



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

Pharmacy Based

**User Manual
Ward Pharmacy**

Version	: 9th EDITION
Document ID	: PB_U. MANUAL_WARD PHARMACY



PhIS & CPS Project
User Manual – Ward Pharmacy



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Application reference: PhIS & CPS v2.0

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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)

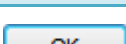
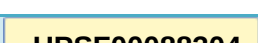
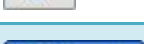
1.3 Organised Sections

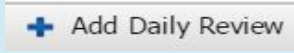
These are the sections within this document:

- 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		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		

Ward Pharmacy (CP2) Module Legend			
	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	9 & 10
CP2 HPI - To set maximum 500 characters	9 & 10
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)	14

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

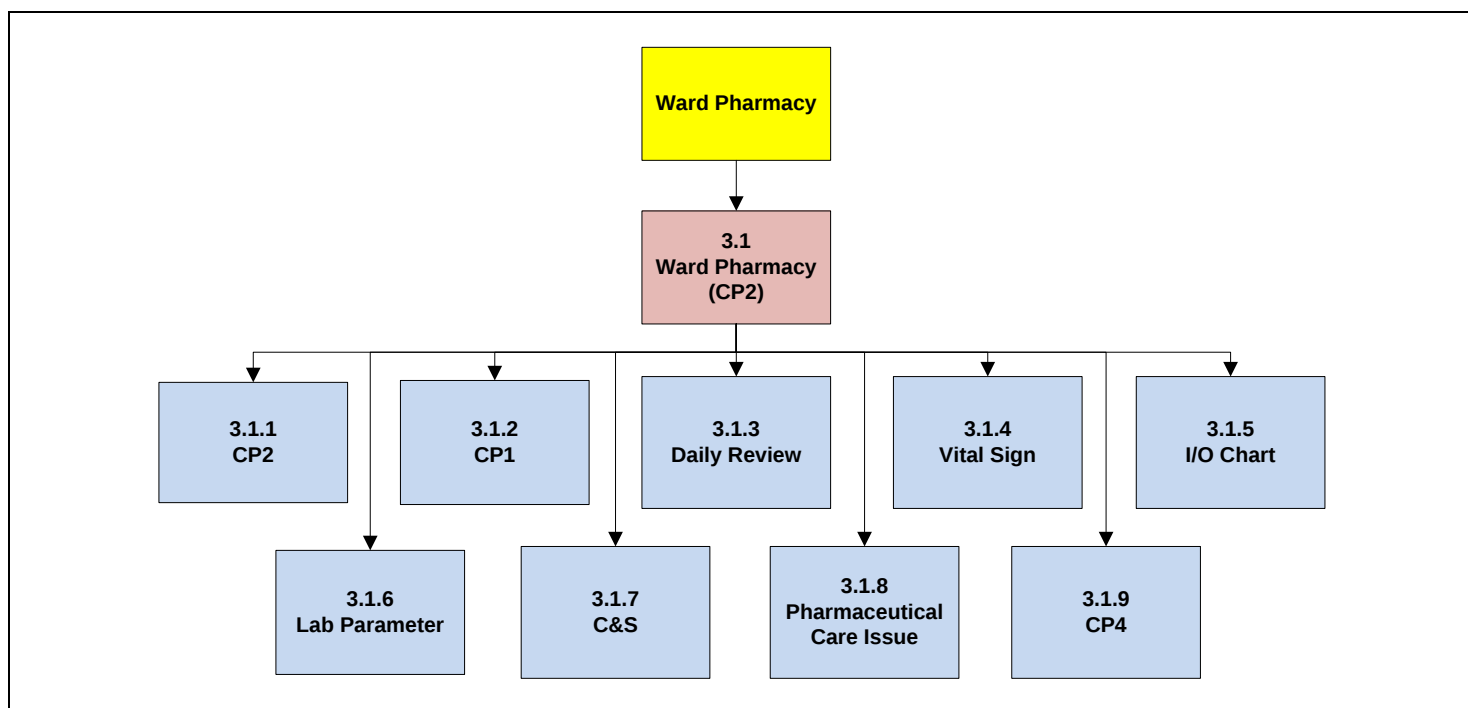


Figure 3.1

Functional Description

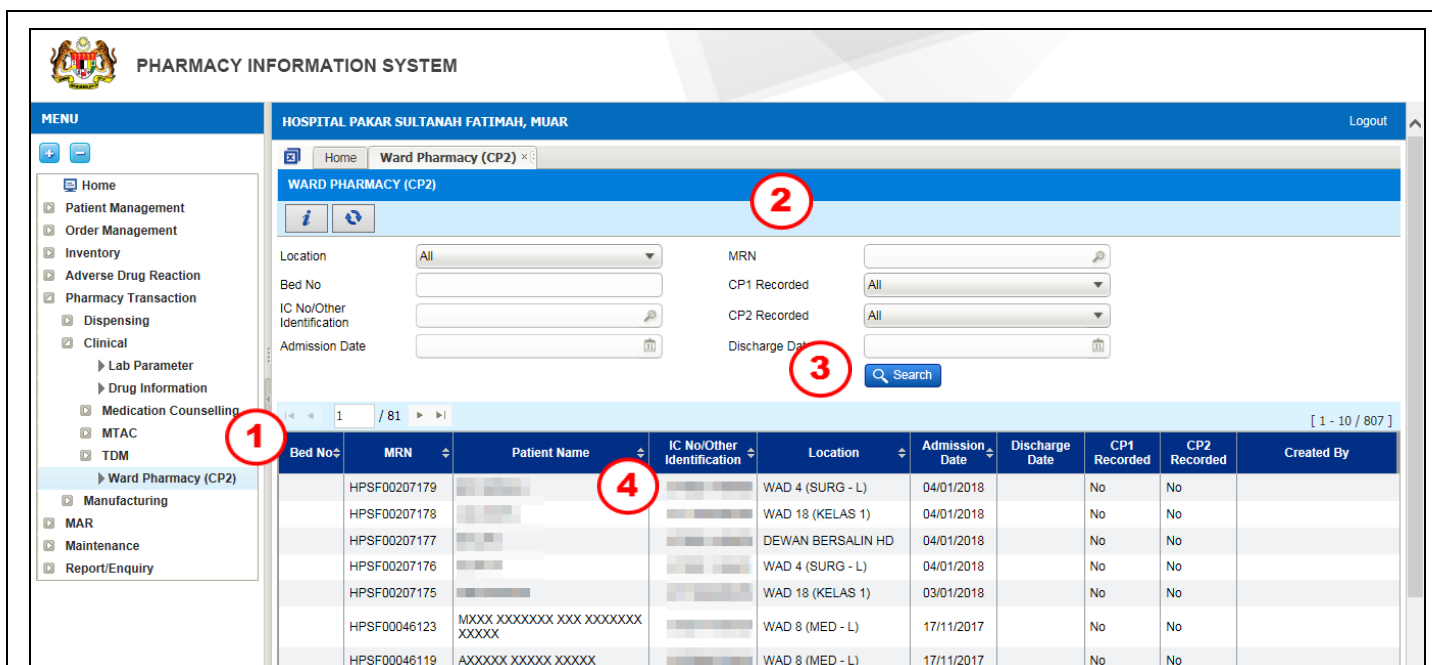
Ward Pharmacy comprises of nine (9) functions:

- 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.



PHARMACY INFORMATION SYSTEM

HOSPITAL PAKAR SULTANAH FATIMAH, MUAR

WARD PHARMACY (CP2)

Location: All MRN: CP1 Recorded: All CP2 Recorded: All Discharge Date: Search

Bed No	MRN	Patient Name	IC No/Other Identification	Location	Admission Date	Discharge Date	CP1 Recorded	CP2 Recorded	Created By
HPSF00207179				WAD 4 (SURG - L)	04/01/2018		No	No	
HPSF00207178				WAD 18 (KELAS 1)	04/01/2018		No	No	
HPSF00207177				DEWAN BERSALIN HD	04/01/2018		No	No	
HPSF00207176				WAD 4 (SURG - L)	04/01/2018		No	No	
HPSF00207175				WAD 18 (KELAS 1)	03/01/2018		No	No	
HPSF00046123	MXXX XXXXXXXX XXX XXXXXXXX XXXXX			WAD 8 (MED - L)	17/11/2017		No	No	
HPSF00046119	AXXXXX XXXXX XXXXX			WAD 8 (MED - L)	17/11/2017		No	No	

