namakan benda ini. (Pensel dan Jam Tangan)

a. Pensel ☐ Betul ☒ Salah

b. Jam Tangan ☐ Betul ☒ Salah

ULANGAN

7. Sebutkan tidak mungkin dan cukup mustahil

☐ Betul ☒ Salah

ARAHAN TIGA PERINGKAT

8. Arahan

a. Ambil kertas dengan tangan kanan ☐ Betul ☒ Salah

b. Lipat setengah ☐ Betul ☒ Salah

c. dan letakkan atas lantaimoja ☐ Betul ☒ Salah

PEMBACAAN

9. Baca dan lakukan.....TUTUP MATA ANDA

☐ Betul ☒ Salah

PENULISAN

10. Tulis satu ayat yang lengkap

☐ Betul ☒ Salah

PENYALINAN

11. Salinkan rajah berikut


☐ Betul ☒ Salah

SCORE:

Score Indicator: 21 = cognitive impairment > 21 = no cognitive impairment

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

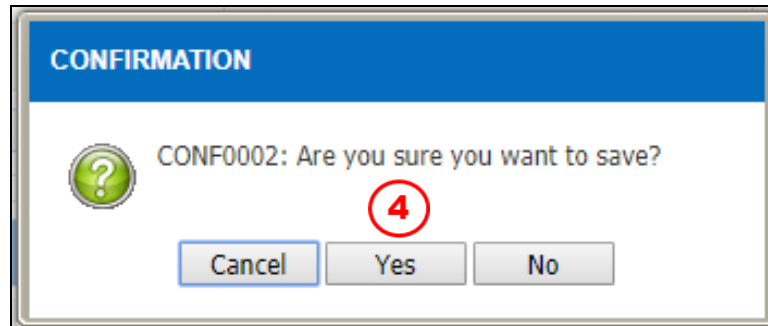
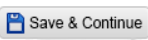
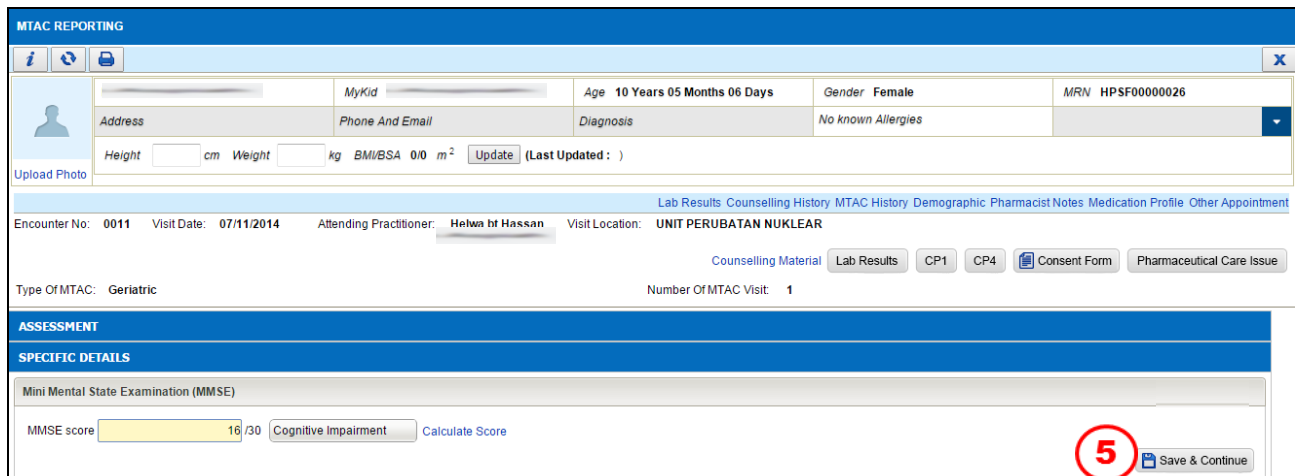


Figure 3.2.3.4-3 Confirmation Alert Message

STEP 5

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



MTAC REPORTING

MyKid: [Name] Age: 10 Years 05 Months 06 Days Gender: Female MRN: HPSF00000026

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

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

Upload Photo

Lab Results Counselling History MTAC History Demographic Pharmacist Notes Medication Profile Other Appointment

Encounter No: 0011 Visit Date: 07/11/2014 Attending Practitioner: Helwa bt Hassan Visit Location: UNIT PERUBATAN NUKLEAR

Counselling Material Lab Results CP1 CP4 Consent Form Pharmaceutical Care Issue

Type Of MTAC: Geriatric Number Of MTAC Visit: 1

ASSESSMENT

SPECIFIC DETAILS

Mini Mental State Examination (MMSE)

MMSE score: 16/30 Cognitive Impairment Calculate Score


5 

Figure 3.2.3.4-4 Specific Details - Geriatric

STEP 6

Click on the  button to confirm save record

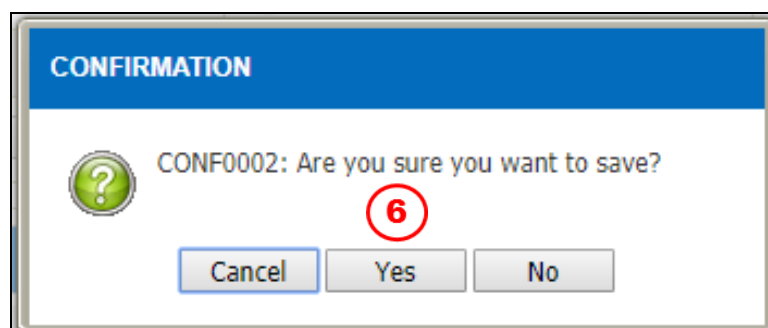


Figure 3.2.3.4-5 Confirmation Alert Message

STEP 7

Click on the  button to confirm record

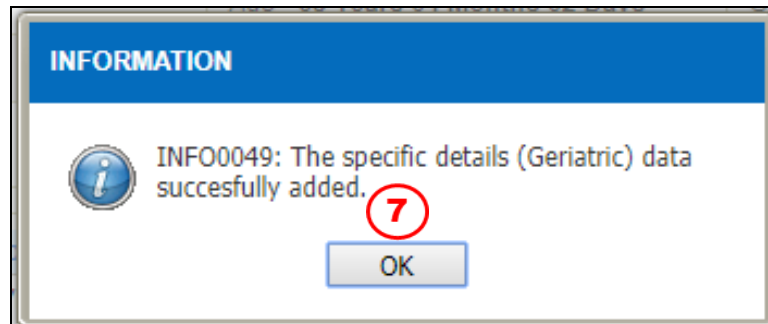


Figure 3.2.3.4-6 Information alert message

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.

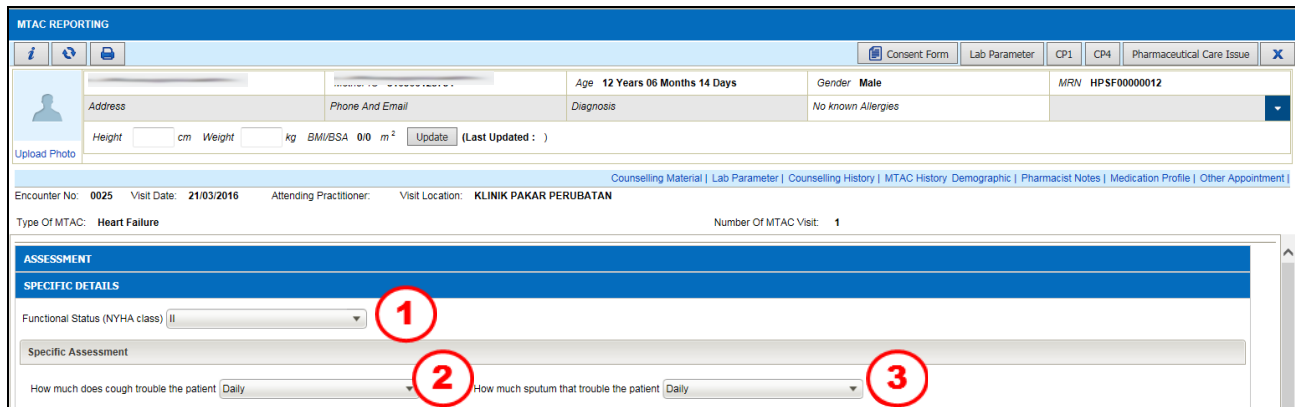


Figure 3.2.3.5 Specific Details - Heart Failure

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

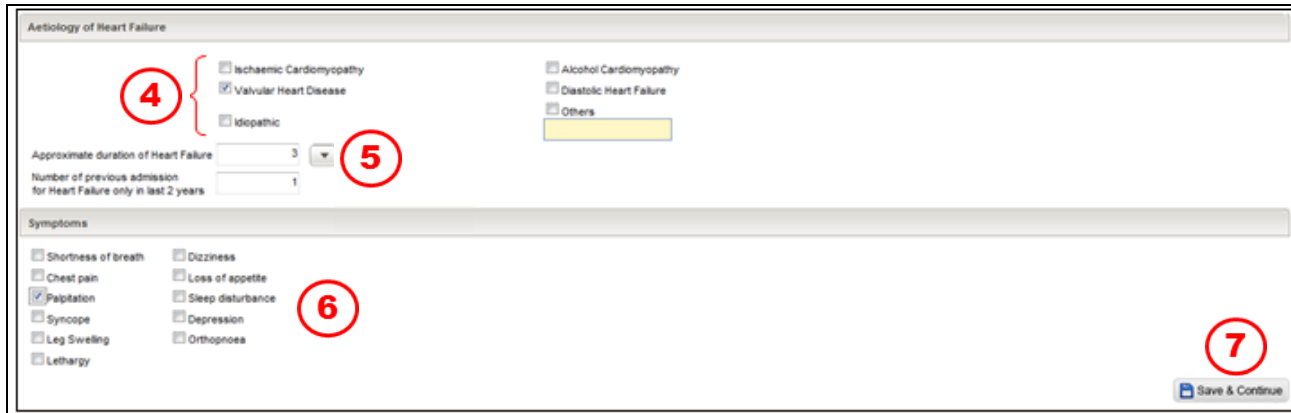
Select **How much does cough trouble the patient** from the drop down box

- 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 first three checkboxes.
- Approximate duration of Heart Failure:** A text input field followed by a dropdown menu. A red circle with the number 5 is placed over the dropdown menu.
- Number of previous admission for Heart Failure only in last 2 years:** A text input field.
- 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 at the bottom right. A red circle with the number 7 is placed over this button.

