



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

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**Pharmacy Based**

**User Manual  
Ward Pharmacy**

<b>Version</b>	<b>: 8<sup>th</sup> EDITION</b>
<b>Document ID</b>	<b>: PB_U. MANUAL_WARD PHARMACY</b>



PhIS & CPS Project  
User Manual – Ward Pharmacy



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Reference ID : PB\_U. MANUAL\_WARD PHARMACY-8<sup>th</sup> EDITION

Application reference: PhIS & CPS v1.8.1



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## 1.0 Introduction

### 1.1 Overview of PhIS

Pharmacy Information System or better known as PhIS, is a complete and comprehensive system that integrates pharmacy related services geared towards pharmacy excellence. PhIS implementation would transform most of current manual process to electronic system would 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 Ward Pharmacy sub-module and its key features and functionalities. The primary objective is to help guide user through the process of completing PhIS application process.

User will understand the following activities in details:

- Ward Pharmacy (CP2)

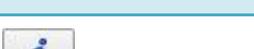
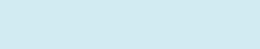
### 1.3 Organised Sections

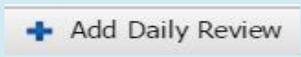
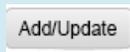
These are the sections within this document:

- Section 1: Introduction
- Section 2: Application Standard Features
- Section 3: Ward Pharmacy
- Section 4: Acronyms
- Section 5: Links to Clinical Modules

## 2.0 Application Standard Features

### 2.1 PhIS Legend

Standard Legend			
	Login to PhIS		Logout from PhIS
	Close All Open Tabs		Refresh Screen
	Expand Menu		Collapse Menu
	Expand Module		Collapse Module
	Add/Create New Record		Save
	Close Window		Calendar Icon
	Save Transaction		Delete Record
	Export Report From PDF file to Excel file		OK Button
	Yes Button		No Button
	Radio Button	<input type="checkbox"/>	Checkbox
	System Automatic Generate Record No.		Automatically Display/Retrieve Box
	Reset Login Screen		Show Help
	Display Home Tab		Search Record
	Cancel		Dropdown Box
	Search Icon	*	Mandatory Field
	Edit Record		Empty Text Box
	Cancel Button		

<b>Ward Pharmacy (CP2) Module Legend</b>			
	To record daily review patient		Add/update Record

**Note**

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



## 2.2 Latest Enhancement and Updates

Latest Functions	Page
No more compliance score (Morisky scale) and change to Adherence score	<a href="#">9 &amp; 10</a>
CP2 HPI - To set maximum 500 characters	<a href="#">9 &amp; 10</a>
CP1 a) PMHx - To set maximum 500 characters b) Reason For Admission - To set maximum 500 characters c) Comments - To set maximum 500 characters d) Pharmacist Note - To set maximum 500 characters (Pharmacist Note has been remove in CP1 screen following the request of removing MMAS score. User can use Pharmacist note in CP2 screen)	<a href="#">14</a>

## 3.0 Ward Pharmacy

### Overview

The Ward Pharmacy module include Implementing safe and organized CP2 form, CP1 form, CP4 form, Pharmaceutical Care Issue (PCI) and lab result reporting

### User Group

This module is intended for pharmacist

### Functional Diagram

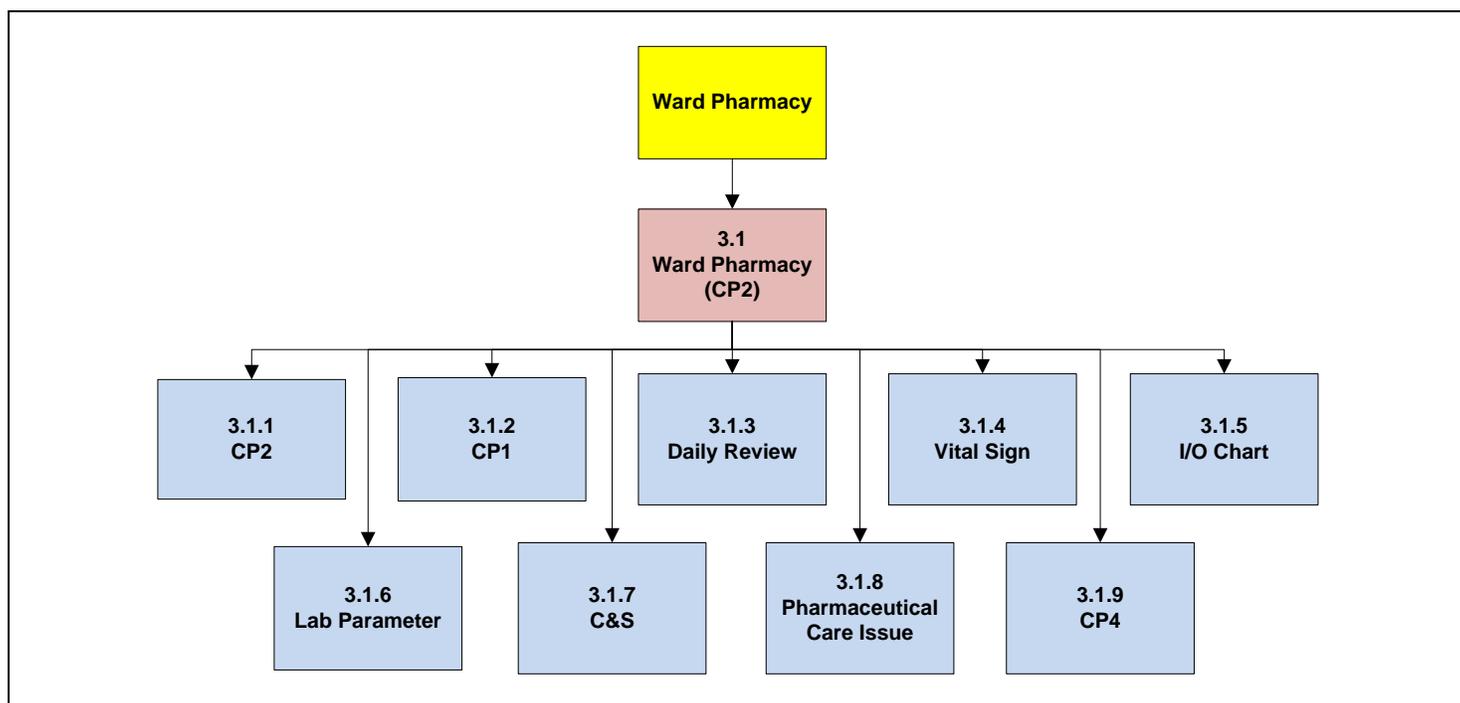


Figure 3.1

### Functional Description

Ward Pharmacy comprises of nine (9) functions:

- CP1
- CP2
- Daily Review
- Vital Sign
- I/O Chart
- Lab Parameter
- C&S
- Pharmaceutical Care Issue
- CP4

### 3.1 Ward Pharmacy (CP2)

#### 3.1.1 CP2

This function is used to transcribe CP2 form record in the system.

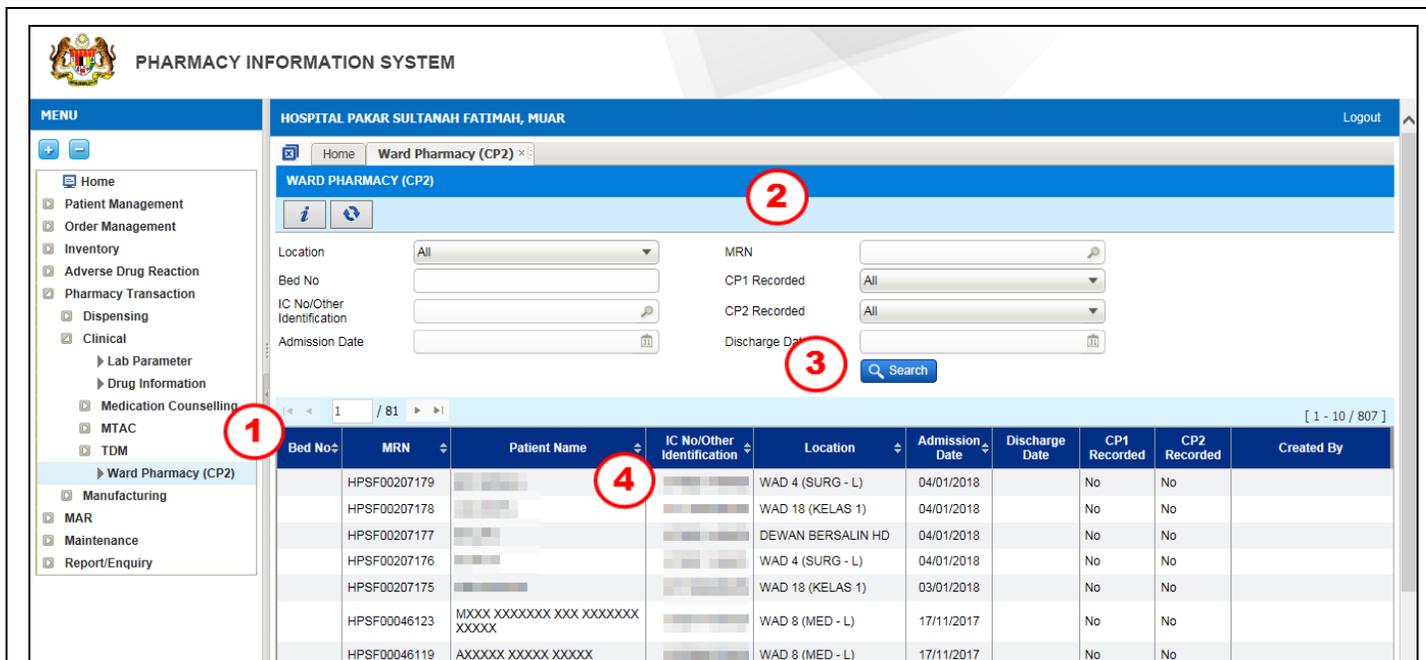


Figure 3.1.1-1 Ward Pharmacy Listing Page

**Note**

Phis Screen menu/sub menu will be displayed according to user access right.

**STEP 1**

Click on Pharmacy Transaction menu then click on Clinical follow by click on Ward Pharmacy CP2

**STEP 2**

To search for patient Ward Pharmacy (CP2) records, user can search by criteria as follows:

Search			
No	Field	Description	Remark
a	Location	Location	Allow to search by assigned location: - Inpatient visit - Emergency visit - Daycare visit
b	MRN	Patient MRN	Allow to search by patient full or partial MRN No
c	Bed No	Bed No	Allow to search by patient bed no
d	ID No	ID No	Allow to search by patient full or partial ID No
e	CP1 Recorded?	- All - Yes - No	All-Allow to search by status 'Yes' and 'No' Yes-Allow to search by status 'Yes' No-Allow to search by status 'No'
f	CP2 Recorded?	- All - Yes	All-Allow to search by status 'Yes' and 'No' Yes-Allow to search by status 'Yes'

		– No	No-Allow to search by status 'No'
g	Admission Date	Date Enter Ward	Allow to search by date enter to ward
h	Discharged Date	Date Dismissed from Ward	Allow to search by date dismissed from ward

**Table 3.1.1-1**

**STEP 3**

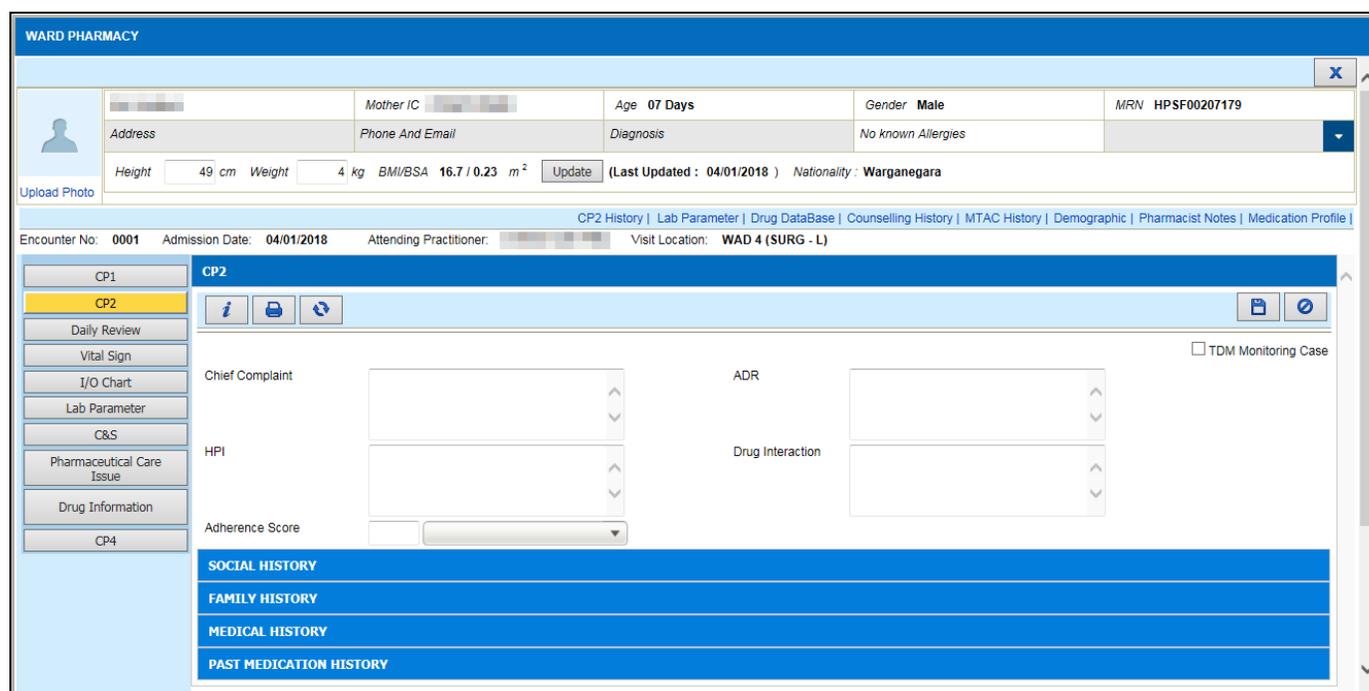
Click on the  button and result display will be based on the criteria

**Note**

If CP1 and CP2 already recorded for the particular patient, the listing will show Yes for both line.