Figure 3.1.1-1 Ward Pharmacy Listing Page

Note

This 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

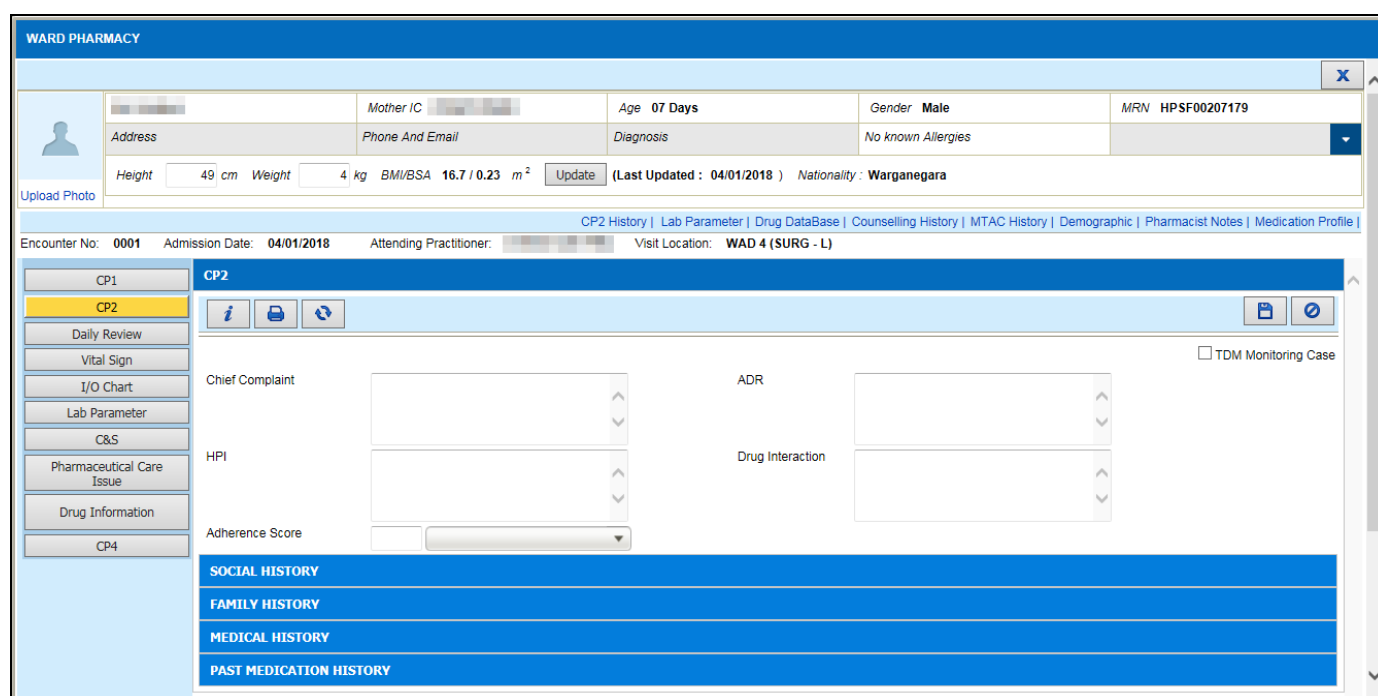
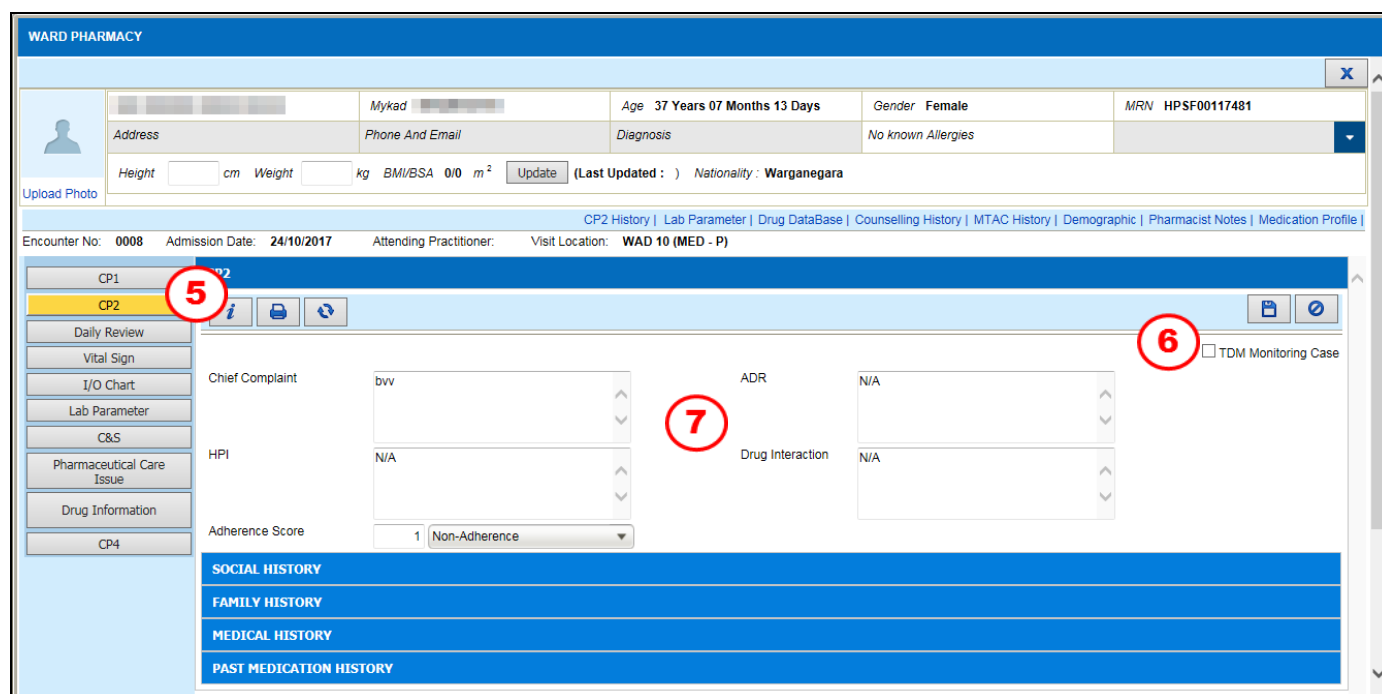