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

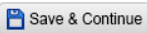
STEP 6

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

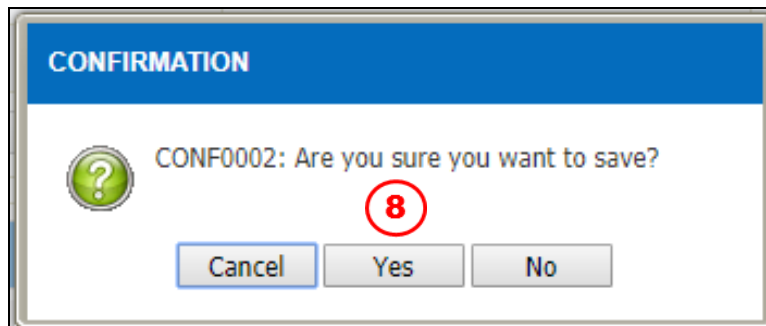



Figure 3.2.3.5-3 Confirmation Alert Message

STEP 9

Click on the  button to confirm record

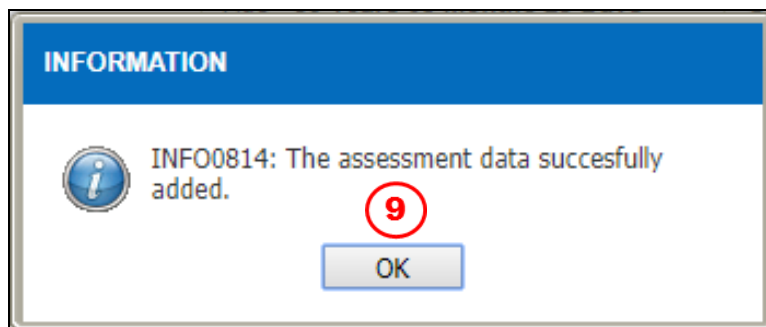


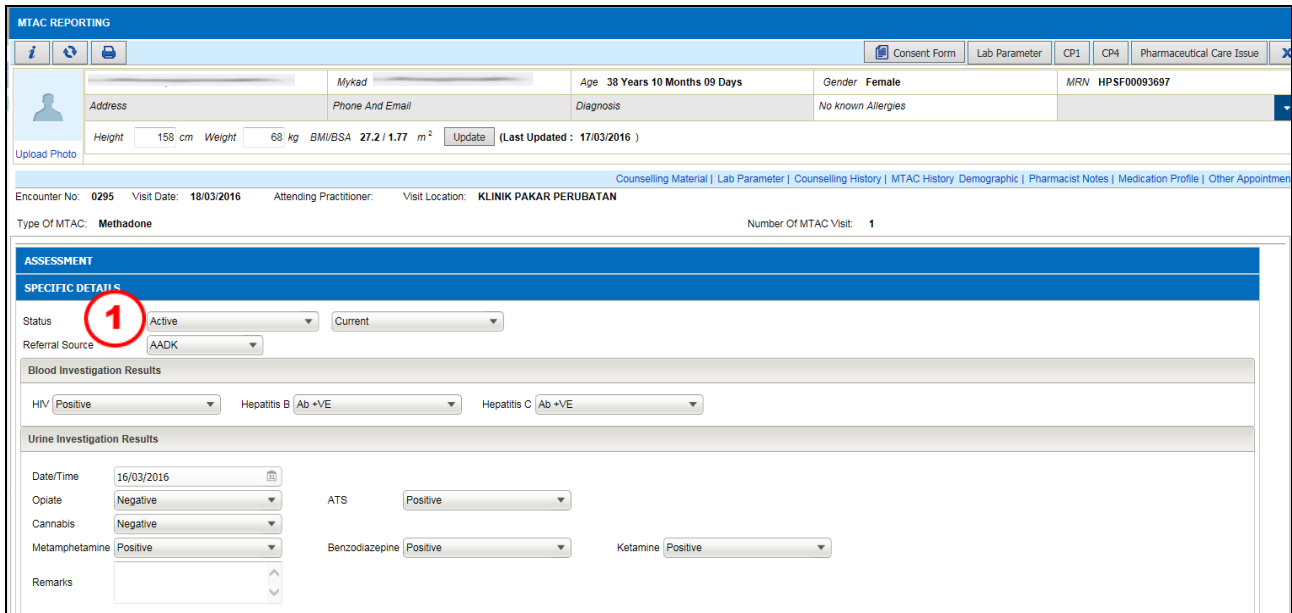
Figure 3.2.3.5-4 Information Alert Message

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 tabs for 'Consent Form', 'Lab Parameter', 'CP1', 'CP4', and 'Pharmaceutical Care Issue'. Below these, patient information is shown: Mykad, Age (38 Years 10 Months 09 Days), Gender (Female), MRN (HPSF00093697), Address, Phone And Email, Diagnosis, and No known Allergies. Physical attributes include Height (158 cm), Weight (68 kg), BMI/BSA (27.2 / 1.77 m²), and an 'Update' button. The 'Type Of MTAC' is set to 'Methadone' and the 'Number Of MTAC Visit' is '1'. The 'ASSESSMENT' section is expanded, showing 'SPECIFIC DETAILS'. A red circle with the number '1' highlights the 'Status' dropdown menu, which is currently set to 'Active'. Other dropdowns include 'Referral Source' (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 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

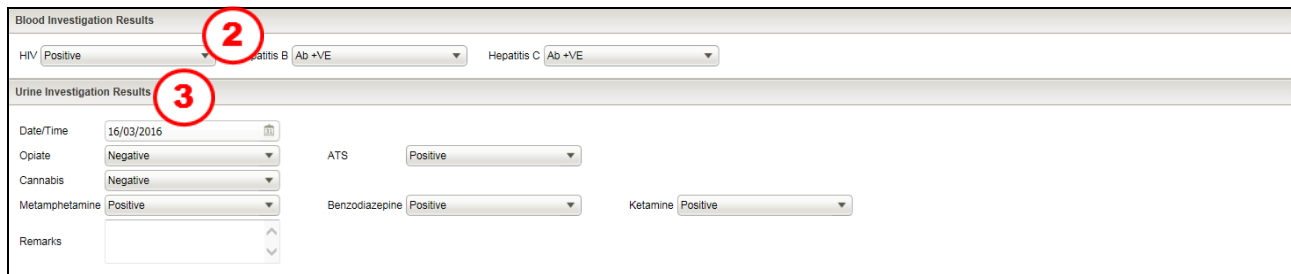


Figure 3.2.3.6-2 Specific Details – Methadone

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*.

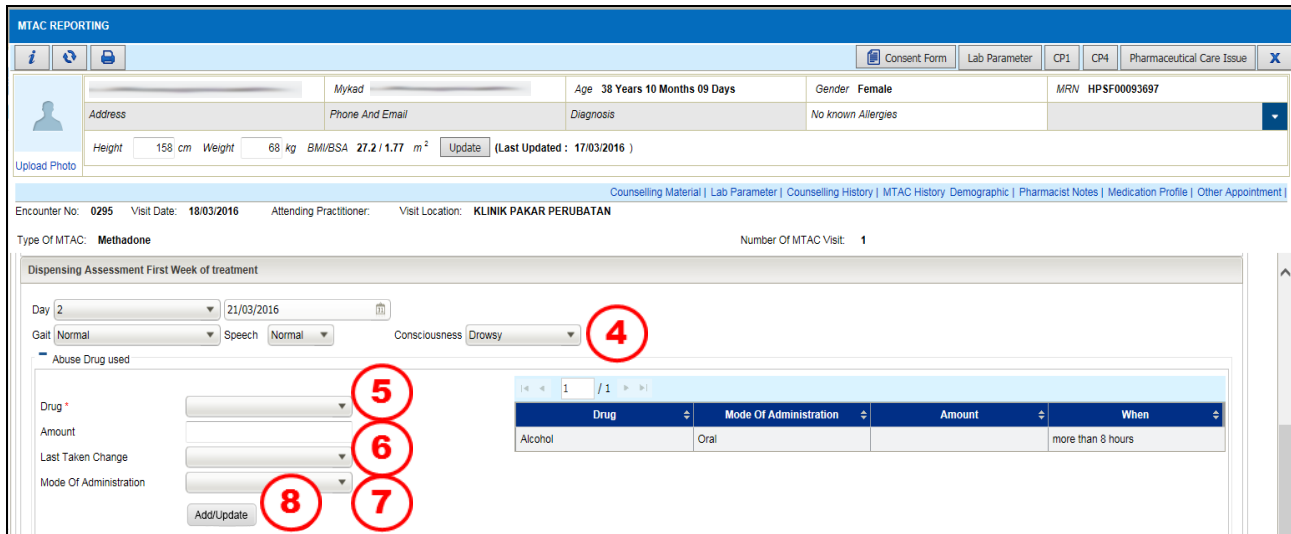
Select **Opiate**, **ATS**, **Cannabis**, **Methamphetamine**, **Benzodiazepine**, and **Ketamine** from the drop down box

- 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: [Field] Age: 38 Years 10 Months 09 Days Gender: Female MRN: HPSF00093697

Address: [Field] Phone And Email: [Field] Diagnosis: [Field] 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: [Field] 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

Abuse Drug used


Drug: [Field] Amount: [Field] Last Taken Change: [Field] Mode Of Administration: [Field]

Add/Update

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 
--	--	---

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

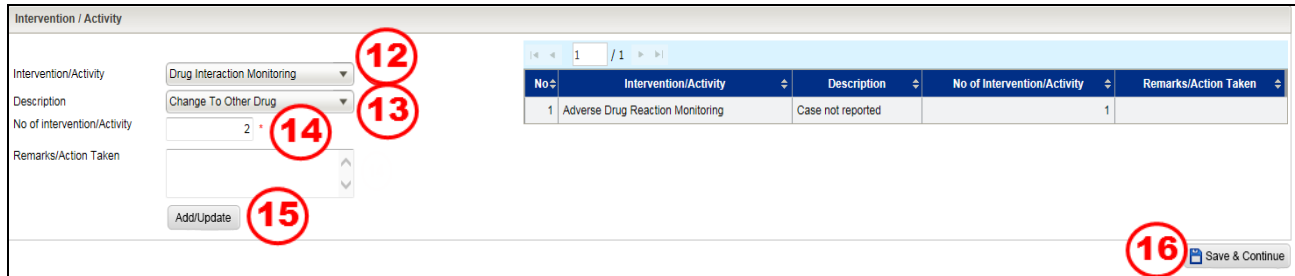
Blank fields will be enabled if user selects 'Other' from the drop down box of Evidence of withdrawal and Evidence of intoxication.

STEP 11

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

- Sufficient
- Too High
- Too Low

Intervention / Activity



The screenshot shows the 'Intervention / Activity' form. It includes a form on the left with fields for 'Intervention/Activity', 'Description', 'No of Intervention/Activity', and 'Remarks/Action Taken'. There are two dropdown menus: 'Drug Interaction Monitoring' (labeled 12) and 'Change To Other Drug' (labeled 13). The 'No of Intervention/Activity' field contains the number '2' (labeled 14). Below the form is an 'Add/Update' button (labeled 15). On the right, there is a table with the following data:

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

At the bottom right of the form is a 'Save & Continue' button (labeled 16).