**STEP 4**

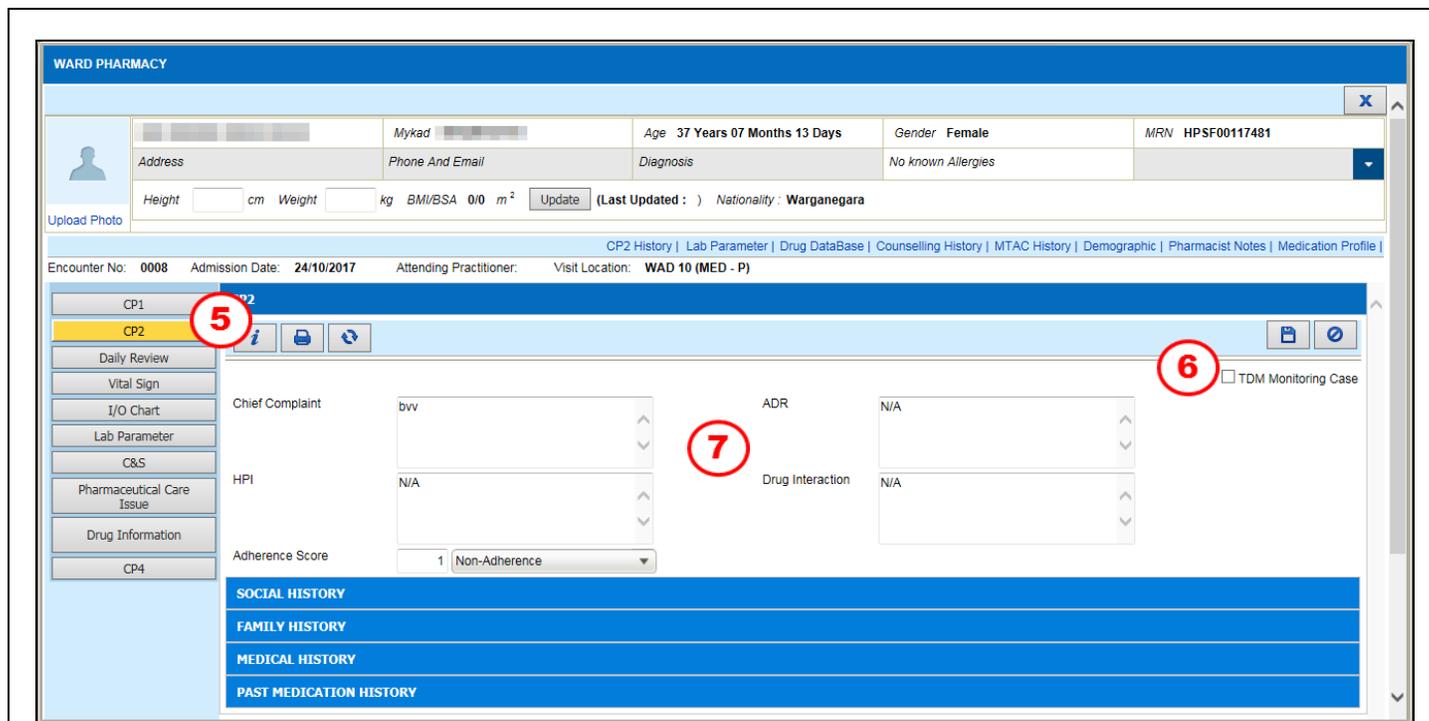
Double click on patient name and user will enter the ward pharmacy CP2 function



**Figure 3.1.1-2 Ward Pharmacy**

**Note**

- By default system will CP2 screen
- User can navigate to other screen using tab on the left side that consist of:
  - CP1
  - CP2
  - Daily Review
  - Vital Sign
  - I/O Chart
  - Lab Parameter
  - C&S
  - Pharmaceutical Care Issue
  - Drug Information
  - CP4



**Figure 3.1.1-3 Ward Pharmacy**

### STEP 5

Click on the **CP2** tab on the left side

### Note

CP2 consist of:

- Main
- Social History
- Family History
- Medical History
- Past Medication History

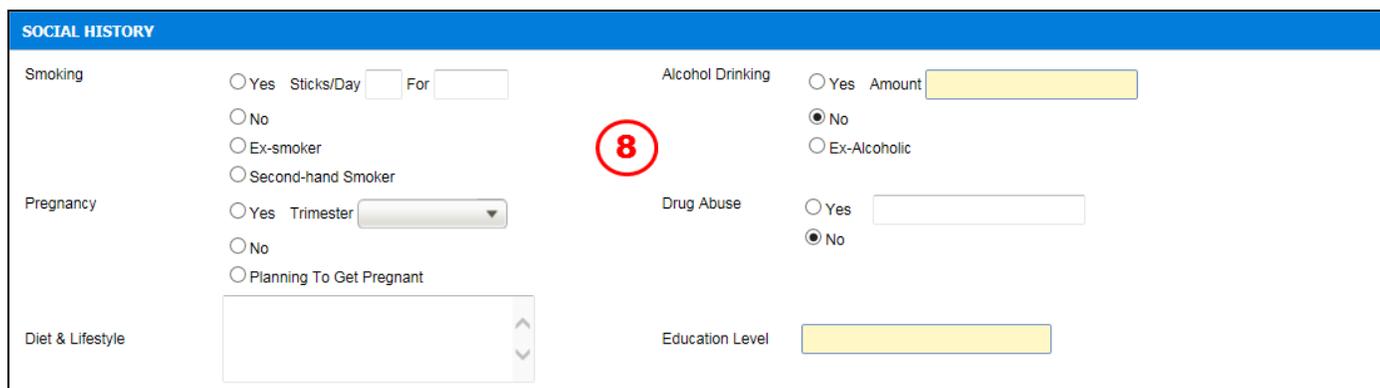
### STEP 6

Select on **TDM Monitoring Case** checkbox if applicable

### STEP 7

Enter the necessary information

- a) **Chief Complaint**
- b) **HPI**
- c) **ADR**
- d) **Drug Information**
- e) **Adherence Score**



**Figure 3.1.1-4 Social History**

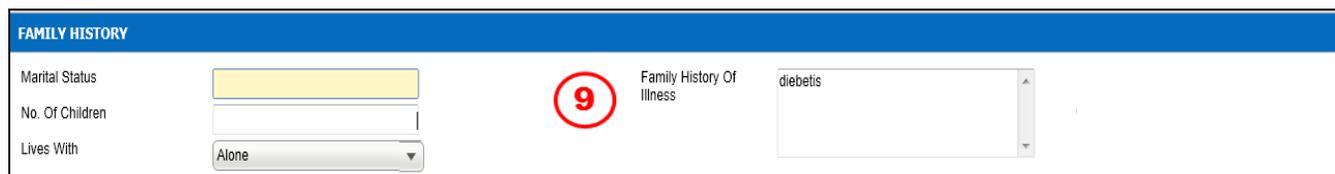
**STEP 8**

Enter the necessary information in Social History section. Social History section consist of:

- a) **Smoking**
- b) **Pregnancy**
- c) **Diet & Lifestyle**
- d) **Alcohol Drinking**
- e) **Drug Abuse**

**Note**

- **Pregnancy** field is disable if the patient gender is male
- **Education** is retrieved from **Patient Registration** function



**Figure 3.1.1-5 Family History**

**STEP 9**

Fill in the necessary information in Family History section. Family History section consist of:

- a) **Martial Status**
- b) **No Of Children**
- c) **Lives With**
- d) **Family History Of Illness**

**Note**

Information in Martial Status is available if information is filled during patient registration function.

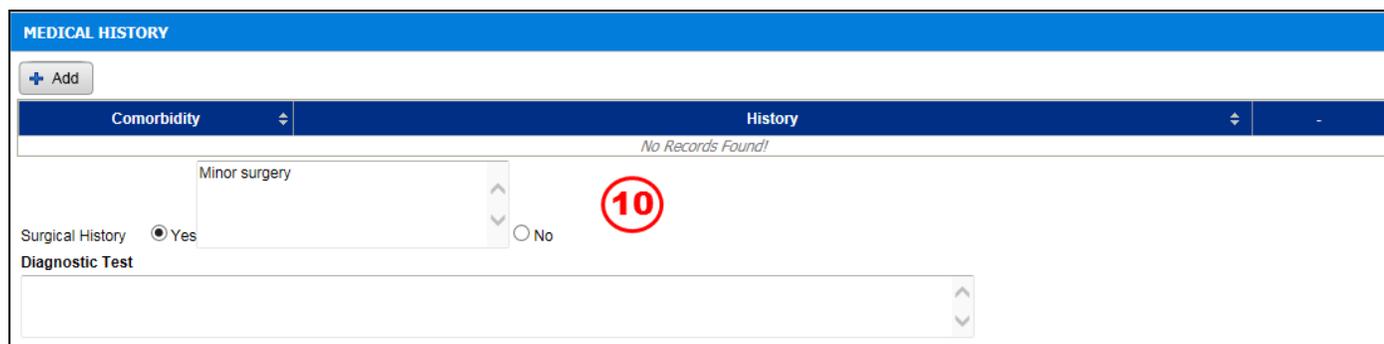


Figure 3.1.1-6 Medical History

**STEP 10**

Fill in the necessary information in Family History section. Family History section consist of:

- a) **Comorbidity**
- b) **Surgical History**
- c) **Diagnostic Test**

**Note**

User can add patient comorbidity by click on the  button

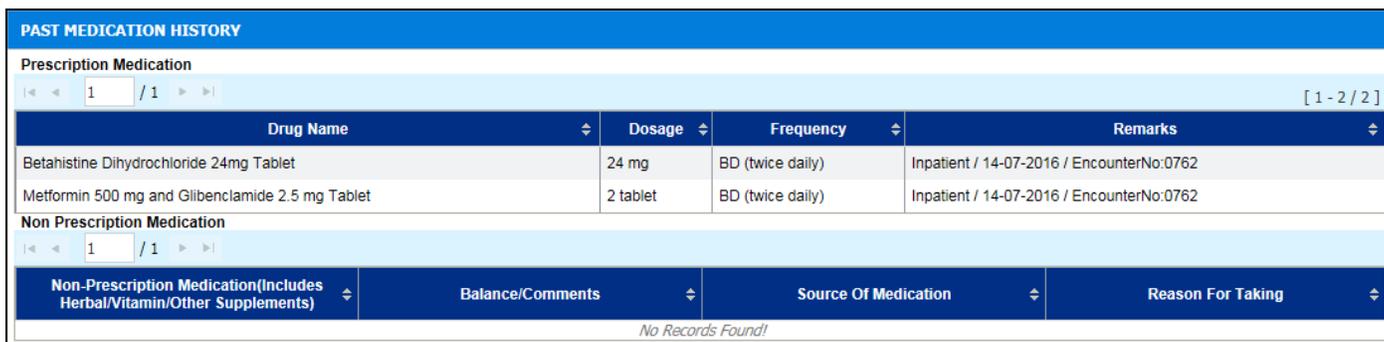
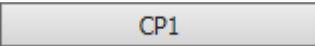
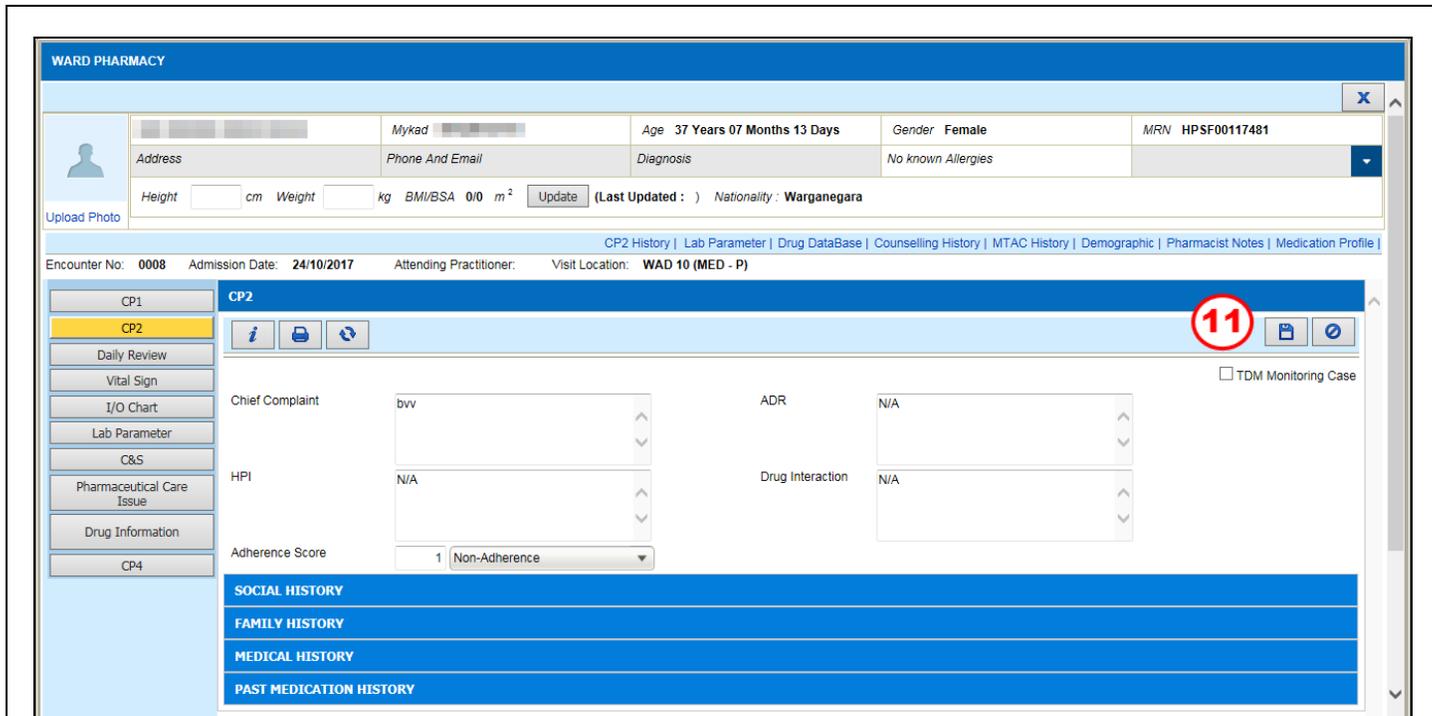


Figure 3.1.1-7 Past Medication History

**Note**

Past Medication History consist of:

- Prescription Medication
- Non Prescription Medication
- However, this field cannot be filling and need to be filled in  screen.