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

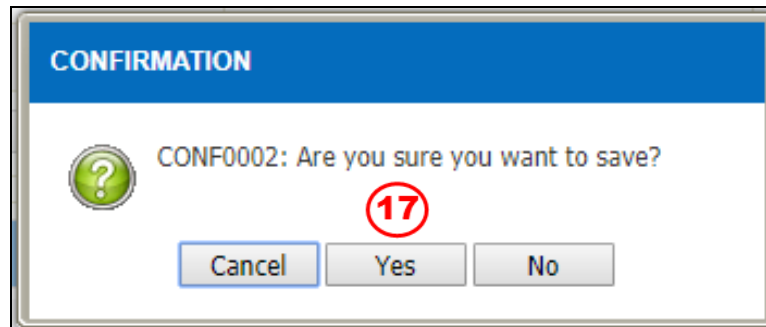


Figure 3.2.3.6-6 Confirmation Alert Message

STEP 18

Click on the  button to add record

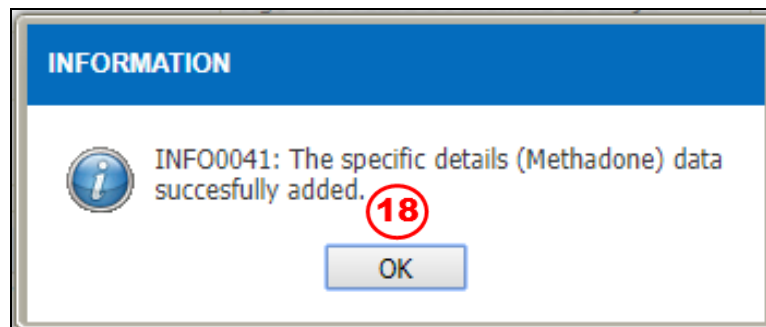


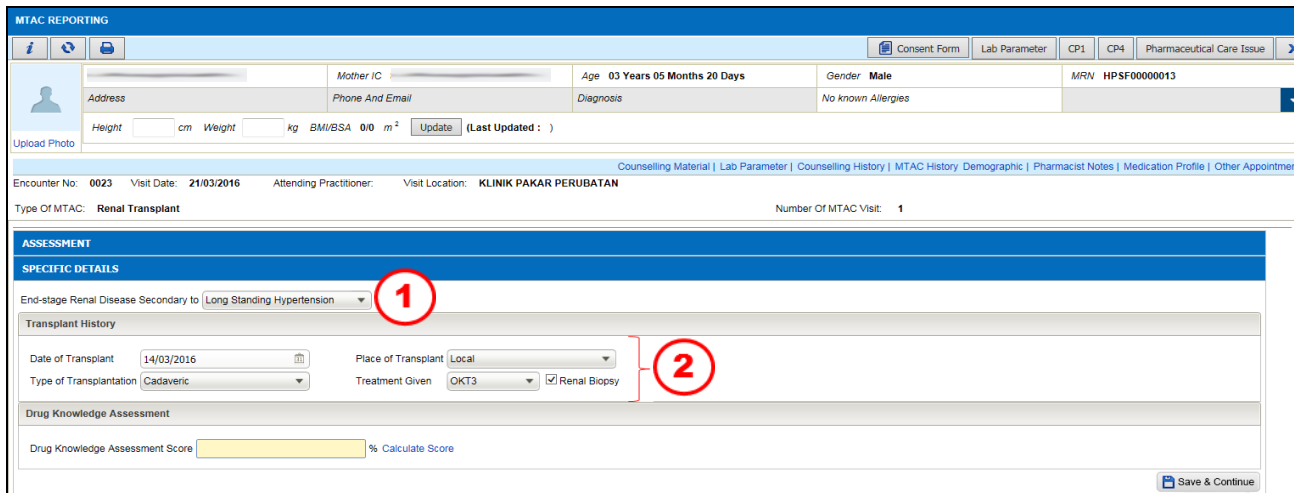
Figure 3.2.3.6-7 Information Alert Message

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.



MTAC REPORTING

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

Address: _____ Mother IC: _____ Age: 03 Years 05 Months 20 Days Gender: Male MRN: HPSF00000013

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 (1)

Transplant History

Date of Transplant: 14/03/2016 (2) Place of Transplant: Local (2)

Type of Transplantation: Cadaveric (2) Treatment Given: OKT3 (2) ☒ Renal Biopsy (2)

Drug Knowledge Assessment

Drug Knowledge Assessment Score: _____ % Calculate Score

Save & Continue

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

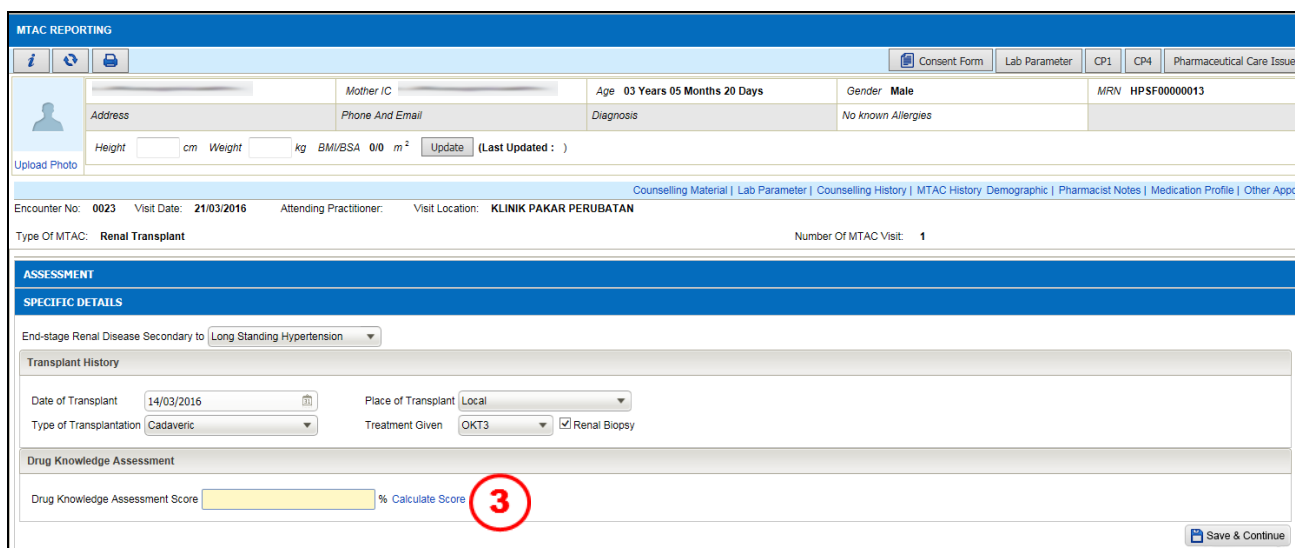
Note

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 displays the MTAC Reporting interface. The top navigation bar includes links for Consent Form, Lab Parameter, CP1, CP4, and Pharmaceutical Care Issue. The patient information section shows details for a 03 Years 05 Months 20 Days old male patient with MRN HPSF00000013. The 'ASSESSMENT' section is active, showing 'Specific Details' for a Renal Transplant. The 'Transplant History' section includes fields for Date of Transplant (14/03/2016), Place of Transplant (Local), Type of Transplantation (Cadaveric), Treatment Given (OKT3), and a checked box for Renal Biopsy. The 'Drug Knowledge Assessment' section shows a 'Calculate Score' button circled in red with the number 3, indicating the next step in the process.

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

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

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

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

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

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

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

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

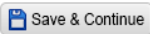
b) Take it together with immunosuppressant without notify doctor /pharmacist
☐ Yes ☐ No ☐ Not Sure

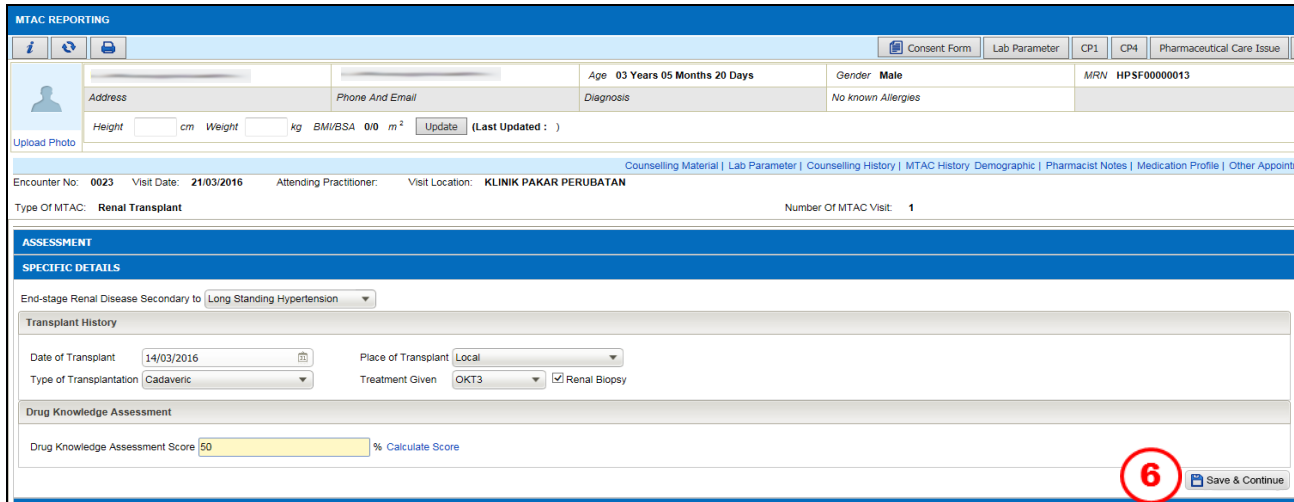
c) Take supplement and stop immunosuppressant
☐ Yes ☐ No ☐ Not Sure

SCORE: 0

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

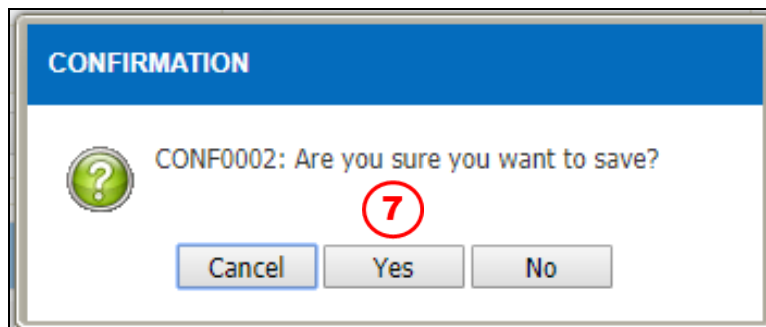
Drug Knowledge Assessment Score: 50 % Calculate Score

6 Save & Continue

Figure 3.2.3.7-4 Specific Details - Renal Transplant

STEP 7

Click on the **Yes** button to confirm save record



CONFIRMATION

CONF0002: Are you sure you want to save?

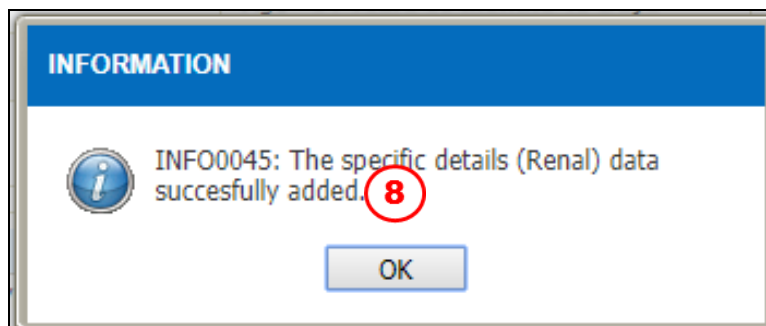
7

Cancel Yes No

Figure 3.2.3.7-5 Confirmation Alert Message

STEP 8

Click on the **OK** button to confirm record



INFORMATION

INFO0045: The specific details (Renal) data successfully added.