**WARD PHARMACY**

Mykad: [REDACTED] Age: 37 Years 07 Months 13 Days Gender: Female MRN: HPSF00117481

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

Height: [REDACTED] cm Weight: [REDACTED] kg BMI/BSA: 0/0 m<sup>2</sup> Update (Last Updated: ) Nationality: Warganegara

Encounter No: 0008 Admission Date: 24/10/2017 Attending Practitioner: Visit Location: WAD 10 (MED - P)

CP2 History | Lab Parameter | Drug DataBase | Counselling History | MTAC History | Demographic | Pharmacist Notes | Medication Profile

CP1 | **CP2** | CP4

Daily Review | Vital Sign | I/O Chart | Lab Parameter | C&S | Pharmaceutical Care Issue | Drug Information

Chief Complaint: bvv ADR: N/A

HPI: N/A Drug Interaction: N/A

Adherence Score: 1 Non-Adherence

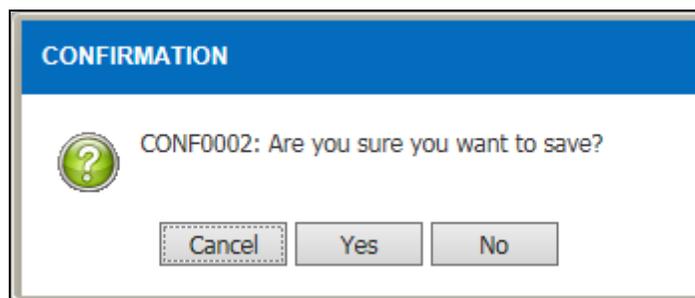
TDM Monitoring Case

SOCIAL HISTORY  
FAMILY HISTORY  
MEDICAL HISTORY  
PAST MEDICATION HISTORY

**Figure 3.1.1-7 Ward Pharmacy (CP2)**

## STEP 11

Click on the  button to save the CP2 record and system will display confirmation alert as figure 3.1.1-8



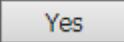
**CONFIRMATION**

 CONF0002: Are you sure you want to save?

Cancel Yes No

**Figure 3.1.1-8 Confirmation Alert**

## Note

- Click on  the button to save the record.

### 3.1.2 CP1

The function of this menu is to record a complete patient medication history within 24 hours of admission.

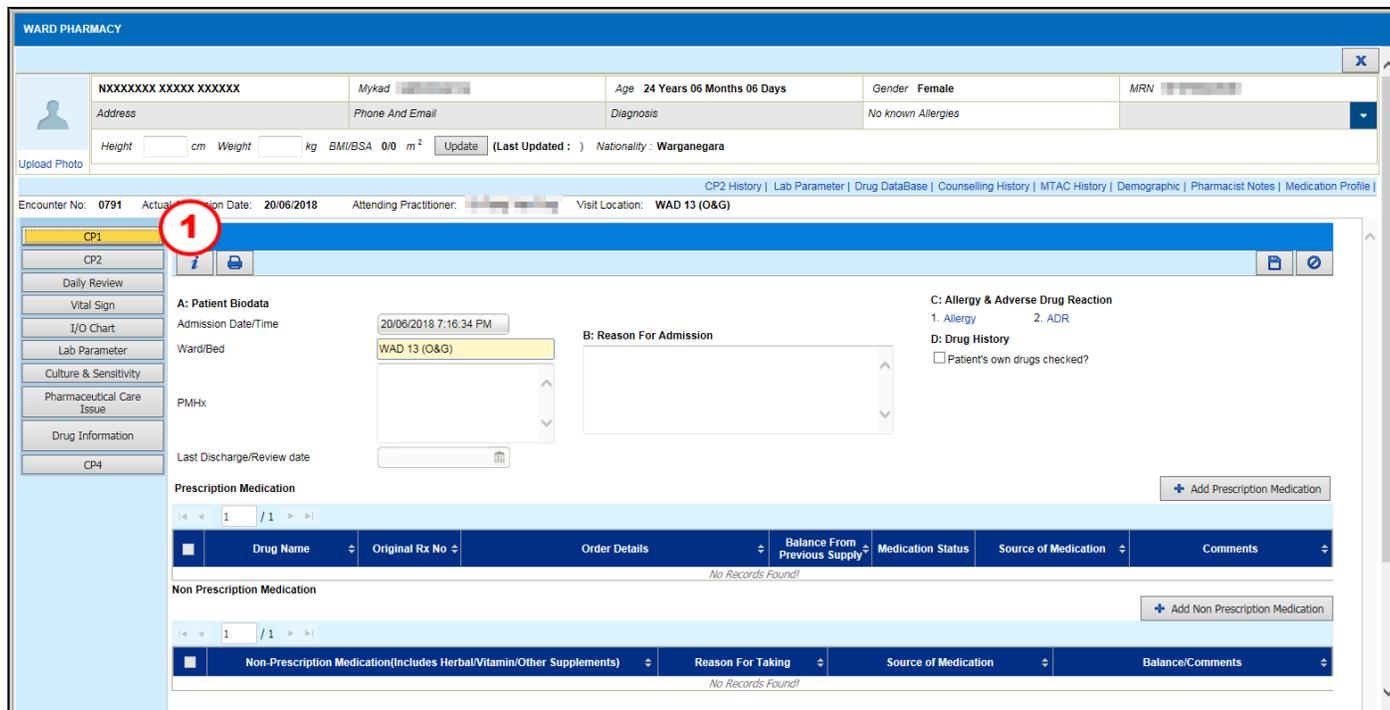


Figure 3.1.2-1 CP1 Button

#### STEP 1

Click on the **CP1** tab on the left side

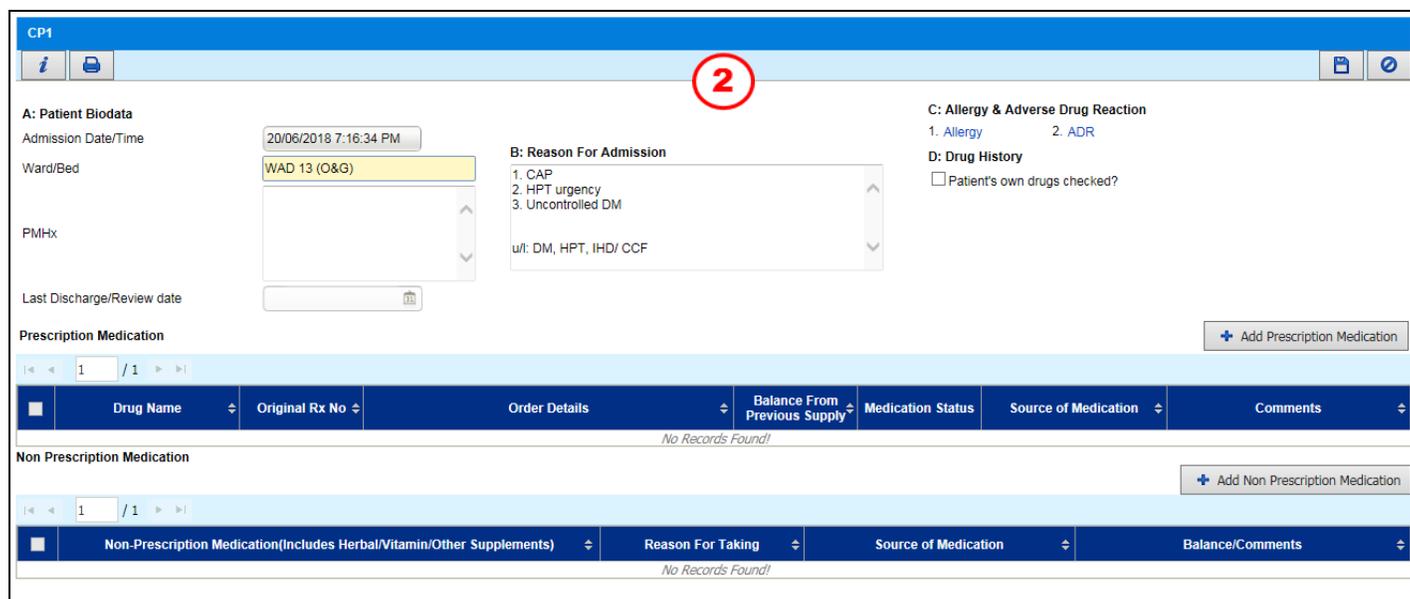


Figure 3.1.2-2 CP1

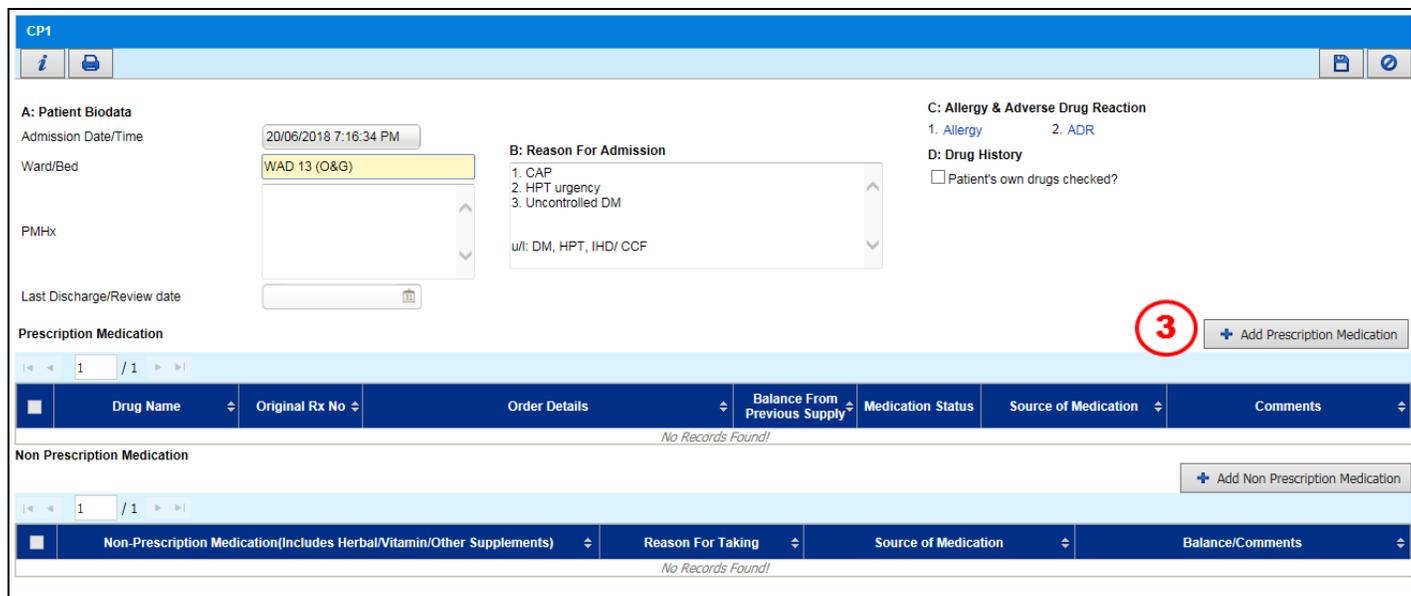
**STEP 2**

Enter the necessary information

- a) **A: Patient Biodata**
- b) **B: Reason For Admission**
- c) **D: Drug history**

**Note**

User can view information of patient Allergy and ADR at **C: Allergy & Adverse Drug Reaction** hyperlink

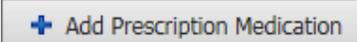


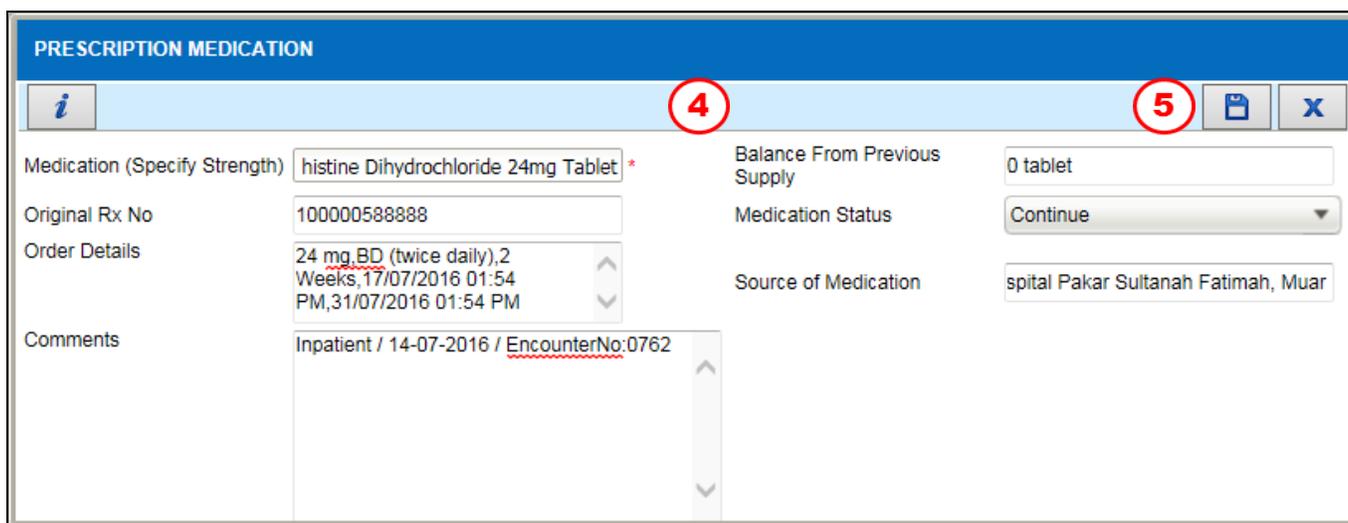
The screenshot shows the CP1 patient record form. It is divided into several sections:
 