8

OK

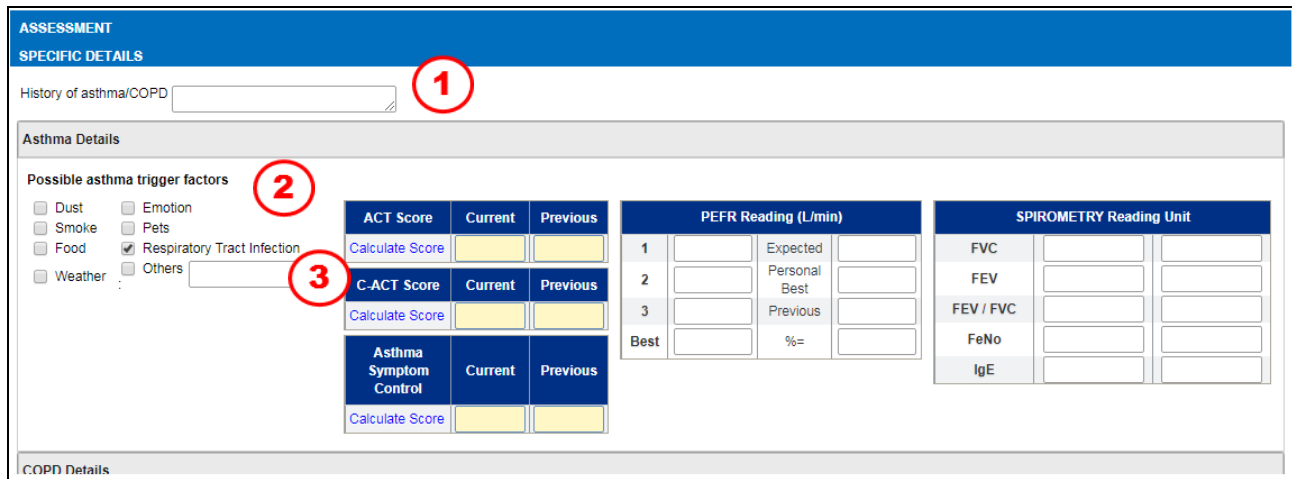
Figure 3.2.3.7-6 Information Alert Message

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



ASSESSMENT
SPECIFIC DETAILS

History of asthma/COPD

Asthma Details

Possible asthma trigger factors

☐ Dust ☐ Emotion
☐ Smoke ☐ Pets
☐ Food ☒ Respiratory Tract Infection
☐ Weather ☐ Others

ACT Score	Current	Previous
Calculate Score	<input type="text"/>	<input type="text"/>

C-ACT Score	Current	Previous
Calculate Score	<input type="text"/>	<input type="text"/>

Asthma Symptom Control	Current	Previous
Calculate Score	<input type="text"/>	<input type="text"/>

PEFR Reading (L/min)			
1	<input type="text"/>	Expected	<input type="text"/>
2	<input type="text"/>	Personal Best	<input type="text"/>
3	<input type="text"/>	Previous	<input type="text"/>
Best	<input type="text"/>	%=	<input type="text"/>

SPIROMETRY Reading Unit		
FVC	<input type="text"/>	<input type="text"/>
FEV	<input type="text"/>	<input type="text"/>
FEV / FVC	<input type="text"/>	<input type="text"/>
FeNo	<input type="text"/>	<input type="text"/>
IgE	<input type="text"/>	<input type="text"/>

COPD Details

Figure 3.2.3.8-1 Specific Details – Respiratory 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
- Respiratory Tract Infection
- 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**, **C-ACT Score** and the '**Asthma Symptom Control**', window will be displayed as shown in Figure 3.2.3.8-2 (a), Figure 3.2.3.8-2 (b), Figure 3.2.3.8-2 (c)

STEP 4

Select the drop down box to answer the questionnaire

ASTHMA CONTROL TEST

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?

All Of The Time
▼

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

1 To 2 Times A Day
▼

2. During the past 4 weeks, how often have you had shortness of breath?

More Than Once A Day
▼

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

Somewhat Controlled
▼

3. During the past 4 weeks, how often did your asthma symptoms (wheezing, coughing, shortness of breath, chest tightness or pain) wake you up at night or earlier than usual in the morning?




Once A Week
▼

SCALE: 10

ACT Score Indicator: (25) Congratulations!; (20 - 24) On Target; (< 19) Off Target

Figure 3.2.3.8-2 (a) Asthma Control Test – Questionnaire

CHILDHOOD ASTHMA CONTROL TEST (C-ACT)

Have your child complete these questions(1-4)

1. How is your Asthma today?

▼

2. How much of a problem is your Asthma when you run, exercise or play sports?

▼

3. Do you cough because of your Asthma?

▼

4. Do you wake up during the night because of your Asthma?

▼

Please complete the following questions (5-7) on your own

5. During the last 4 weeks, on average, how many days per month did your child have any daytime Asthma symptoms?

▼

6. During the last 4 weeks, on average, how many days per month did your child wheeze during the day because of Asthma?

▼

7. During the last 4 weeks, on average, how many days per month did your child wake up during the night because of Asthma?

▼



***C-ACT score indicator: (20 – 27) May be under control; (19 or less) May not be controlled**

SCORE: 0

Figure 3.2.3.8-2 (b) Childhood Asthma Control Test – Questionnaire

ASTHMA SYMPTOM CONTROL

i

[Record the Level of Asthma Symptom Control Scale at each visit. In the past 4 weeks, has the patient had (please (✓) for Yes ; (X) for No)]

1. Daytime symptoms more than twice/week?

Yes

2. Any night waking due to Asthma?

No

3. Reliever needed* more than twice/week

Yes

4. Any activity limitation due to Asthma?

Yes

SCALE:

3

#Level of Asthma Symptom Control scale indicator:

(1) Controlled: None of these items;

(2) Partly Controlled: 1-2 of these items;

(3) Uncontrolled: 3-4 of these items

Figure 3.2.3.8-2 (c) Asthma Symptom Control – 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

CAT Score

Current

Previous

Calculate Score

5

Inhaler Technique Checklist

+ Add

Inhaler Technique	Before Counselling	After Counselling	
Accuhaler Score			
Accuhaler Score			
Breezhaler Score			
Easyhealer Score			
Ellipta Score			
Handihaler Score			
MDI Score			
MDI and Aerochamber Score			
MDI and Optichamber Score			
MDI and Tube Score			
RespiMAT Score			
Turbuhaler Score			

7

Save & Continue

Figure 3.2.3.8-3 Specific Details – COPD Details

STEP 6

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

CAT SCORE - QUESTIONNAIRE

i

6

Save

X

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 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 because of 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

SCALE: 23

CAT Score Indicator: (<10) = Low Impact; (10-20) = Medium Impact; (> 20) = High Impact; (>30) = Very High Impact

Figure 3.2.3.8-4 CAT Score – Questionnaire

STEP 7

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

- a) MDI Score
- b) Easyhaler Score
- c) MDI and Aerochamber Score
- d) MDI and TUBE Score
- e) MDI and Optichamber Score
- f) Turbuhaler Score
- g) Accuhaler Score
- h) Handihaler Score
- i) Breezhaler Score
- j) Respimat Score
- k) Ellipta Score

EASYHALER - EVALUATION

i

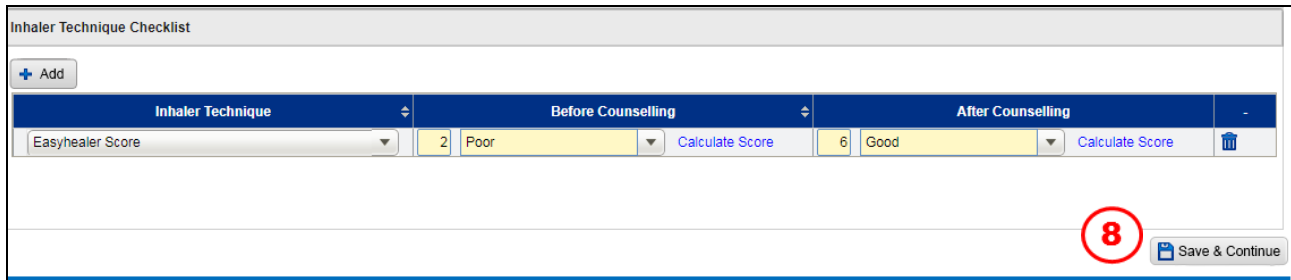
Save

X

Indicate YES (1) or NO (0) if step was performed in proper sequences;
if critical step (**) falls under NO (0), overall technique is poor.

No	Question	Answer
1.	Remove the dust cap and shake easyhaler in an up-down motion 3-5 times.	<input type="radio"/> Yes <input checked="" type="radio"/> No
2.	Hold the device in upright position. Press easyhaler ONCE until a 'CLICK' sound is heard	<input type="radio"/> Yes <input checked="" type="radio"/> No
3.	Breath out completely, away from the mouthpiece.	<input checked="" type="radio"/> Yes <input type="radio"/> No
4.	Place mouthpiece between lips. Make sure lips cover the mouthpiece tightly.	<input checked="" type="radio"/> Yes <input type="radio"/> No
5.	Inhale forcefully and deeply through the mouth **.	<input type="radio"/> Yes <input checked="" type="radio"/> No
6.	Remove the inhaler from the mouth and hold breath for 5-10 seconds, and then breath out slowly.	<input type="radio"/> Yes <input checked="" type="radio"/> No
6.	Repeat step 1-5 if more than one dose is required.	<input type="radio"/> Yes <input checked="" type="radio"/> No
Score Rating: (6) Good, (4 - 5) Satisfactory, (0 - 3) Poor		SCALE: 2

Figure 3.2.3.8-5(a) Inhaler Technique Understanding-Before




Inhaler Technique	Before Counselling	After Counselling
Easyhealer Score	2 Poor	6 Good