- A: Patient Biodata:** Includes fields for Admission Date/Time (20/06/2018 7:16:34 PM), Ward/Bed (WAD 13 (O&G)), PMHx, and Last Discharge/Review date.
- B: Reason For Admission:** A list box containing '1. CAP', '2. HPT urgency', and '3. Uncontrolled DM'. Below it is a text field with 'u/l: DM, HPT, IHD/ CCF'.
- C: Allergy & Adverse Drug Reaction:** Includes a list for '1. Allergy' and '2. ADR', and a checkbox for 'Patient's own drugs checked?'.
- D: Drug History:** A checkbox for 'Patient's own drugs checked?'.
- Prescription Medication:** A table with columns: Drug Name, Original Rx No, Order Details, Balance From Previous Supply, Medication Status, Source of Medication, and Comments. A red circle '3' highlights the '+ Add Prescription Medication' button.
- Non Prescription Medication:** A table with columns: Non-Prescription Medication(Includes Herbal/Vitamin/Other Supplements), Reason For Taking, Source of Medication, and Balance/Comments. It also has a '+ Add Non Prescription Medication' button.

**Figure 3.1.2-3 CP1**

**STEP 3**

Click on the  button to enter the information as Figure 3.1.2-4.



The screenshot shows the 'PRESCRIPTION MEDICATION' form. It contains the following fields:
 

- Medication (Specify Strength):** histine Dihydrochloride 24mg Tablet \*
- Original Rx No:** 100000588888
- Order Details:** 24 mg BD (twice daily), 2 Weeks, 17/07/2016 01:54 PM, 31/07/2016 01:54 PM
- Comments:** Inpatient / 14-07-2016 / EncounterNo:0762
- Balance From Previous Supply:** 0 tablet
- Medication Status:** Continue
- Source of Medication:** spital Pakar Sultanah Fatimah, Muar

 A red circle '4' highlights the information icon in the top left, and a red circle '5' highlights the save and close buttons in the top right.

**Figure 3.1.2-4 Prescription Medication**

#### STEP 4

Fill in the necessary information

- a) **Medication (Specify Strength)**
- b) **Original Rx No**
- c) **Order Details**
- d) **Comments**
- e) **Balance From Previous Supply**
- f) **Medication Status**
- g) **Source of Medication**

#### STEP 5

Click on the  button to save record and system will display confirmation alert as figure 3.1.2-5

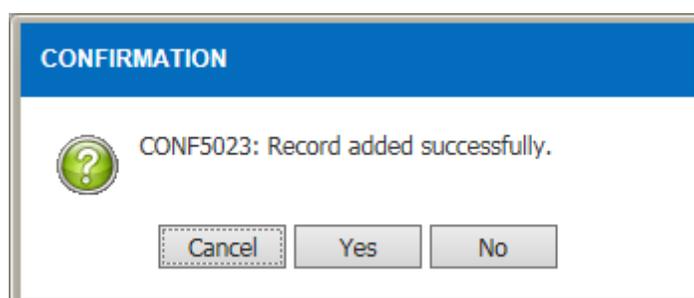
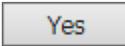


Figure 3.1.2-5 Confirmation alert

#### Note

- Click on  the button to save the record.

**CP1**

**A: Patient Biodata**  
 Admission Date/Time: 20/06/2018 7:16:34 PM  
 Ward/Bed: WAD 13 (O&G)  
 PMHx:  
 Last Discharge/Review date:

**B: Reason For Admission**  
 1. CAP  
 2. HPT urgency  
 3. Uncontrolled DM  
 u/l: DM, HPT, IHD/ CCF

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

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

**Prescription Medication** + Add Prescription Medication

Drug Name	Original Rx No	Order Details	Balance From Previous Supply	Medication Status	Source of Medication	Comments
<input checked="" type="checkbox"/> Chlorpheniramine Maleate 2 mg/5 ml Syrup	40001087877	2 mg,OD (once daily),3 Days,04/01/2018 03:24 PM,07/01/2018 03:24 PM	60 ml	ORDERED	Hospital Pakar Sultanah Fatimah, Muar	Inpatient / 04-01-2018 / EncounterNo:0001
<input type="checkbox"/> Lorazepam 1 mg Tablet	40001087880	1 mg,BD (twice daily),4 Days,04/01/2018 03:44 PM,08/01/2018 03:44 PM	8 tablet	ORDERED	Hospital Pakar Sultanah Fatimah, Muar	Inpatient / 04-01-2018 / EncounterNo:0001
<input checked="" type="checkbox"/> Paracetamol 250 mg/5 ml Syrup	40001087876	120 mg,PRN,5 Days,04/01/2018 03:06 PM,09/01/2018 03:06 PM	60 ml	ORDERED	Hospital Pakar Sultanah Fatimah, Muar	Inpatient / 04-01-2018 / EncounterNo:0001

**Non Prescription Medication** + Add Non Prescription Medication

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

Pharmacist Notes

Figure 3.1.2-6 CP1

**STEP 6**

Click on the + Add Non Prescription Medication button to enter the information as Figure 3.1.2-7

**NON PRESCRIPTION MEDICATION**

**7** **8**

Non-prescription Medication: Shaklee Reason for Taking: Supplement

Source of Medication: Guardian Balance/Comments:

Figure 3.1.2-7 Non Prescription Medication

### STEP 7

Fill in the necessary information

- a) **Non-prescription Medication**
- b) **Source of Medication**
- c) **Reason for Taking**
- d) **Balance/Comments**

### STEP 8

Click on the  button to save record and system will display confirmation alert as figure 3.1.2-8

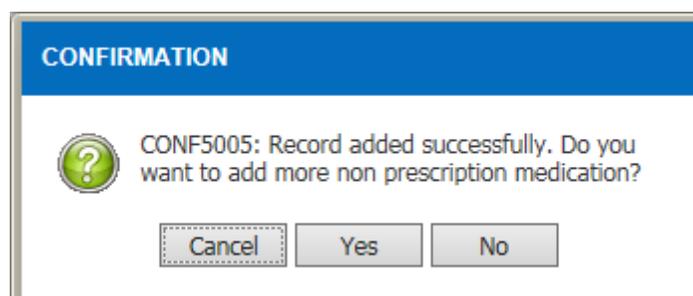
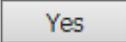
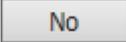


Figure 3.1.2-8 Confirmation Alert

### Note

- Click on the  button will saved the record and allowed user to add more non prescription information without close the Non Prescription Medication screen.
- Click on the  button will saved the record and display the main screen
- 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
- Non Prescription Medication.
  - User can add any none prescription medication that has been taken by patient in system

CP1

9

**A: Patient Biodata**

Admission Date/Time:

Ward/Bed:

PMHx:

Last Discharge/Review date:

**B: Reason For Admission**

1. CAP

2. HPT urgency

3. Uncontrolled DM

u/l: DM, HPT, IHD/ CCF

**C: Allergy & Adverse Drug Reaction**

1. Allergy      2. ADR

**D: Drug History**

Patient's own drugs checked?

**Prescription Medication** + Add Prescription Medication

<< 1 / 1 >> [ 1 - 3 / 3 ]

<input type="checkbox"/>	Drug Name	Original Rx No	Order Details	Balance From Previous Supply	Medication Status	Source of Medication	Comments
<input checked="" type="checkbox"/>	Chlorpheniramine Maleate 2 mg/5 ml Syrup	40001087877	2 mg,OD (once daily),3 Days,04/01/2018 03:24 PM,07/01/2018 03:24 PM	60 ml	ORDERED	Hospital Pakar Sultanah Fatimah, Muar	Inpatient / 04-01-2018 / EncounterNo:0001
<input type="checkbox"/>	Lorazepam 1 mg Tablet	40001087880	1 mg,BD (twice daily),4 Days,04/01/2018 03:44 PM,08/01/2018 03:44 PM	8 tablet	ORDERED	Hospital Pakar Sultanah Fatimah, Muar	Inpatient / 04-01-2018 / EncounterNo:0001
<input checked="" type="checkbox"/>	Paracetamol 250 mg/5 ml Syrup	40001087876	120 mg,PRN,5 Days,04/01/2018 03:06 PM,09/01/2018 03:06 PM	60 ml	ORDERED	Hospital Pakar Sultanah Fatimah, Muar	Inpatient / 04-01-2018 / EncounterNo:0001

**Non Prescription Medication** + Add Non Prescription Medication

<< 1 / 1 >>

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

Pharmacist Notes:

Figure 3.1.2-9 CP1

**Note**

Enter **Pharmacist Notes** if applicable

**STEP 9**

Click on the button to save the CP1 record and confirmation alert will display as Figure 3.1.2-10

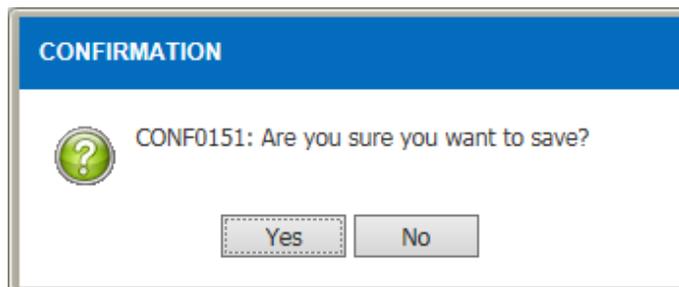


Figure 3.1.2-10 Confirmation Alert

**Note**

Information under Prescription Medication and Non Prescription will be display in the CP2 if user tick on the information checkbox.

### 3.1.3 Daily Review

To record Daily review, perform the step below:

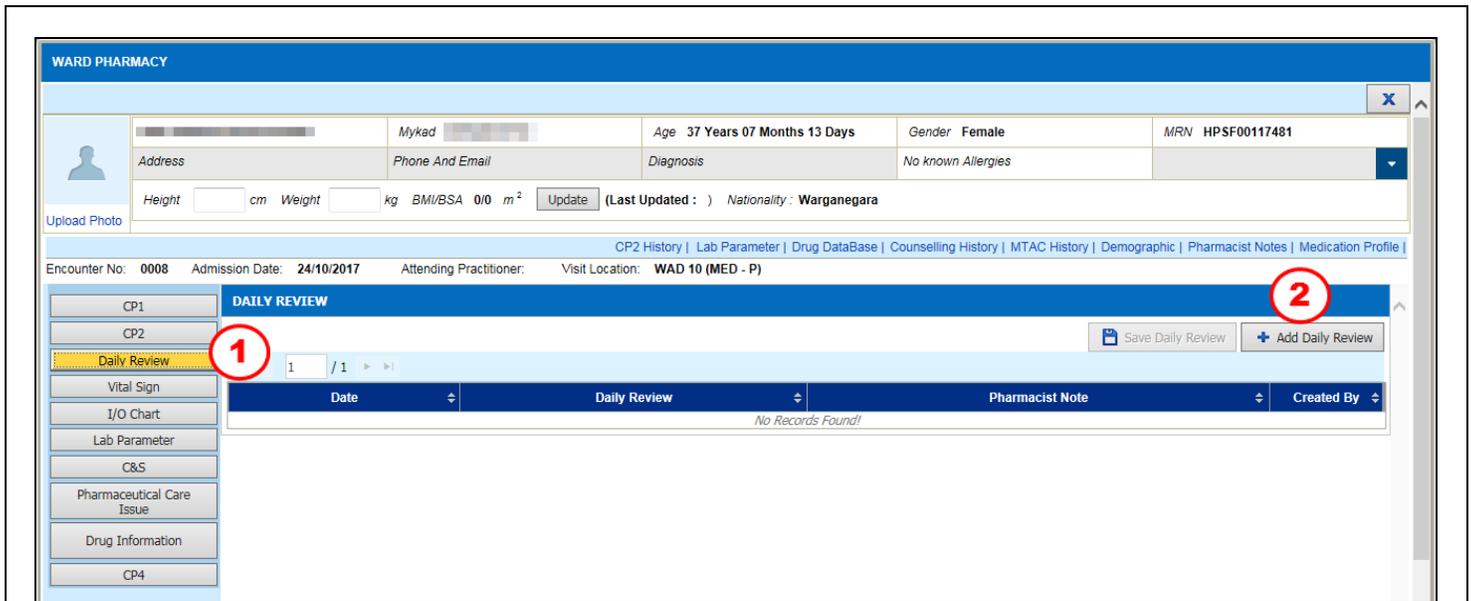


Figure 3.1.3-1 Daily Review

#### STEP 1

Click on the **Daily Review** tab on the left side

#### STEP 2

Click on the **+ Add Daily Review** button and Add Daily Review screen will be display as Figure 3.1.3-2

#### Note

Add Daily Review button only will be enable if user completed fill in CP2 information in the system