Save & Continue

Figure 3.2.3.8-5(b) Inhaler Technique Understanding-After

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

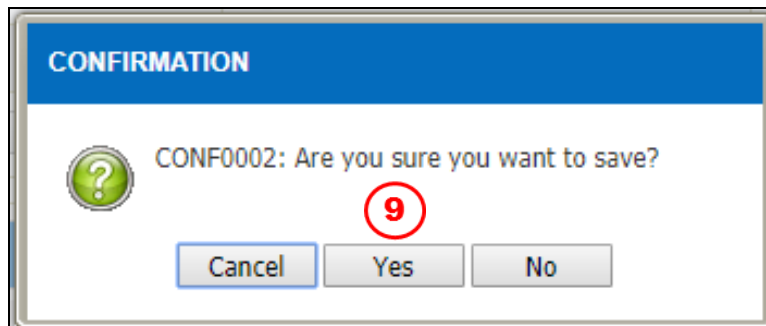



Figure 3.2.3.8-6 Confirmation Alert Message

STEP 10

Click on the  button to confirm record

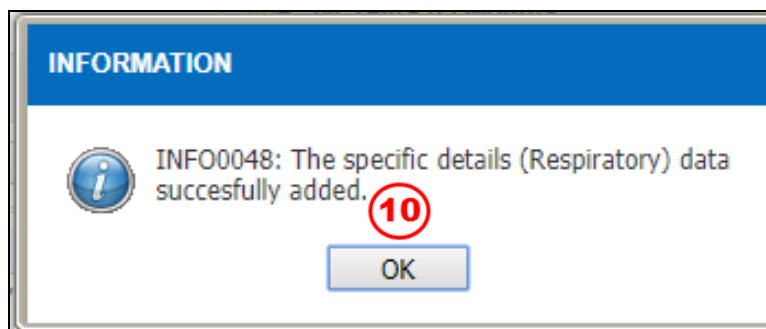


Figure 3.2.3.8-7 Information Alert Message

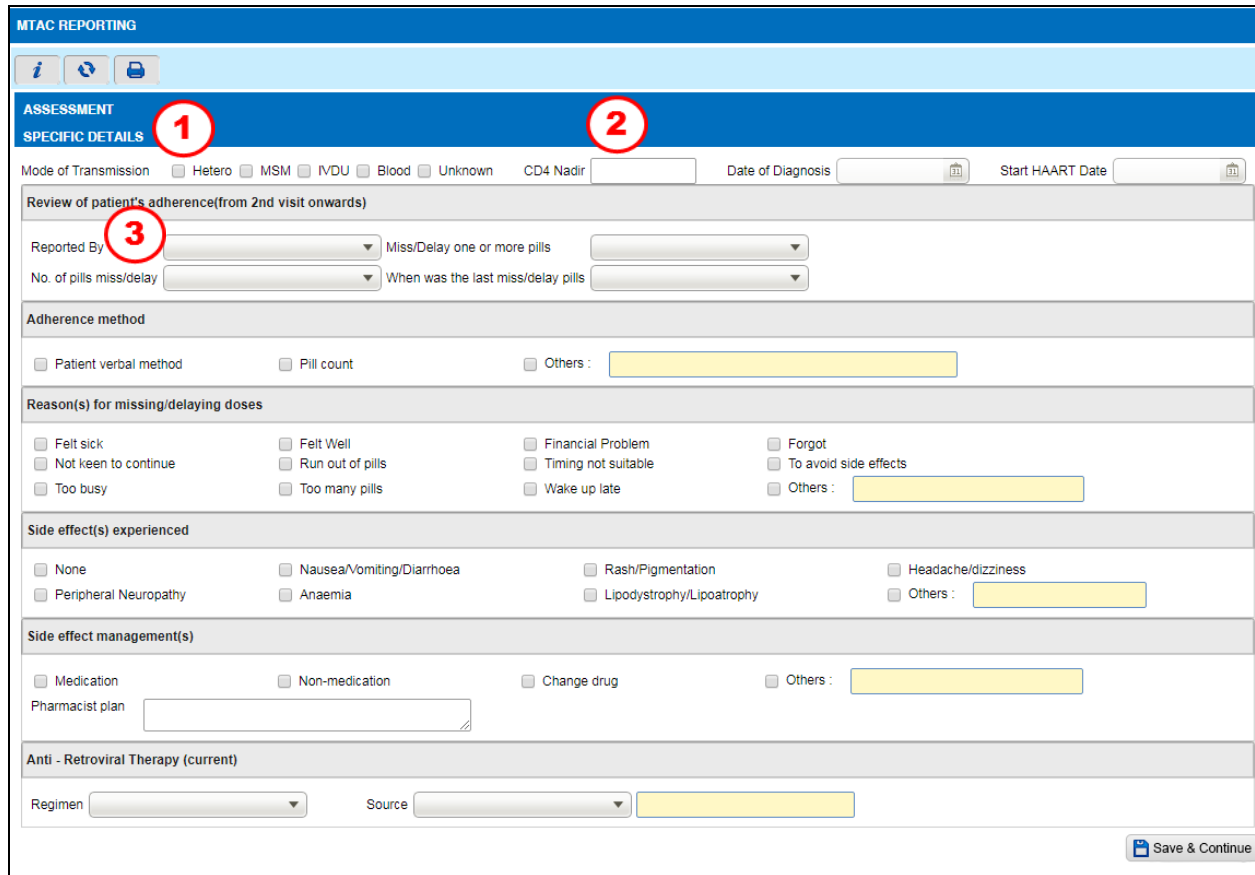
Note

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.



MTAC REPORTING

ASSESSMENT SPECIFIC DETAILS

Mode of Transmission ☐ Hetero ☐ MSM ☐ IVDU ☐ Blood ☐ Unknown ☐ CD4 Nadir Date of Diagnosis Start HAART Date

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

Reported By Miss/Delay one or more pills

No. of pills miss/delay When was the last miss/delay pills

Adherence method

☐ Patient verbal method ☐ Pill count ☐ Others :

Reason(s) for missing/delaying doses

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

Side effect(s) experienced

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

Side effect management(s)

☐ Medication ☐ Non-medication ☐ Change drug ☐ Others :

Pharmacist plan

Anti - Retroviral Therapy (current)

Regimen Source

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

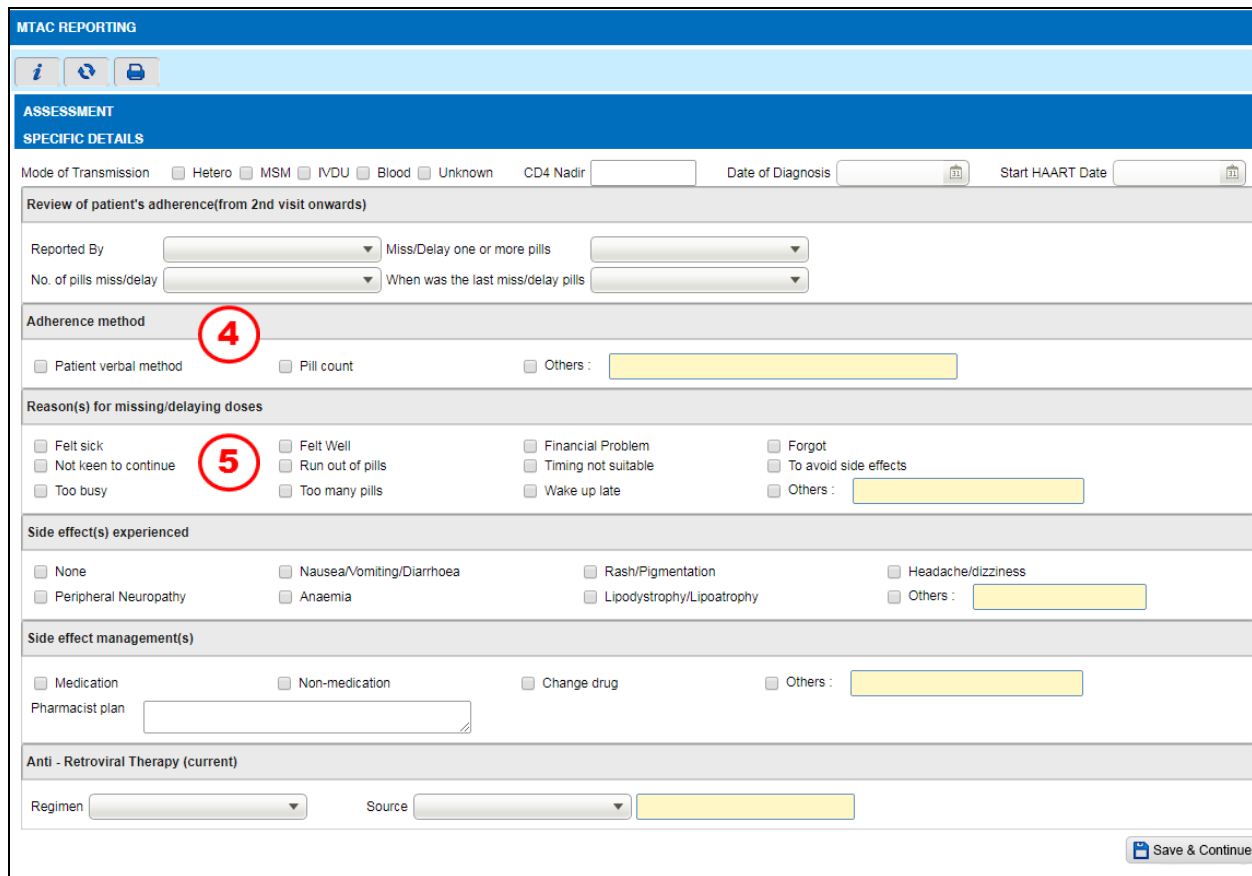
- Caregiver
- Patient

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



MTAC REPORTING

ASSESSMENT
SPECIFIC DETAILS

Mode of Transmission ☐ Hetero ☐ MSM ☐ IVDU ☐ Blood ☐ Unknown CD4 Nadir Date of Diagnosis Start HAART Date

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

Reported By Miss/Delay one or more pills

No. of pills miss/delay When was the last miss/delay pills

Adherence method 4

☐ Patient verbal method ☐ Pill count ☐ Others :

Reason(s) for missing/delaying doses

☐ Felt sick ☐ Felt Well ☐ Financial Problem ☐ Forgot 5
☐ Not keen to continue ☐ Run out of pills ☐ Timing not suitable ☐ To avoid side effects
☐ Too busy ☐ Too many pills ☐ Wake up late ☐ Others :

Side effect(s) experienced

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

Side effect management(s)

☐ Medication ☐ Non-medication ☐ Change drug ☐ Others :

Pharmacist plan

Anti - Retroviral Therapy (current)

Regimen Source

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.

SPECIFIC DETAILS			
Mode of Transmission	<input type="checkbox"/> Hetero <input type="checkbox"/> MSM <input type="checkbox"/> IVDU <input type="checkbox"/> Blood <input type="checkbox"/> Unknown	CD4 Nadir	<input type="text"/>
Date of Diagnosis	<input type="text"/>	Start HAART Date	<input type="text"/>
Review of patient's adherence(from 2nd visit onwards)			
Reported By	<input type="text"/>	Miss/Delay one or more pills	<input type="text"/>
No. of pills miss/delay	<input type="text"/>	When was the last miss/delay pills	<input type="text"/>
Adherence method			
<input type="checkbox"/> Patient verbal method	<input type="checkbox"/> Pill count	<input type="checkbox"/> Others :	<input type="text"/>
Reason(s) for missing/delaying doses			
<input type="checkbox"/> Felt sick	<input type="checkbox"/> Felt Well	<input type="checkbox"/> Financial Problem	<input type="checkbox"/> Forgot
<input type="checkbox"/> Not keen to continue	<input type="checkbox"/> Run out of pills	<input type="checkbox"/> Timing not suitable	<input type="checkbox"/> To avoid side effects
<input type="checkbox"/> Too busy	<input type="checkbox"/> Too many pills	<input type="checkbox"/> Wake up late	<input type="checkbox"/> Others : <input type="text"/>
Side effect(s) experienced			
<input type="checkbox"/> None	<input type="checkbox"/> Nausea/Vomiting/Diarrhoea	<input type="checkbox"/> Rash/Pigmentation	<input type="checkbox"/> Headache/dizziness
<input type="checkbox"/> Peripheral Neuropathy	<input type="checkbox"/> Anaemia	<input type="checkbox"/> Lipodystrophy/Lipoatrophy	<input type="checkbox"/> Others : <input type="text"/>
Side effect management(s)			
<input type="checkbox"/> Medication	<input type="checkbox"/> Non-medication	<input type="checkbox"/> Change drug	<input type="checkbox"/> Others : <input type="text"/>
Pharmacist plan	<input type="text"/>		
Anti - Retroviral Therapy (current)			
Regimen	<input type="text"/>	Source	<input type="text"/>
<input type="button" value="Save & Continue"/>			

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

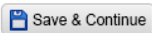
Select **Source** from the drop down box

- 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

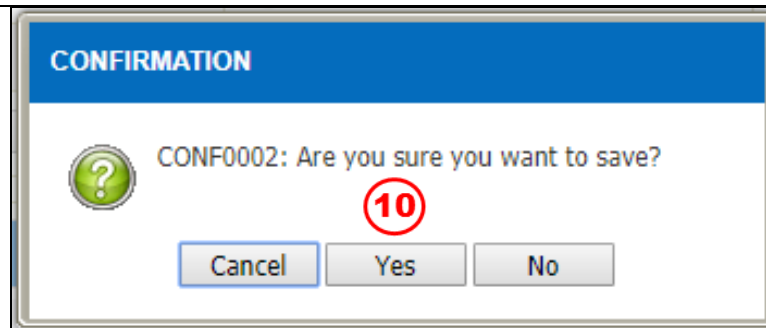



Figure 3.2.3.9-4 Confirmation Alert Message

STEP 11

Click on the  button to confirm record

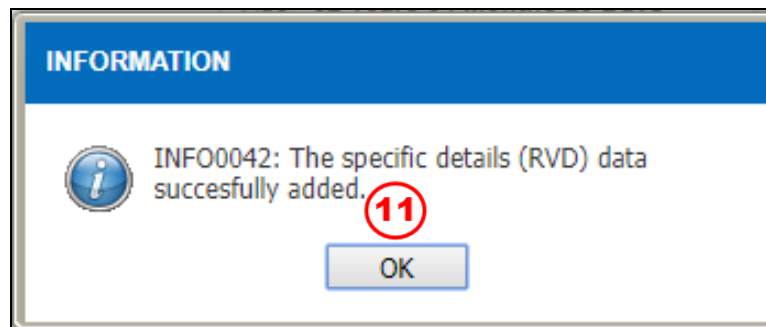


Figure 3.2.3.9-5 Information Alert Message

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.