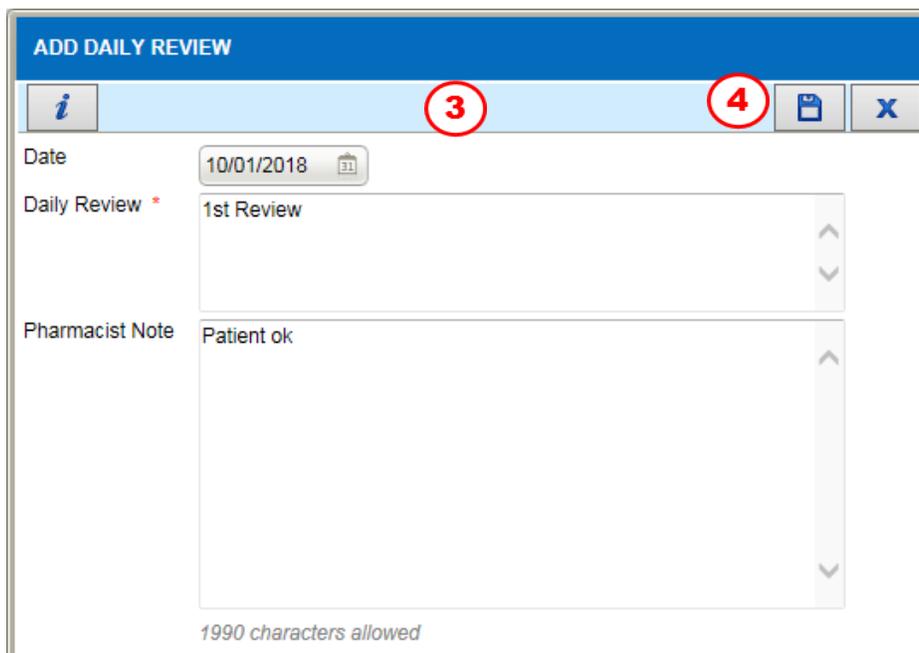


Figure 3.1.3-2 Add Daily Review

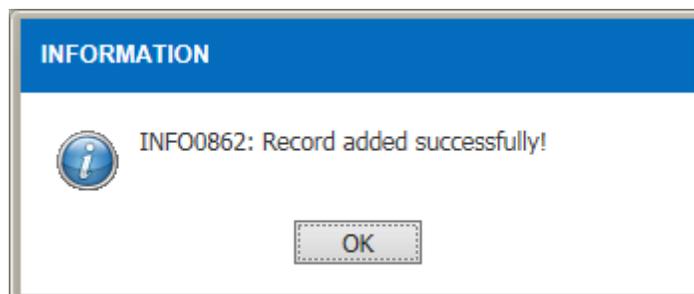
**STEP 3**

Fill in necessary information

- a) **Date**
- b) **Daily Review**
- c) **Pharmacist Note**

**STEP 4**

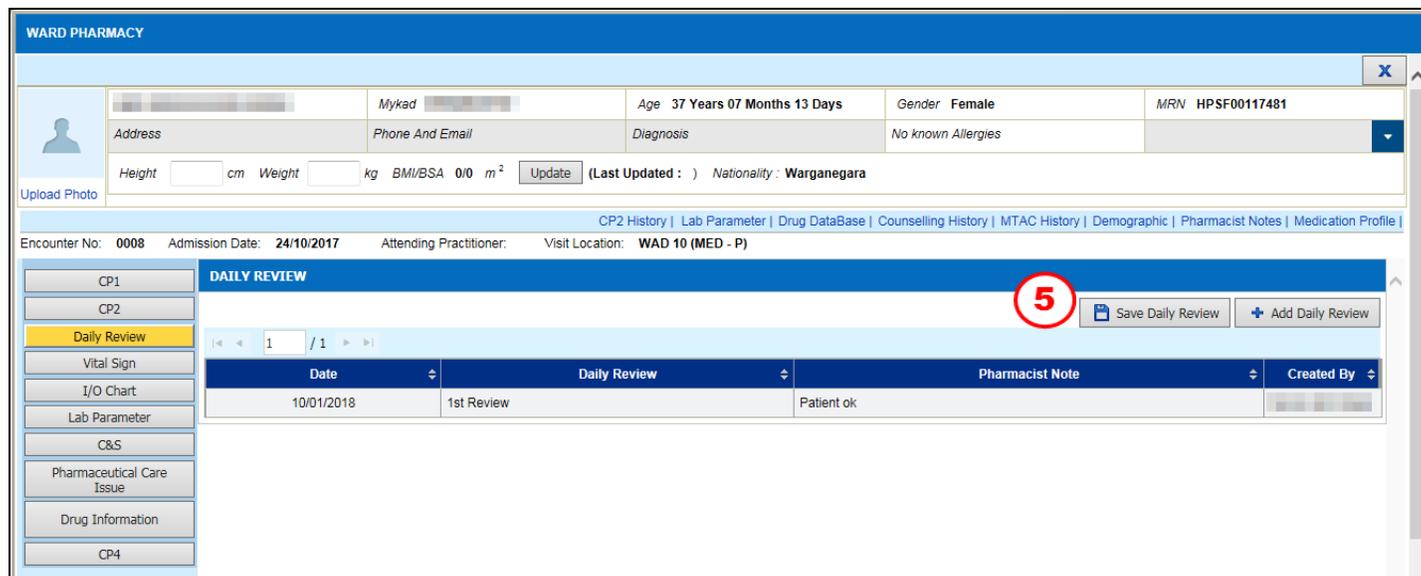
Click on the  button to save the record and confirmation alert will displayed as Figure 3.1.3-3



**Figure 3.1.3-3 Confirmation Alert**

**Note**

- Click on the  button to successfully save the record
- After save the record, the information will displayed in the main screen as Figure 3.1.3-4



**Figure 3.1.3-4 Daily Review**

**Note**

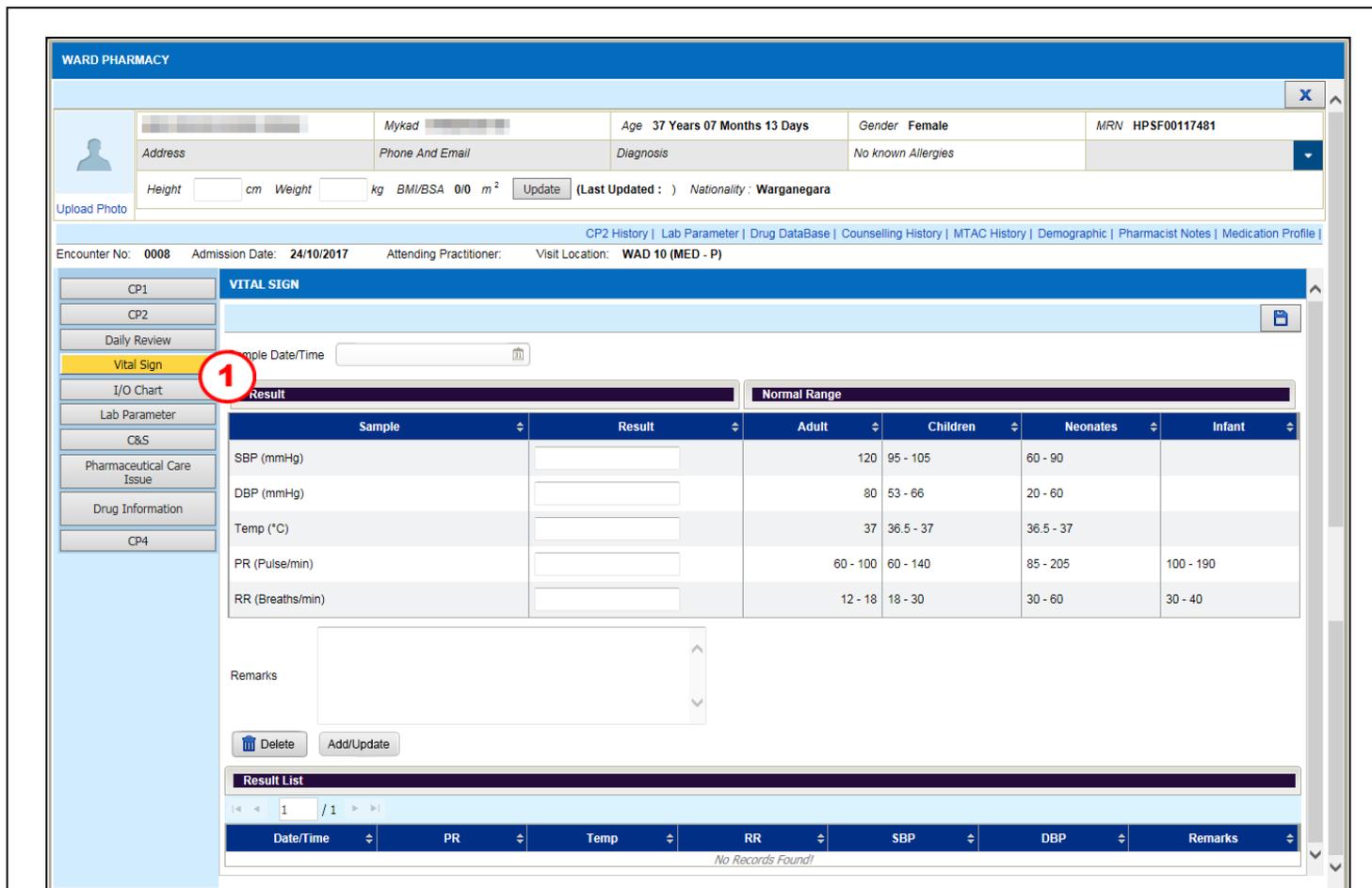
User is allowed to edit the record by double click on the information.

**STEP 5**

Click on the  button to save the Daily review record

### 3.1.4 Vital Sign

To record Vital Sign, perform the step below:



The screenshot displays the 'WARD PHARMACY' interface. At the top, there is a patient information section with fields for Mykad, Age (37 Years 07 Months 13 Days), Gender (Female), and MRN (HPSF00117481). Below this, there are fields for Address, Phone And Email, Diagnosis, and No known Allergies. A section for Height, Weight, BMI/BSA, and Nationality (Warganegara) is also present. A navigation bar includes links for CP2 History, Lab Parameter, Drug DataBase, Counselling History, MTAC History, Demographic, Pharmacist Notes, and Medication Profile. The main content area shows 'Encounter No: 0008', 'Admission Date: 24/10/2017', 'Attending Practitioner:', and 'Visit Location: WAD 10 (MED - P)'. On the left, a vertical menu contains tabs for CP1, CP2, Daily Review, Vital Sign (highlighted in yellow and circled with a red '1'), I/O Chart, Lab Parameter, C&S, Pharmaceutical Care Issue, Drug Information, and CP4. The 'Vital Sign' section includes a 'Sample Date/Time' field, a 'Result' table, and a 'Normal Range' table. The 'Result' table has columns for Sample, Result, Adult, Children, Neonates, and Infant. The 'Normal Range' table has columns for Adult, Children, Neonates, and Infant. Below the tables are 'Delete' and 'Add/Update' buttons, and a 'Remarks' text area. At the bottom, there is a 'Result List' table with columns for Date/Time, PR, Temp, RR, SBP, DBP, and Remarks. The status 'No Records Found!' is displayed at the bottom of the result list.

Figure 3.1.4-1 Vital Sign

#### STEP 1

Click on the **Vital Sign** tab on the left side

**VITAL SIGN**

Sample Date/Time

2

Result	Normal Range				
Sample	Result	Adult	Children	Neonates	Infant
SBP (mmHg)	118	120	95 - 105	60 - 90	
DBP (mmHg)	79	80	53 - 66	20 - 60	
Temp (°C)	37	37	36.5 - 37	36.5 - 37	
PR (Pulse/min)	80	60 - 100	60 - 140	85 - 205	100 - 190
RR (Breaths/min)	14	12 - 18	18 - 30	30 - 60	30 - 40

Remarks

Delete
 Add/Update
4

**Result List**

<< 1 / 1 >>

Date/Time	PR	Temp	RR	SBP	DBP	Remarks
02/01/2018 03:46 PM	80	37	14	118	79	

Figure 3.1.4-2 Vital Sign

**STEP 2**

Select **Sample Date/Time**

**STEP 3**

Fill in necessary information

- a) **SBP (mmHg)**
- b) **DBP (mmHg)**
- c) **Temp (°C)**
- d) **PR (Pulse/min)**
- e) **RR (Breaths/min)**
- f) **Remarks**

**STEP 4**

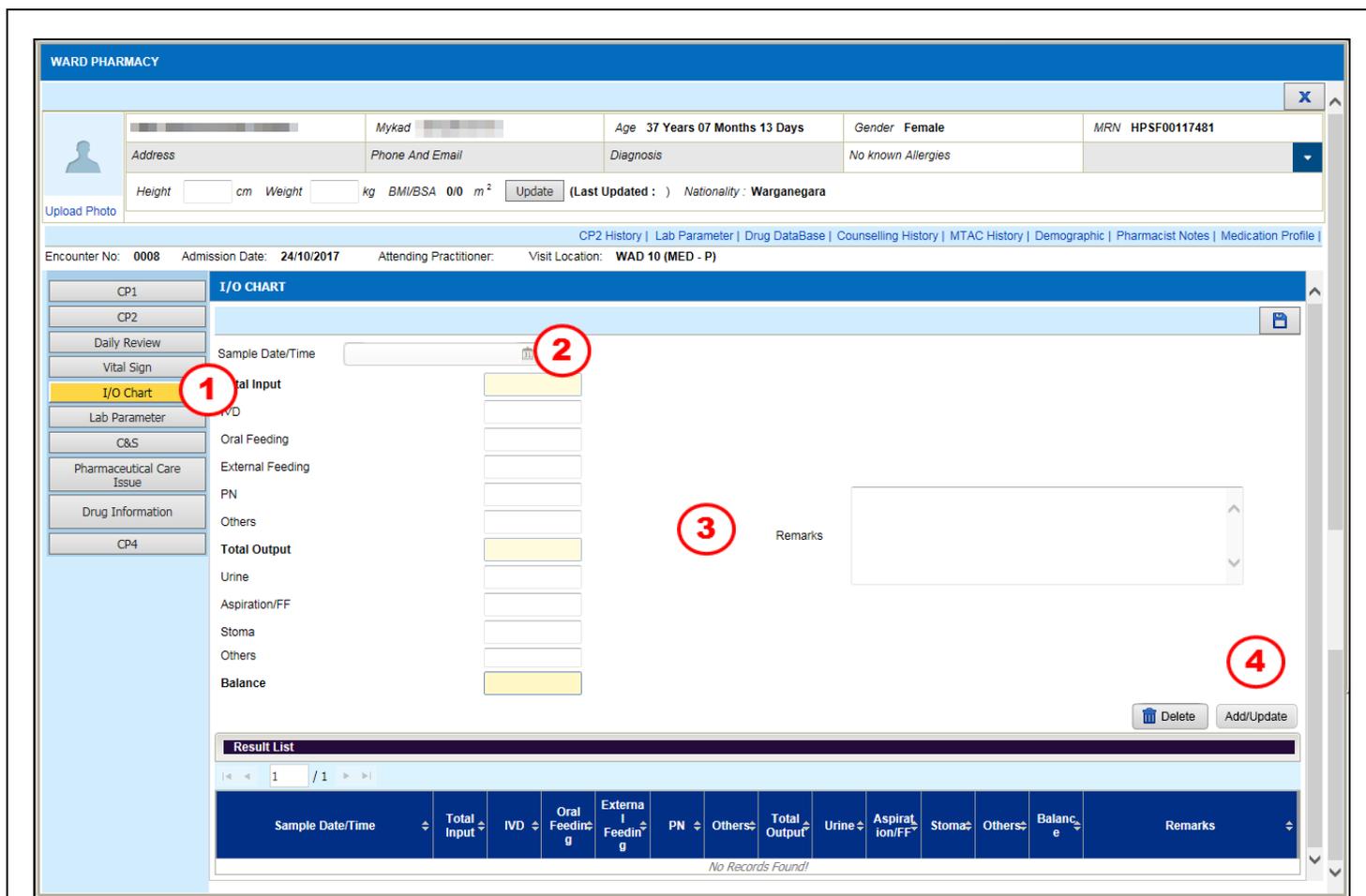
Click on the button to add the information in to Result List

**Note**

- User is allowed to delete the record by click on the button
- User is allowed to update the record by double click on the information in the Result List and edit the information if applicable

### 3.1.5 I/O Chart

To record I/O Chart, perform the step below:



**WARD PHARMACY**

Mykad: [REDACTED] Age: 37 Years 07 Months 13 Days Gender: Female MRN: HPSF00117481

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

Height: [REDACTED] cm Weight: [REDACTED] kg BMI/BSA: 0/0 m<sup>2</sup> Update (Last Updated: ) Nationality: Warganegara

Encounter No: 0008 Admission Date: 24/10/2017 Attending Practitioner: Visit Location: WAD 10 (MED - P)

**I/O CHART**

Sample Date/Time: [REDACTED]

Total Input: [REDACTED]

IVD: [REDACTED]

Oral Feeding: [REDACTED]

External Feeding: [REDACTED]

PN: [REDACTED]

Others: [REDACTED]

Total Output: [REDACTED]

Urine: [REDACTED]

Aspiration/FF: [REDACTED]

Stoma: [REDACTED]

Others: [REDACTED]

Balance: [REDACTED]

Remarks: [REDACTED]

Delete Add/Update

**Result List**

Sample Date/Time	Total Input	IVD	Oral Feeding	External Feeding	PN	Others	Total Output	Urine	Aspiration/FF	Stoma	Others	Balance	Remarks
No Records Found!													

Figure 3.1.5-1 I/O Chart

#### STEP 1

Click on the **I/O Chart** tab on the left side

#### STEP 2

Select **Sample Date/Time**

#### STEP 3

Fill in all necessary information

- IVD
- Oral Feeding
- External Feeding
- PN
- Others
- Urine
- Aspiration/FF
- Stoma
- Others
- Balance
- Remarks

#### STEP 4

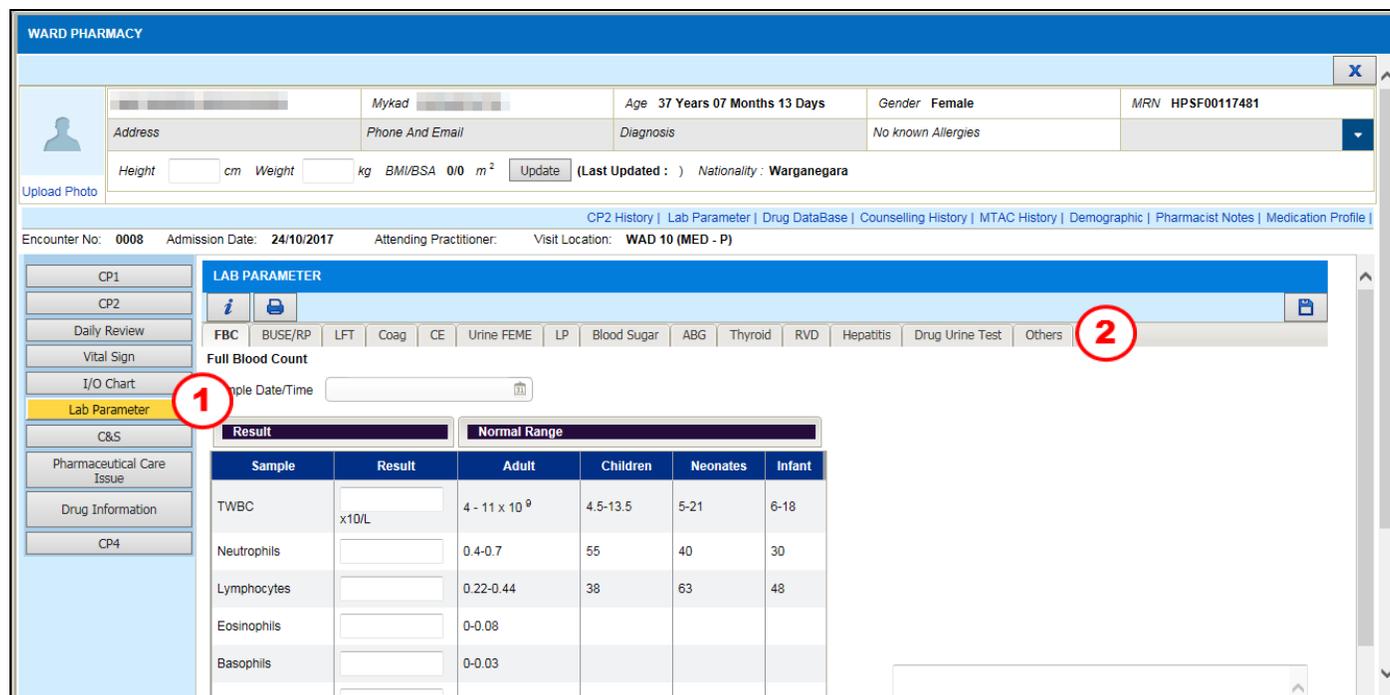
Click on the  button to add the information in to Result List

#### **Note**

- *User is allowed to delete the record by click on the  button*
- *User is allowed to update the record by double click on the information in the Result List and edit the information if applicable*

### 3.1.6 Lab Parameter

To record Lab Parameter, perform the step below:



**WARD PHARMACY**

Mykad: [REDACTED] Age: 37 Years 07 Months 13 Days Gender: Female MRN: HPSF00117481

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

Height: [REDACTED] cm Weight: [REDACTED] kg BMI/BSA: 0/0 m<sup>2</sup> Update (Last Updated: ) Nationality: Warganegara

CP2 History | Lab Parameter | Drug DataBase | Counselling History | MTAC History | Demographic | Pharmacist Notes | Medication Profile

Encounter No: 0008 Admission Date: 24/10/2017 Attending Practitioner: Visit Location: WAD 10 (MED - P)

**LAB PARAMETER**

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

Full Blood Count

Sample Date/Time

Sample	Result	Normal Range			
		Adult	Children	Neonates	Infant
TWBC	x10 <sup>9</sup> /L	4 - 11 x 10 <sup>9</sup>	4.5-13.5	5-21	6-18
Neutrophils		0.4-0.7	55	40	30
Lymphocytes		0.22-0.44	38	63	48
Eosinophils		0-0.08			
Basophils		0-0.03			

Figure 3.1.6-1 Lab Parameter

#### STEP 1

Click on the **Lab Parameter** tab on the left side

#### STEP 2

Select Lab Parameter that consist of:

- PBX**
- BUSE/RP**
- LFT**
- Coug**
- CE**
- Urine FEME**
- LP**
- Blood Sugar**
- ABG**
- Thyroid**
- RVD**
- Hepatitis**
- Drug Urine Test**
- Others**

**LAB PARAMETER**

i
📄

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

**Full Blood Count**

Sample Date/Time

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

🗑️ Delete
Add/Update

Remarks

**Result List**

1 / 1

Sample Date/Time	TWBC	Neutrophils	Lymphocytes	Eosinophils	Basophils	RBC	Monocytes	MCV	Mpv	Hb	HCT	Mch	Mchc	Platelet	Remarks
No Records Found!															

**Figure 3.1.6-2 Lab Parameter**

**STEP 3**

Fill in all necessary information

**STEP 4**

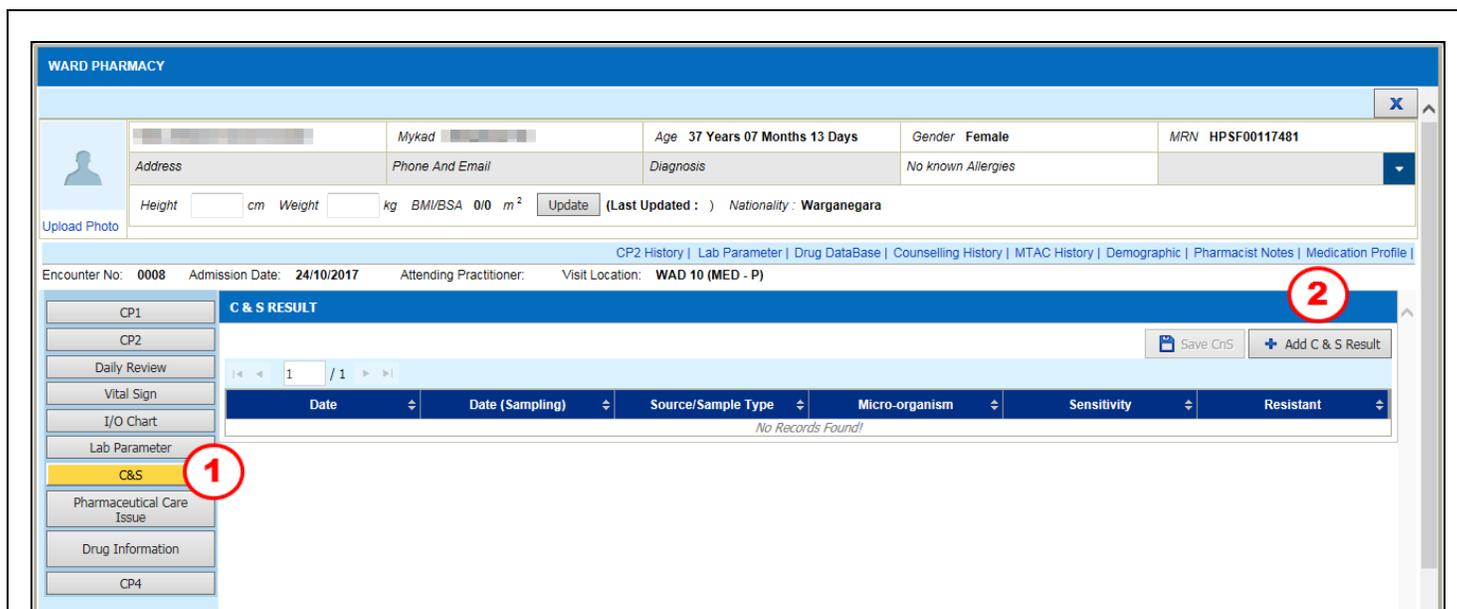
Click on the  button to add the information in to Result List

**Note**

- User is allowed to delete the record by click on the  button
- User is allowed to update the record by double click on the information in the Result List and edit the information if applicable
- The step is the same for all other Lab Parameter

### 3.1.7 C&S

To record C&S, perform the step below:



The screenshot shows the 'WARD PHARMACY' interface. On the left sidebar, the 'C&S' tab is highlighted with a red circle labeled '1'. The main content area shows the 'C & S RESULT' screen. At the top right of this screen, the '+ Add C & S Result' button is highlighted with a red circle labeled '2'. The patient information at the top includes Mykad, Age (37 Years 07 Months 13 Days), Gender (Female), and MRN (HPSF00117481). The encounter number is 0008 and the admission date is 24/10/2017. The visit location is WAD 10 (MED - P). The table below the header is currently empty with the text 'No Records Found!'.