Medication Profile | Counseling History | Pharmacist Notes | Demographic | Monitoring Parameter | Other Appointment | Drug Database |

Encounter No: 0001 Actual Visit Date: 07/10/2019 Attending Practitioner: Visit Location: KLINIK PAKAR PERUBATAN

MTAC Order No: MTA190004162

Type Of MTAC: Warfarin Search History * Appointment Date: 07/10/2019 Audit Trail

Priority: Routine Appointment Type: New

To Be Counseled By: Remarks:

Ordered By: Status: Scheduled Ordered Date/Time: 07/10/2019 11:55

Target INR Range: Date Warfarin Started: 01/10/2019

Warfarin Indication: Arterial Embolism Anticipated Duration:

Bleeding Risk Factor: Low Risk 0 Calculate Score Time in Therapeutic Range (TTR): test for new enhancement v2.2

Figure 3.2.3.10-1- MTAC Order-Warfarin

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

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/Supplement Change Yes No

Target INR Range:

Warfarin Indication: Arterial Embolism

Bleeding Risk Factor: Low Risk

Date Warfarin Started: 2019-10-01

Warfarin Dose Recommended

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<input type="text"/> mg	<input type="text"/> mg	<input type="text"/> mg	<input type="text"/> mg	<input type="text"/> mg	<input type="text"/> mg	<input type="text"/> mg

Save & Continue

Figure 3.2.3.10-2 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.
- Additional **Time in Therapeutic Range(TTR)** function added as per Figure 3.2.3.10-1 and will display in specific details as per Figure 3.2.3.10-2

STEP 1

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

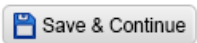
- Signs of bleeding**
- Correct Dose Taken**
- Signs of thrombosis**
- Missed doses in past 1 week**
- Medication changes**

- **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 3.2.3.10-2.
- User is allowed to fill in the recommended warfarin dose per day in the column below as shown in Figure 3.2.3.10-2.

STEP 2

Click on the  button to save and continue with reporting section

STEP 3

Click on the  button to confirm save record

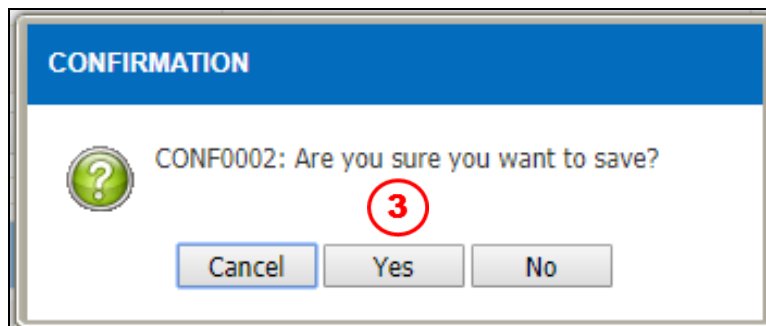


Figure 3.2.3.10-3 Confirmation Alert Message

STEP 4

Click on the  button to confirm record

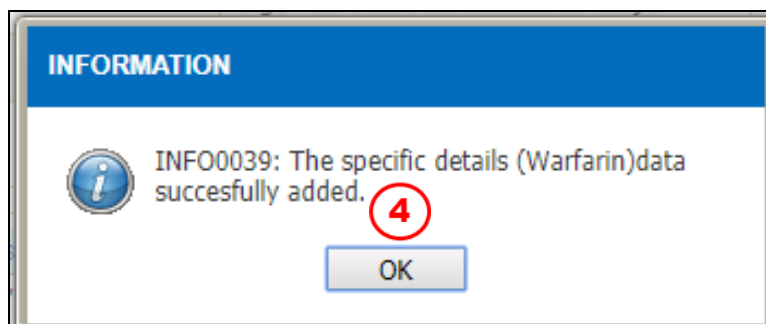


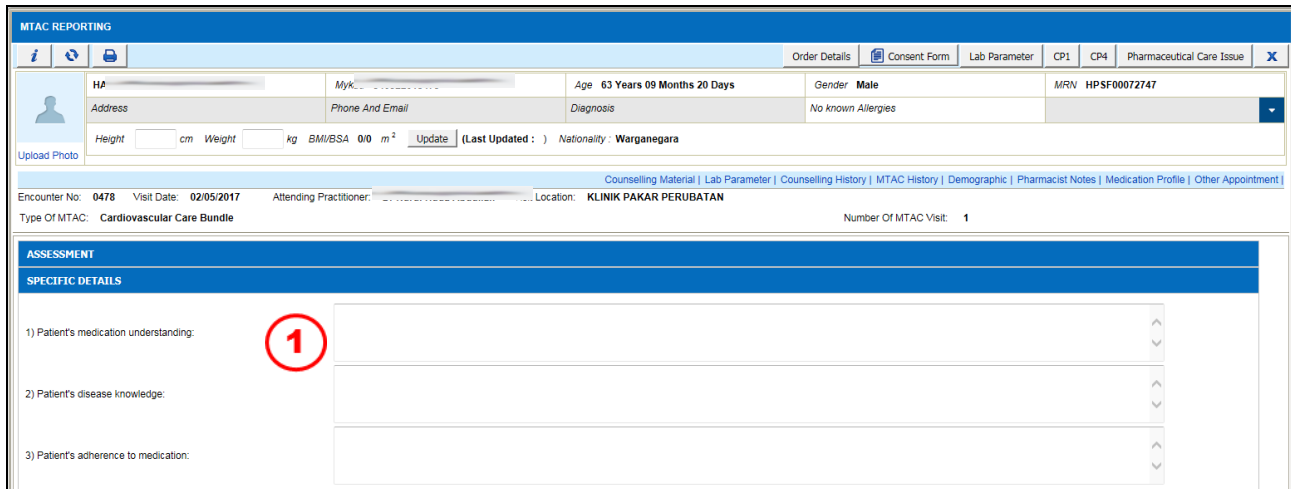
Figure 3.2.3.10-4 Information Alert Message

Note

- For 'Reporting' section, repeat **Note (Page 28) to Step 32** as in 3.2.1 Create New MTAC Reporting with No Specific Details.
- 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 shows the 'MTAC REPORTING' interface. At the top, there are tabs for 'Order Details', 'Consent Form', 'Lab Parameter', 'CP1', 'CP4', and 'Pharmaceutical Care Issue'. Below these are fields for patient information: 'Myk...', 'Age 63 Years 09 Months 20 Days', 'Gender Male', 'MRN HPSF00072747', 'Address', 'Phone And Email', 'Diagnosis', 'No known Allergies', 'Height', 'Weight', 'BMI/BSA 0/0 m²', and 'Nationality Warganegara'. The 'Type Of MTAC' is set to 'Cardiovascular Care Bundle'. The 'ASSESSMENT' section is expanded, showing 'SPECIFIC DETAILS' with three text 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 text area.

Figure 3.2.3.11-1 Specific Details – Cardiovascular Care Bundle

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.

3.2.3.11 Haemophilia

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

Type Of MTAC: **Haemophilia**
Number Of MTAC Visit: **1**

Bleeding patterns or frequency in the past

1) Frequency of bleedings :

2) Type of bleed :

3) Site of bleed (state all location)& frequency :

4) Time from bleed to infusion of factors :

5) Time to alleviate pain/stop bleed :

6) No. of infusions required to stop each bleeding incident :

7) No. of days off work/school :

8) Prophylaxis dose (if applicable) :

History of serious bleed : ☐ No ☐ Yes

☐ Intracranial bleed; Date :

☐ Iliopsoas bleed; Date :

☐ Others :

Target joints :

Deformities :

Education topics done : ☐ Visit 1 (C:1-7) ☐ Visit 2 (C:8-12) ☐ Visit 3 (C:13-16) ☐ Visit 4 (C:17-18)

week(s) : times in a : ☐ week ☐ month

☐ Spontaneous ☐ Traumatic

☐ mins ☐ hrs

☐ mins ☐ hrs

days

1

2

3

Save & Continue

Figure 3.2.3.11-1 Specific Details – Haemophilia

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 Haemophilia.

STEP 1

For Specific details, user need to fill up the patient specific detail based on:

- **Bleeding patterns or frequency in the past**
- **History of serious bleed**
- **Target joints**


- Deformities
- Education topics done

STEP 2

For Factor Concentrates Infusion Plan, user need to fill up the patient specific detail based on:

- On Demand Therapy
- Prophylaxis Therapy

STEP 3

Click on the  button to save and continue with reporting section

STEP 4

Click on the  button to confirm save record

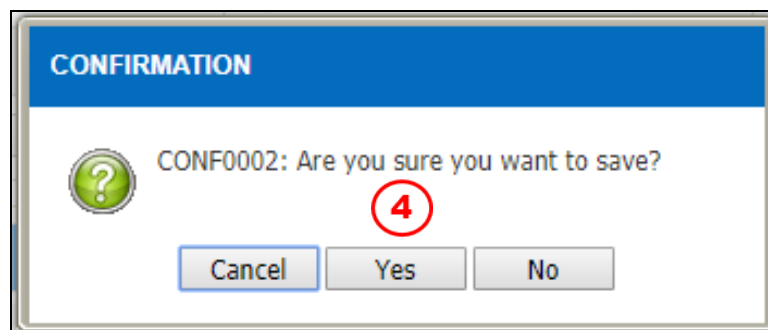


Figure 3.2.3.11-2 Confirmation Alert Message

STEP 5

Click on the  button to confirm record

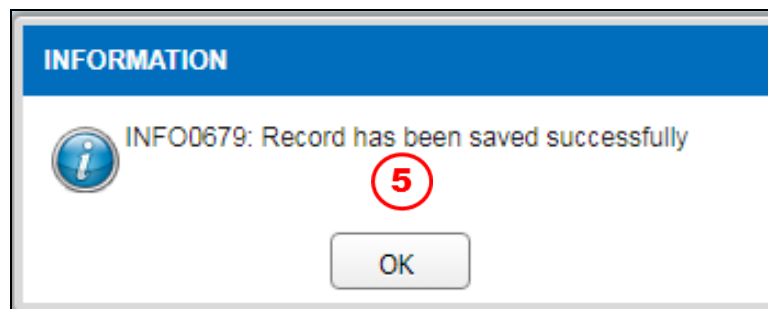


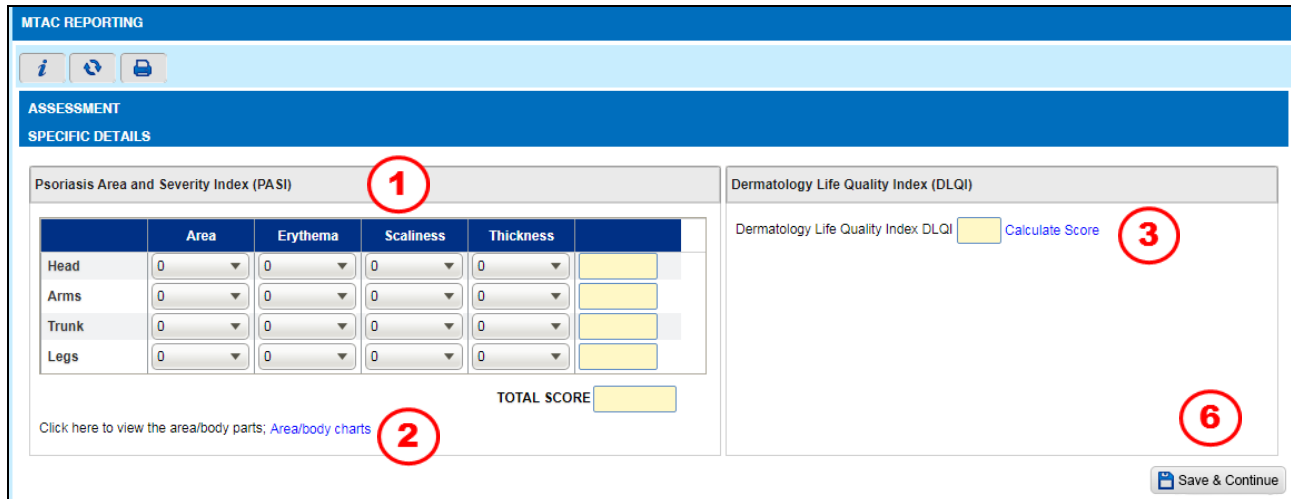
Figure 3.2.3.11-3 Information Alert Message

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, Haemophilia record will appear in MTAC History

3.2.3.12 Psoriasis

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



MTAC REPORTING

ASSESSMENT

SPECIFIC DETAILS

Psoriasis Area and Severity Index (PASI)

	Area	Erythema	Scaliness	Thickness	
Head	0	0	0	0	
Arms	0	0	0	0	
Trunk	0	0	0	0	
Legs	0	0	0	0	

[Click here to view the area/body parts; Area/body charts](#)

TOTAL SCORE

Dermatology Life Quality Index (DLQI)

Dermatology Life Quality Index DLQI [Calculate Score](#)

[Save & Continue](#)

Figure 3.2.3.12-1 Specific Details – Psoriasis

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 Psoriasis

1) Psoriasis Area Severity Index (PASI): Assessment

STEP 1

Select the score from drop down value for Area, Erythema, Scaliness and Thickness for:

- **Head**
- **Arms**
- **Trunk**
- **Legs**

Details calculation for the Psoriasis Area and Severity Index (PSAI) is as below:

No.	Name	Description
1.	Head (Area)	User can select from Drop down menu value = (0 – 6)
2.	Head (Erythema)	User can select from Drop down menu value = (0 – 6)
3.	Head (Scaliness)	User can select from Drop down menu value = (0 – 6)
4.	Head (Thickness)	User can select from Drop down menu value = (0 – 6)
5.	Head (Total)	Auto calculated based on below: $0.1 \times \text{Head Area} \times (\text{Head Erythema} + \text{Head Scaliness} + \text{Head Thickness})$
6.	Arms (Area)	User can select from Drop down menu value = (0 – 4)
7.	Arms (Erythema)	User can select from Drop down menu value = (0 – 4)
8.	Arms (Scaliness)	User can select from Drop down menu value = (0 – 4)
9.	Arms (Thickness)	User can select from Drop down menu value = (0 – 4)
10.	Arms (Total)	Auto calculated based on below: $0.2 \times \text{Arms Area} \times (\text{Arms Erythema} + \text{Arms Scaliness} + \text{Arms Thickness})$
11.	Trunk (Area)	User can select from Drop down menu value = (0 – 4)
12.	Trunk (Erythema)	User can select from Drop down menu value = (0 – 4)
13.	Trunk (Scaliness)	User can select from Drop down menu value = (0 – 4)
14.	Trunk (Thickness)	User can select from Drop down menu value = (0 – 4)
15.	Trunk (Total)	Auto calculated based on below: $0.3 \times \text{Trunk Area} \times (\text{Trunk Erythema} + \text{Trunk Scaliness} + \text{Trunk Thickness})$
16.	Legs (Area)	User can select from Drop down menu value = (0 – 4)
17.	Legs (Erythema)	User can select from Drop down menu value = (0 – 4)
18.	Legs (Scaliness)	User can select from Drop down menu value = (0 – 4)
19.	Legs (Thickness)	User can select from Drop down menu value = (0 – 4)
20.	Legs (Total)	Auto calculated based on below: $0.4 \times \text{Legs Area} \times (\text{Legs Erythema} + \text{Legs Scaliness} + \text{Legs Trunk Thickness})$
21.	Total Score	Auto calculated based on below: Head Total + Arms Total + Trunk Total + Legs Total

Table 3.2.3.12-1 Specific Details – Psoriasis

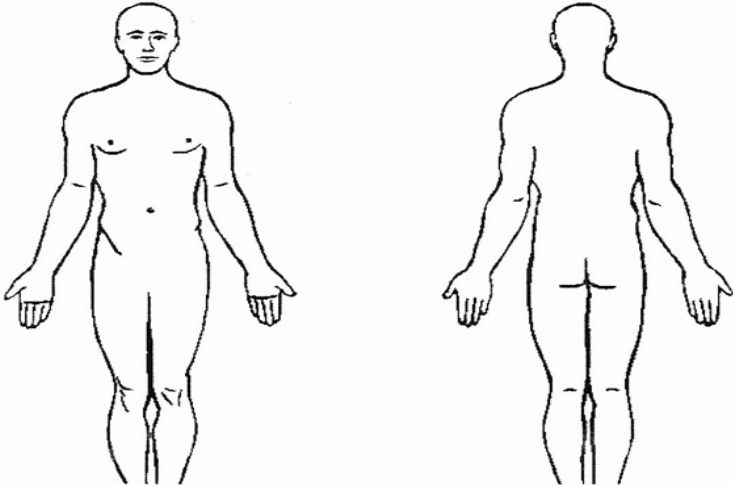
STEP 2

Click on the [Area/body charts](#) hyperlink to view the area/body parts :

MTAC PSORIASIS

Nama : EXXXX XXXXXXXX XXXXXXXXXX MRN : HKL000441 IC :
 Tarikh : 09/08/2019 MTAC Visit : 1

Sila rujuk kepada warna atau nama ubat untuk memastikan ubat disapu pada bahagian badan yang betul



PSORIASIS AREA AND SEVERITY INDEX (PASI) : ASSESSMENT
 E.g. 0.1 x Head Area x (Head Erythema + Head Scaliness + Head Thickness)

Head	: 0.1 x	<input type="text" value="1"/>	x (<input type="text" value="2"/>	+	<input type="text" value="0"/>	+	<input type="text" value="2"/>) =	<input type="text" value="0.4"/>
Arms	: 0.2 x	<input type="text" value="3"/>	x (<input type="text" value="4"/>	+	<input type="text" value="4"/>	+	<input type="text" value="3"/>) =	<input type="text" value="6.6"/>
Trunks	: 0.3 x	<input type="text" value="1"/>	x (<input type="text" value="3"/>	+	<input type="text" value="2"/>	+	<input type="text" value="1"/>) =	<input type="text" value="1.8"/>
Legs	: 0.4 x	<input type="text" value="0"/>	x (<input type="text" value="2"/>	+	<input type="text" value="2"/>	+	<input type="text" value="1"/>) =	<input type="text" value="0"/>
TOTAL SCORE										<input type="text" value="8.8"/>

Figure 3.2.3.12-2 Specific Details – Area Body Chart

2. Dermatology Life Quality Index (DLQI)

Dermatology Life Quality Index (DLQI)

Dermatology Life Quality Index DLQI [Calculate Score](#)

Figure 3.2.3.12-3 Specific Details –DLQI

STEP 3

Click on the 'Calculate Score' hyperlink shall display assessment screen as below:

DERMATOLOGY LIFE QUALITY INDEX (DLQI)

5

Please tick one box for each question

	Over the last week	Very much	A lot	A little	Not at all	Not relevant
1	How itchy, sore, painful or stinging has your skin been ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	How embarrassed or self conscious have you been because of your skin ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	How much has your skin interfered with you going shopping or looking after your home or garden ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	How much has your skin influenced the clothes you wear ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	How much has your skin affected any social or leisure activities ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	How much has your skin made it difficult for you to do any sport ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Has your skin prevented you from working or studying ? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Relevant		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8	If No, over the last week how much has your skin been a problem at work or studying ?					
9	How much your skin created problems with your partner or any of your close friends or relatives ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	How much has your skin caused by any sexual difficulties ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	How much of a problem has the treatment for your skin been, for example by making your home messy, or by taking up time ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DLQI =

Figure 3.2.3.12-4 Specific Details –DLQI Questionnaire

STEP 4

Tick on the answers check box for each question


Details of the score description as below:

No.	Name	Description
1.	How itchy, sore, painful or stinging has your skin been? <i>Setakat manakah kulit anda berasa gatal atau sakit?</i>	User shall need to tick one of below answer: a) Very Much: 3 b) A lot: 2 c) A little: 1 d) Not at all: 0
2.	How embarrassed or self conscious have you been because of your skin? <i>Setakat manakah anda berasa malu atau segan, disebabkan oleh kulit anda?</i>	User shall need to tick one of below answer: a) Very Much: 3 b) A lot: 2 c) A little: 1 d) Not at all: 0
3.	How much has your skin interfered with you going shopping or looking after your home or garden? <i>Setakat manakah kulit anda mengganggu anda daripada pergi membeli-belah atau menjaga rumah atau berkebun?</i>	User shall need to tick one of below answer: a) Very Much: 3 b) A lot: 2 c) A little: 1 d) Not at all: 0 e) Not relevant: 0
4.	How much has your skin influenced the clothes you wear? <i>Setakat manakah kulit anda mempengaruhi pakaian yang anda pakai?</i>	User shall need to tick one of below answer: a) Very Much: 3 b) A lot: 2 c) A little: 1 d) Not at all: 0 e) Not relevant: 0
5.	How much has your skin affected any social or leisure activities? <i>Setakat manakah kulit anda mengganggu aktiviti-aktiviti sosial atau masa lapang anda?</i>	User shall need to tick one of below answer: a) Very Much: 3 b) A lot: 2 c) A little: 1