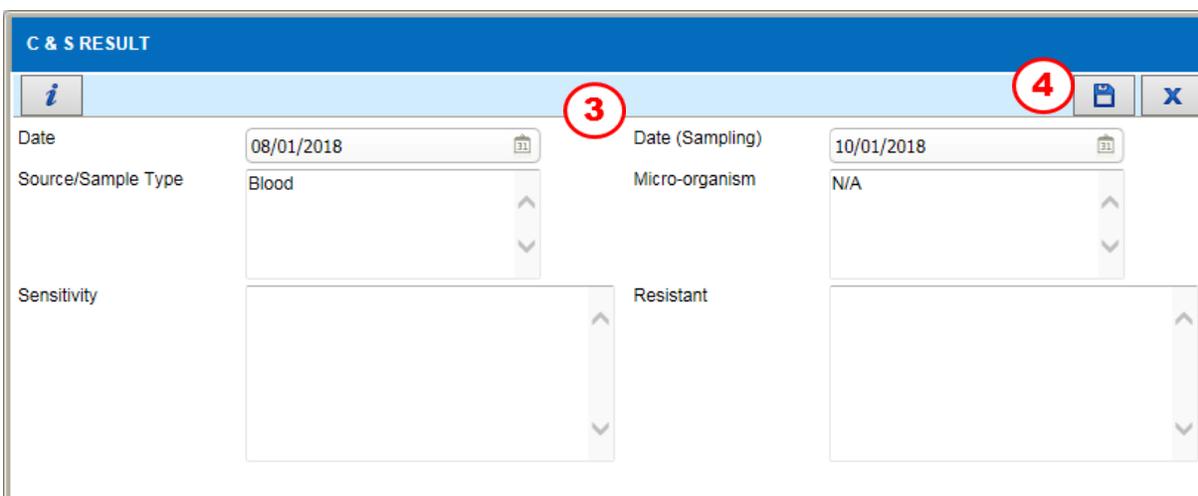
Figure 3.1.7-1 C&S

#### STEP 1

Click on the **C&S** tab on the left side

#### STEP 2

Click on the **+ Add C & S Result** button and C&S Result screen will displayed as Figure 3.1.7-2



The screenshot shows the 'C & S RESULT' form. The 'Date' field is set to 08/01/2018 and the 'Date (Sampling)' field is set to 10/01/2018. The 'Source/Sample Type' is 'Blood' and the 'Micro-organism' is 'N/A'. The 'Sensitivity' and 'Resistant' fields are empty. A red circle labeled '3' highlights the information icon (i) at the top left, and a red circle labeled '4' highlights the save button (floppy disk icon) at the top right.

Figure 3.1.7-2 C&S Result

#### STEP 3

Fill in all the necessary information

- Date**
- Date (Sampling)**
- Source/Sample Type**
- Micro-organism**

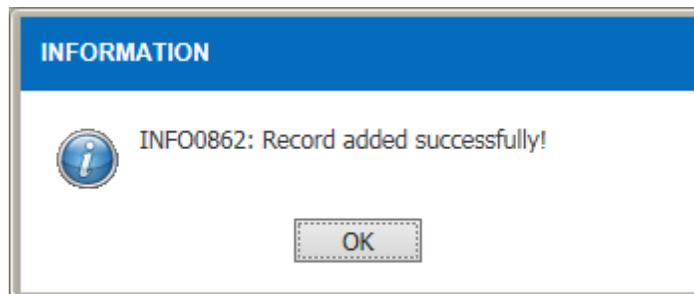
- e) **Sensitivity**
- f) **Resistant**

**Note**

user is allow to edit **Date** with the condition of 5 days backdated

**STEP 4**

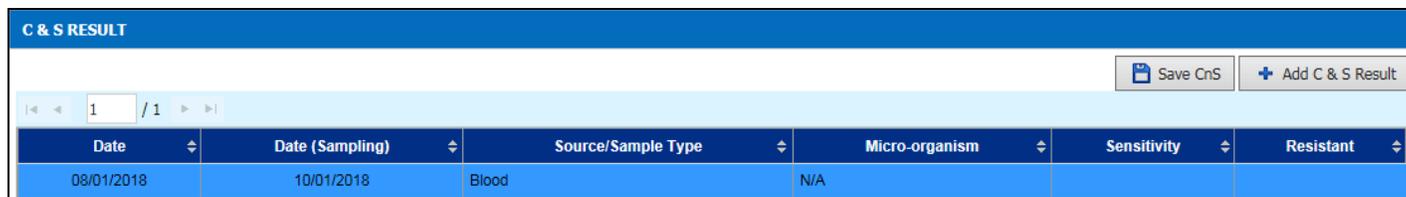
Click on the  button to save the record and system will display information alert as Figure 3.1.7-3



**Figure 3.1.7-3 Information Alert**

**Note**

- Click on the  button to successfully save the record
- After saved, the information will be display at the C&S main screen as Figure 3.1.7-4



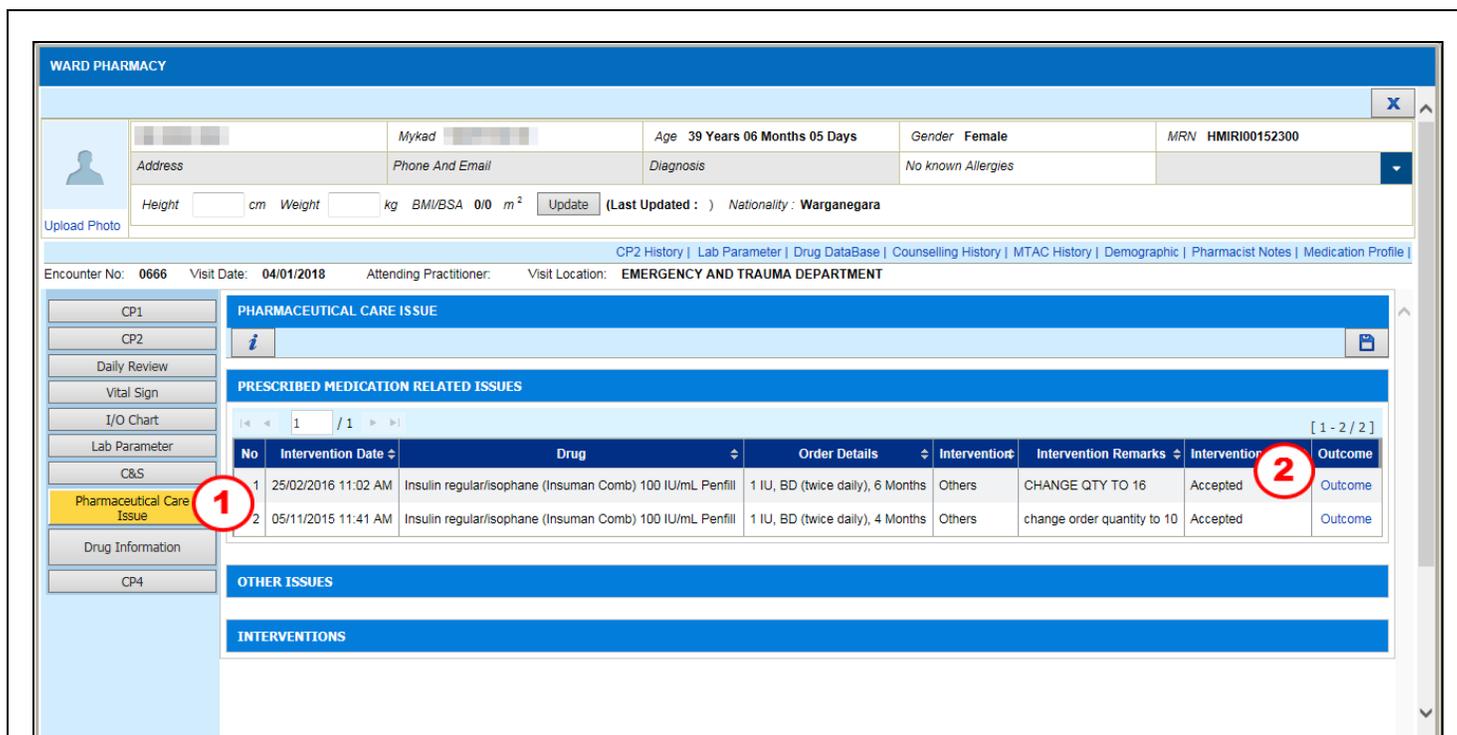
The image shows a screenshot of the "C & S RESULT" screen. At the top right, there are two buttons: "Save CnS" and "+ Add C & S Result". Below the buttons is a pagination control showing "1 / 1". The main content is a table with the following columns: Date, Date (Sampling), Source/Sample Type, Micro-organism, Sensitivity, and Resistant. The table contains one row of data.

Date	Date (Sampling)	Source/Sample Type	Micro-organism	Sensitivity	Resistant
08/01/2018	10/01/2018	Blood	N/A		

**Figure 3.1.7-4 C&S Result**

### 3.1.8 Pharmaceutical Care Issue

To record Pharmaceutical Care Issue, perform the step below:



WARD PHARMACY

Mykad: [REDACTED] Age: 39 Years 06 Months 05 Days Gender: Female MRN: HMIRI00152300

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

Height: [REDACTED] cm Weight: [REDACTED] kg BMI/BSA: 0/0 m<sup>2</sup> Update (Last Updated: ) Nationality: Warganegara

Encounter No: 0666 Visit Date: 04/01/2018 Attending Practitioner: [REDACTED] Visit Location: EMERGENCY AND TRAUMA DEPARTMENT

CP1 CP2 Daily Review Vital Sign I/O Chart Lab Parameter C&S **Pharmaceutical Care Issue** Drug Information CP4

PHARMACEUTICAL CARE ISSUE

PRESCRIBED MEDICATION RELATED ISSUES

No	Intervention Date	Drug	Order Details	Intervention	Intervention Remarks	Intervention	Outcome
1	25/02/2016 11:02 AM	Insulin regular/isophane (Insuman Comb) 100 IU/mL Penfill	1 IU, BD (twice daily), 6 Months	Others	CHANGE QTY TO 16	Accepted	Outcome
2	05/11/2015 11:41 AM	Insulin regular/isophane (Insuman Comb) 100 IU/mL Penfill	1 IU, BD (twice daily), 4 Months	Others	change order quantity to 10	Accepted	Outcome

OTHER ISSUES

INTERVENTIONS

Figure 3.1.8-1 Pharmaceutical Care Issue

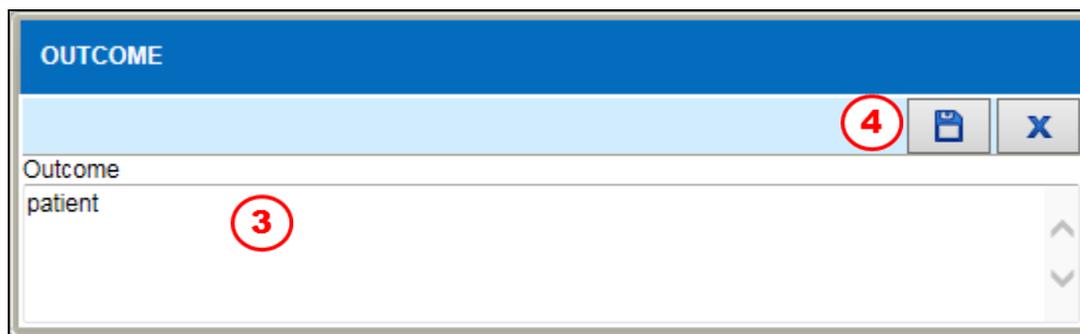
#### STEP 1

Pharmaceutical Care Issue

Click on the **Pharmaceutical Care Issue** tab on the left side

#### STEP 2

Enter the **Prescribed Medication Related Issues** if applicable by click on the **Outcome** hyperlink



OUTCOME

Outcome patient

Save (4)

Figure 3.1.8-2 Outcome

#### STEP 3

Enter the information **outcome**

#### STEP 4

Click on the  button to save the record

**Note**  
*Prescribed Medication Related Issues* is only available if pharmacists do the prescription intervention during dispensing stage

**OTHER ISSUES**

Date:  5

Interventions/Requests Encountered

Type of Intervention:  \*

Description:  \*

PCI:

Status of Intervention \*  
 Accepted  
 Not Accepted

Pharmacist Recommendation:

Outcome:

6

**INTERVENTIONS**

1 / 1

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

**Figure 3.1.8-3 Other Issues**

**STEP 5**

Enter '*Other Issues*' if applicable

- a) *Date*
- b) *Type of Intervention*
- c) *PCI*
- d) *Pharmacist Recommendation*
- e) *Description*
- f) *Status of Intervention*
  - *Accepted*
  - *Not Accepted*
- g) *Outcome*

**Note**

*This section is use for ward pharmacist to record other PCI issue that is not related to dispensing intervention.*

**STEP 6**

Click on the  button to add the record and it will display in Interventions section as Figure 3.1.8-4

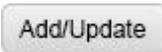
**INTERVENTIONS**

1 / 1

Date	Type of Intervention	Description	PCI	Pharmacist Recommendation	Status of Intervention	Outcome	Follow-up	Checklist
10/01/2018	Incomplete Prescriptions	Dose			Accepted			■

**Figure 3.1.8-4 Interventions**

**Note**

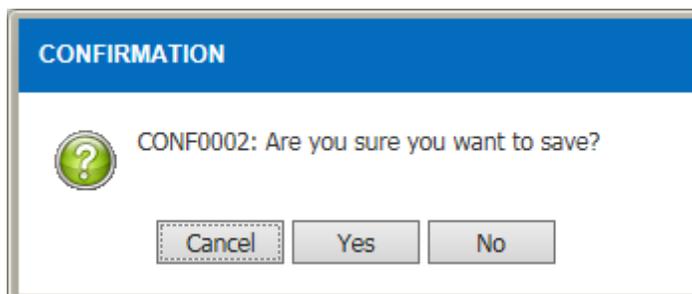
- To edit information in **'Interventions'** section, double click on the data then click on the  button. Change the information that display in the **'Other Issue'** section.
- To delete information in **'Interventions'** section, click on the information checkbox then click on the  button.