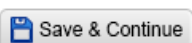
			d) Not at all: 0 e) Not relevant: 0	
6.	How much has your skin made it difficult for you to do any sport? <i>Setakat manakah keadaan kulit anda menyebabkan anda tidak selesa semasa bersukan?</i>		User shall need to tick one of below answer: a) Very Much: 3 b) A lot: 2 c) A little: 1 d) Not at all: 0 e) Not relevant: 0	
7.	Has your skin prevented you from working or studying? <i>Adakah kulit menyebabkan anda tidak dapat kerja atau belajar?</i> Yes/ya <input type="checkbox"/> No/Tidak <input type="checkbox"/> Not relevant/tidak berkenaan <input type="checkbox"/> <ul style="list-style-type: none"> If "No", over the last week how much has your skin been a problem at work or studying? Jika 'Tidak', setakat manakah kulit anda menjadi masalah semasa kerja atau belajar? 		User shall need to tick one of below answer: a) Yes: 3 b) No: If 'No' then allow user to choose: <ul style="list-style-type: none"> A lot: 2 A little: 1 Not at all: 0 c) Not relevant: 0	
8.	How much has your skin created problems with your partner or any of your close friends or relatives? <i>Setakat manakah kulit anda menimbulkan masalah dengan teman, rakan baik atau saudara-mara anda?</i>		User shall need to tick one of below answer: a) Very Much: 3 b) A lot: 2 c) A little: 1 d) Not at all: 0 e) Not relevant: 0	
9.	How much has your skin caused any sexual difficulties? <i>Setakat manakah kulit anda menyebabkan sebarang masalah hubungan seks?</i>		User shall need to tick one of below answer: a) Very Much: 3 b) A lot: 2 c) A little: 1 d) Not at all: 0 e) Not relevant: 0	
10.	How much of a problem has the treatment for your skin been, for example by making your home messy, or by taking up time? <i>Setakat manakah rawatan kulit anda menimbulkan masalah seperti mengotori rumah anda atau mengambil masa anda?</i>		User shall need to tick one of below answer: a) Very Much: 3 b) A lot: 2 c) A little: 1 d) Not at all: 0 e) Not relevant: 0	
11.	DLQI		Auto calculate as below: Total of the Score Question 1 to 10	

Table 3.2.3.12-2 Specific Details – Psoriasis

STEP 5

Click on the  button to save the DLQI record

STEP 6

Click on the  button to save and continue with reporting section

STEP 7

Click on the  button to confirm save record

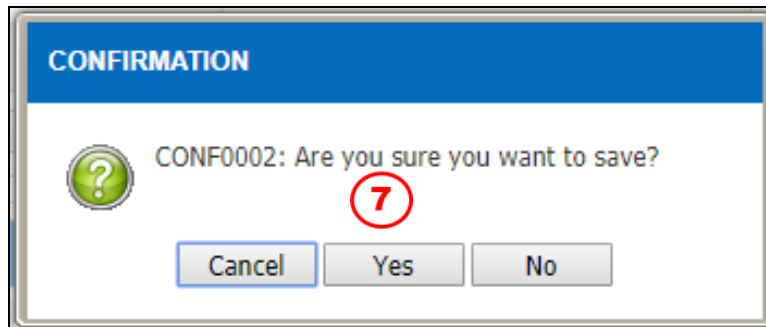


Figure 3.2.3.12-5 Confirmation Alert Message

STEP 8

Click on the  button to confirm record

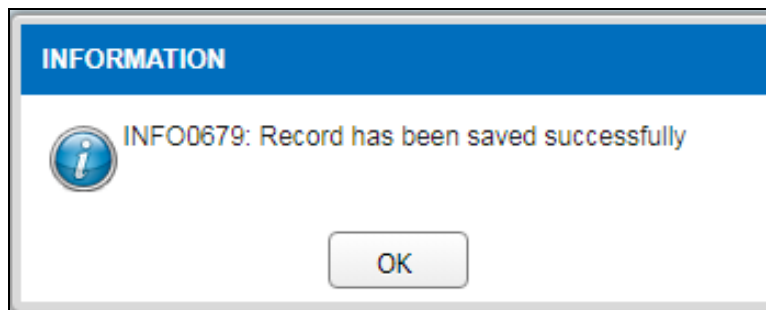


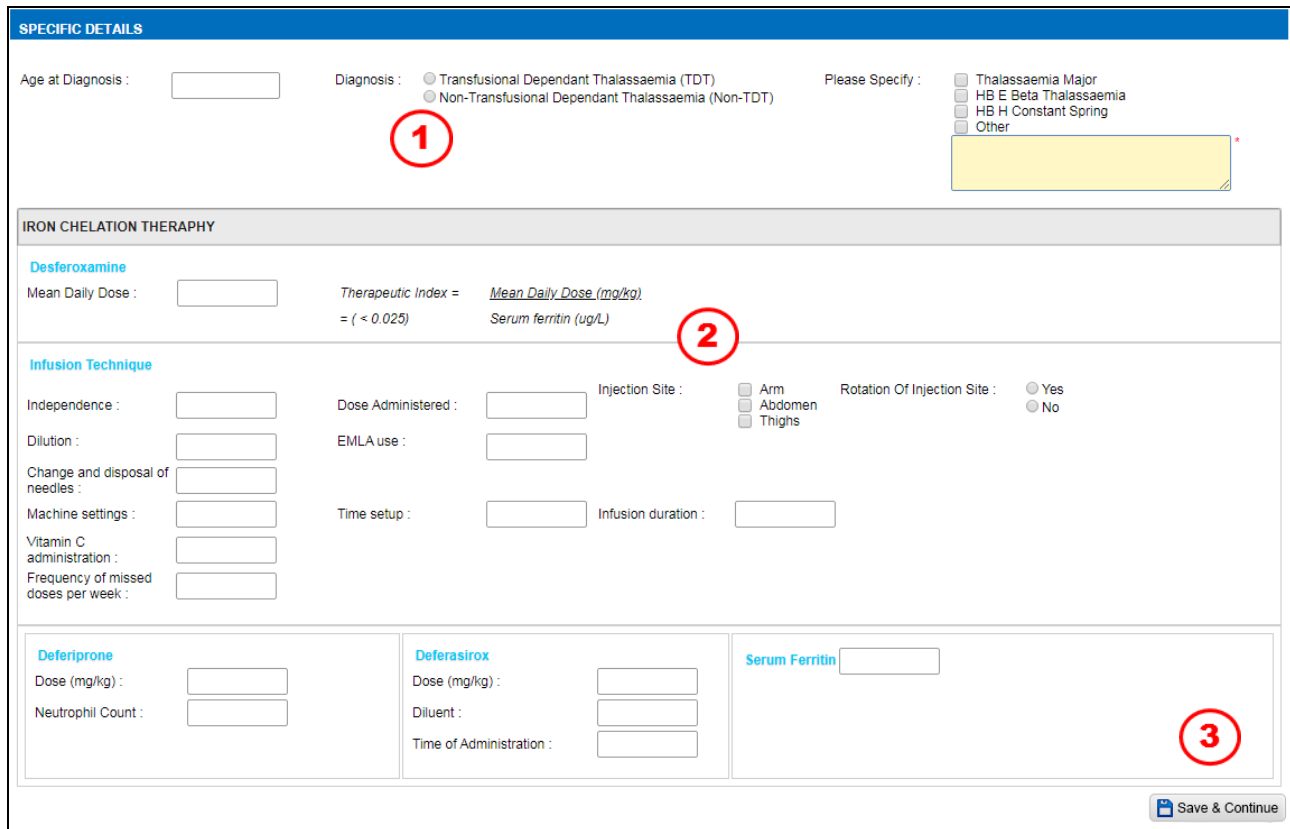
Figure 3.2.3.12-6 Information Alert Message

Note

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

3.2.3.13 Thalassaemia

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



SPECIFIC DETAILS

Age at Diagnosis :

Diagnosis : ☐ Transfusional Dependant Thalassaemia (TDT) ☐ Non-Transfusional Dependant Thalassaemia (Non-TDT)

Please Specify : ☐ Thalassaemia Major ☐ HB E Beta Thalassaemia ☐ HB H Constant Spring ☐ Other

IRON CHELATION THERAPY

Desferoxamine

Mean Daily Dose : Therapeutic Index = $\frac{\text{Mean Daily Dose (mg/kg)}}{\text{Serum ferritin (ug/L)}}$ = (< 0.025)

Infusion Technique

Independence : Dose Administered : Injection Site : ☐ Arm ☐ Abdomen ☐ Thighs

Dilution : EMLA use : Rotation Of Injection Site : ☐ Yes ☐ No

Change and disposal of needles : Machine settings : Time setup : Infusion duration :

Vitamin C administration : Frequency of missed doses per week :

Deferiprone

Dose (mg/kg) : Neutrophil Count :

Deferasirox

Dose (mg/kg) : Diluent : Time of Administration :

Serum Ferritin

Save & Continue

Figure 3.2.3.13-1 Specific Details – Thalassaemia

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 Thalassaemia

STEP 1

Fill up the specific details for Thalassaemia by the below categories:

- Age at Diagnosis
- Dignosis
- Please specify type of Thalassaemia

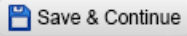
STEP 2

Fill up the **Iron Chelation Therapy** details as below :

- Desferoxamine
- Infusion Technique

- Deferiprone
- Deferasirox
- Serum Ferritin

STEP 3

Click on the  button to save and continue with reporting section

STEP 4

Click on the  button to confirm save record

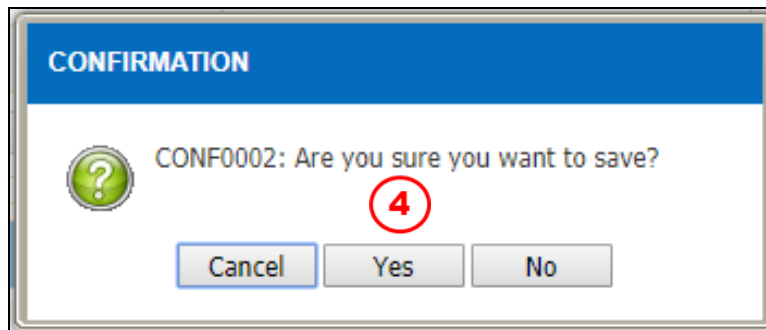


Figure 3.2.3.13-2 Confirmation Alert Message

STEP 5

Click on the  button to confirm record

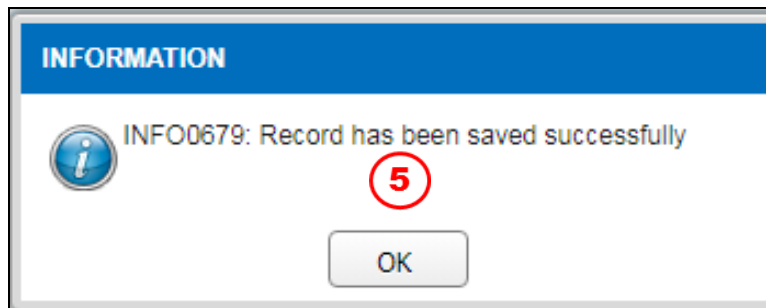


Figure 3.2.3.13-3 Information Alert Message

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, Haemophilia record will appear in MTAC History

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	Inpatient	Click Here	12	CDR Dispensing	Click Here
2	CDR Order	Click Here	13	Methadone Dispensing	Click Here
3	TDM Order	Click Here	14	PN Dispensing	Click Here
4	PN Order	Click Here	15	Order Management	Click Here
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