PHARMACEUTICAL CARE ISSUE								
								 <span style="border: 1px solid red; border-radius: 50%; padding: 2px 5px; font-weight: bold; color: red;">7</span> 
PRESCRIBED MEDICATION RELATED ISSUES								
								[ 1 - 2 / 2 ]
No	Intervention Date	Drug	Order Details	Intervention	Intervention Remarks	Intervention Status	Outcome	
1	25/02/2016 11:02 AM	Insulin regular/isophane (Insuman Comb) 100 IU/mL Penfill	1 IU, BD (twice daily), 6 Months	Others	CHANGE QTY TO 16	Accepted	Outcome	
2	05/11/2015 11:41 AM	Insulin regular/isophane (Insuman Comb) 100 IU/mL Penfill	1 IU, BD (twice daily), 4 Months	Others	change order quantity to 10	Accepted	Outcome	

**Figure 3.1.8-5 Pharmaceutical Care Issue**

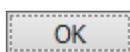
**STEP 7**

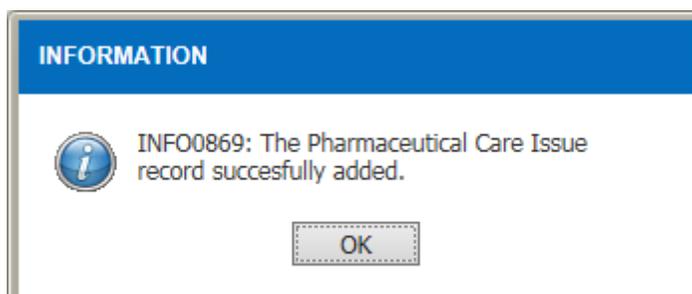
Click on the  button to save the record and system will displayed confirmation alert as Figure 3.1.8-6



**Figure 3.1.8-6 Confirmation Alert**

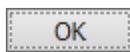
**Note**

Click on the  button to save the record and system will display information alert as Figure 3.1.8-7



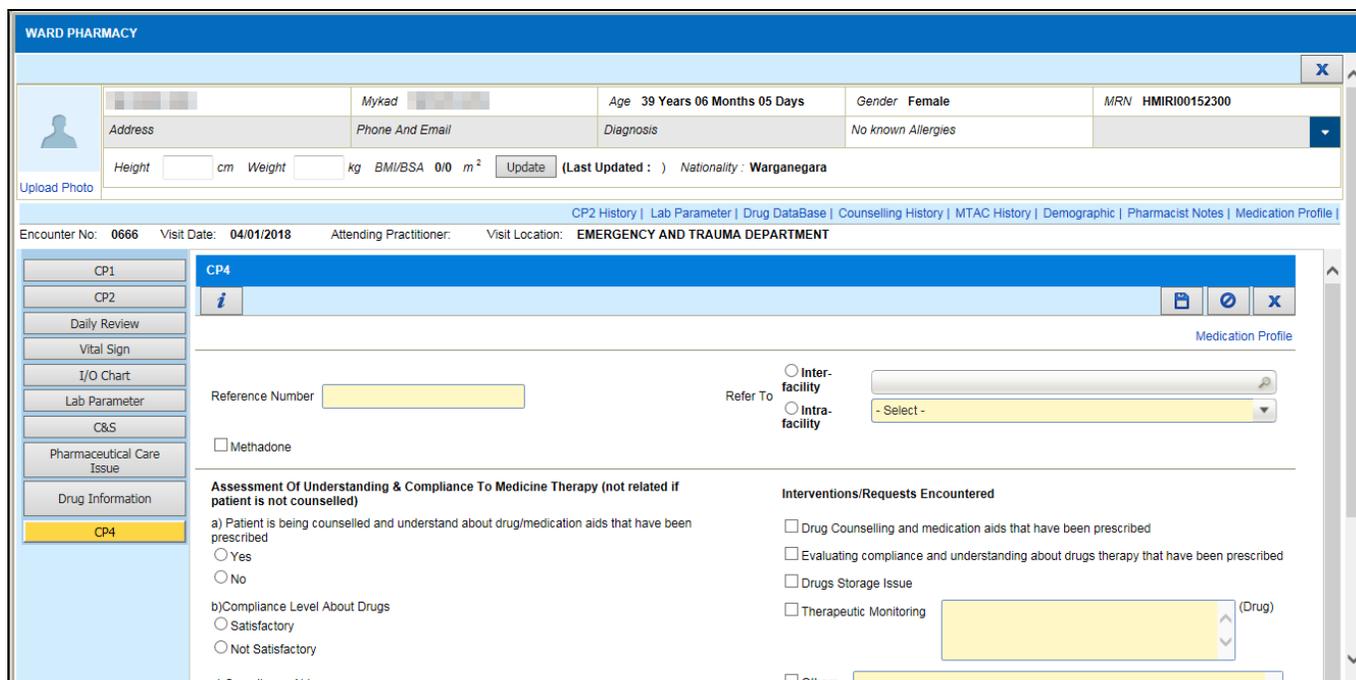
**Figure 3.1.8-7 Information Alert**

**Note**

Click on the  button to successfully save

## 3.1.9 CP4

To record CP4, perform the step below:



**WARD PHARMACY**

Mykad: [Redacted] Age: 39 Years 06 Months 05 Days Gender: Female MRN: HMIRI00152300

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

Height: [Redacted] cm Weight: [Redacted] kg BMI/BSA: 0/0 m<sup>2</sup> Update (Last Updated: ) Nationality: Warganegara

Encounter No: 0666 Visit Date: 04/01/2018 Attending Practitioner: Visit Location: EMERGENCY AND TRAUMA DEPARTMENT

**CP4**

Reference Number: [Redacted]

Refer To:  Inter-facility  Intra-facility

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

**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

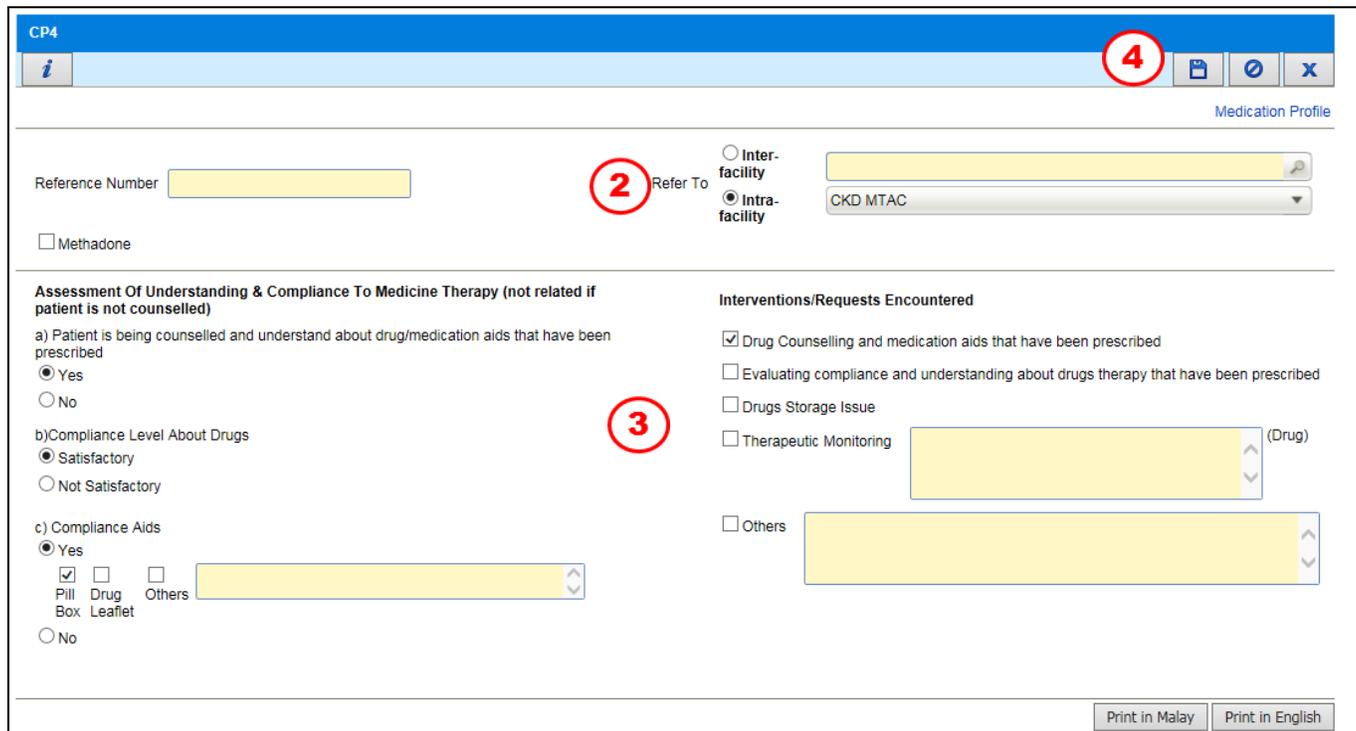
Therapeutic Monitoring [Redacted] (Drug)

Figure 3.1.9-1 CP4

### STEP 1

Click on the **CP4** tab on the left side

**To Record CP4**



CP4 Medication Profile

Reference Number

Methadone

Refer To:  Inter-facility  Intra-facility

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  (Drug)
- Others

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

Print in Malay | Print in English

Figure 3.1.9-2 CP4

**STEP 2**

Select **Refer To**

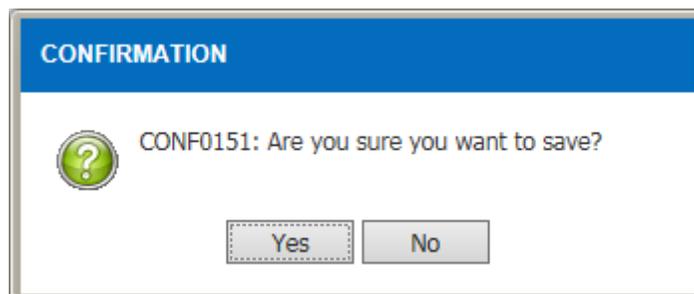
- a) **Inter-facility**
- b) **Intra-facility**

**STEP 3**

Fill up the question

**STEP 4**

Click on the  button to save the record



**CONFIRMATION**

CONF0151: Are you sure you want to save?

Yes No

Figure 3.1.9-3 Confirmation Alert

**Note**

Click on the  button to save the record

### To Record CP4 Methadone



CP4

Medication Profile

Reference Number

Refer To  Inter-facility  Intra-facility

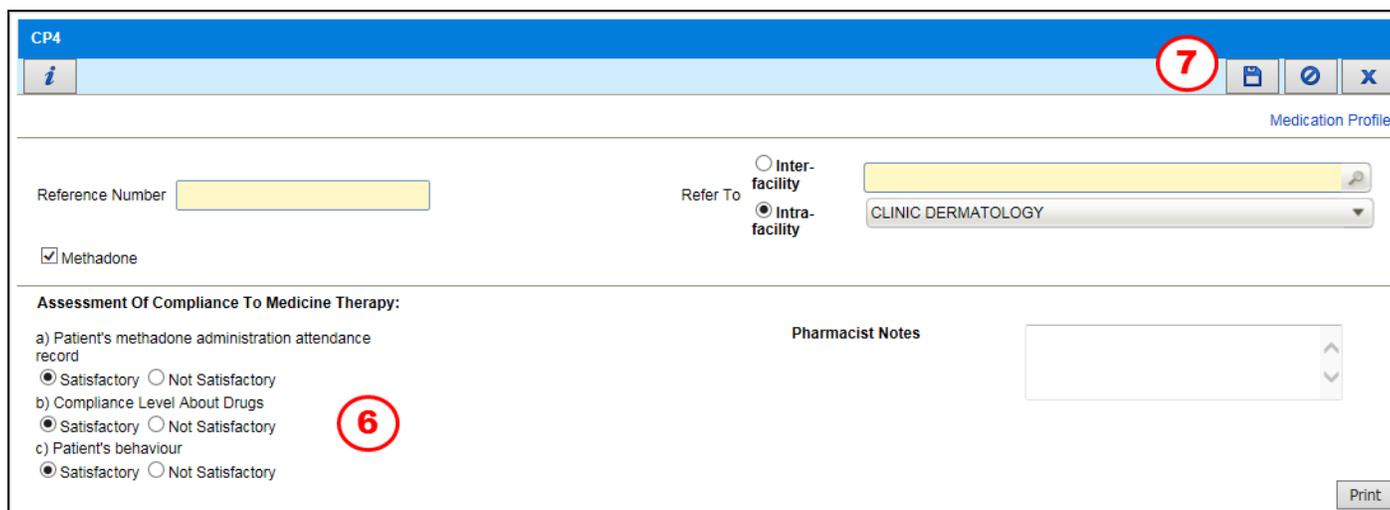
Methadone

CLINIC DERMATOLOGY

Figure 3.1.9-4 CP4 Methadone

### STEP 5

Click on the **Methadone** checkbox



CP4

Medication Profile

Reference Number

Refer To  Inter-facility  Intra-facility

Methadone

**Assessment Of Compliance To Medicine Therapy:**

a) Patient's methadone administration attendance record  
 Satisfactory  Not Satisfactory

b) Compliance Level About Drugs  Satisfactory  Not Satisfactory

c) Patient's behaviour  Satisfactory  Not Satisfactory

Pharmacist Notes

Print

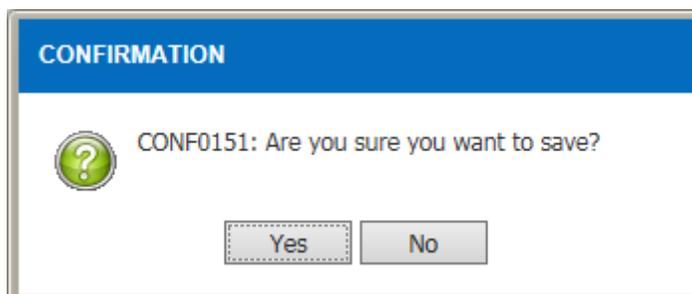
Figure 3.1.9-5 CP4 Methadone

### STEP 6

Fill up the question

### STEP 7

Click on the  button to save the record



CONFIRMATION

CONF0151: Are you sure you want to save?

Yes No

Figure 3.1.9-6 Confirmation Alert

### Note

Click on the  button to save the record

## 4.0 Acronyms

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

## 5.0 Links to Clinical Modules

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