Figure 3.1.1-2 Ward Pharmacy

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



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 m² 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 (5)

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

Chief Complaint: bvv (7) ADR: N/A (6) ☐ TDM Monitoring Case

HPI: N/A Drug Interaction: N/A

Adherence Score: 1 Non-Adherence

SOCIAL HISTORY FAMILY HISTORY MEDICAL HISTORY PAST MEDICATION HISTORY

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**

SOCIAL HISTORY			
Smoking	☐ Yes Sticks/Day For ☐ No ☐ Ex-smoker ☐ Second-hand Smoker	Alcohol Drinking	☐ Yes Amount ☒ No ☐ Ex-Alcoholic
Pregnancy	☐ Yes Trimester ☐ No ☐ Planning To Get Pregnant	Drug Abuse	☐ Yes ☒ No
Diet & Lifestyle			
Education Level			

Figure 3.1.1-4 Social History

STEP 8

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

- Smoking
- Pregnancy
- Diet & Lifestyle
- Alcohol Drinking
- Drug Abuse

Note

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

FAMILY HISTORY			
Marital Status		9 Family History Of Illness	diabetic
No. Of Children			
Lives With	Alone		

Figure 3.1.1-5 Family History

STEP 9

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

- Martial Status
- No Of Children
- Lives With
- Family History Of Illness

Note

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

MEDICAL HISTORY

+ Add

Comorbidity	History
No Records Found!	
Minor surgery	10
Surgical History ☒ Yes ☐ No	
Diagnostic Test	

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 + Add button

PAST MEDICATION HISTORY

Prescription Medication

1 / 1

[1 - 2 / 2]

Drug Name	Dosage	Frequency	Remarks
Betahistine Dihydrochloride 24mg Tablet	24 mg	BD (twice daily)	Inpatient / 14-07-2016 / EncounterNo:0762
Metformin 500 mg and Glibenclamide 2.5 mg Tablet	2 tablet	BD (twice daily)	Inpatient / 14-07-2016 / EncounterNo:0762

Non Prescription Medication

1 / 1

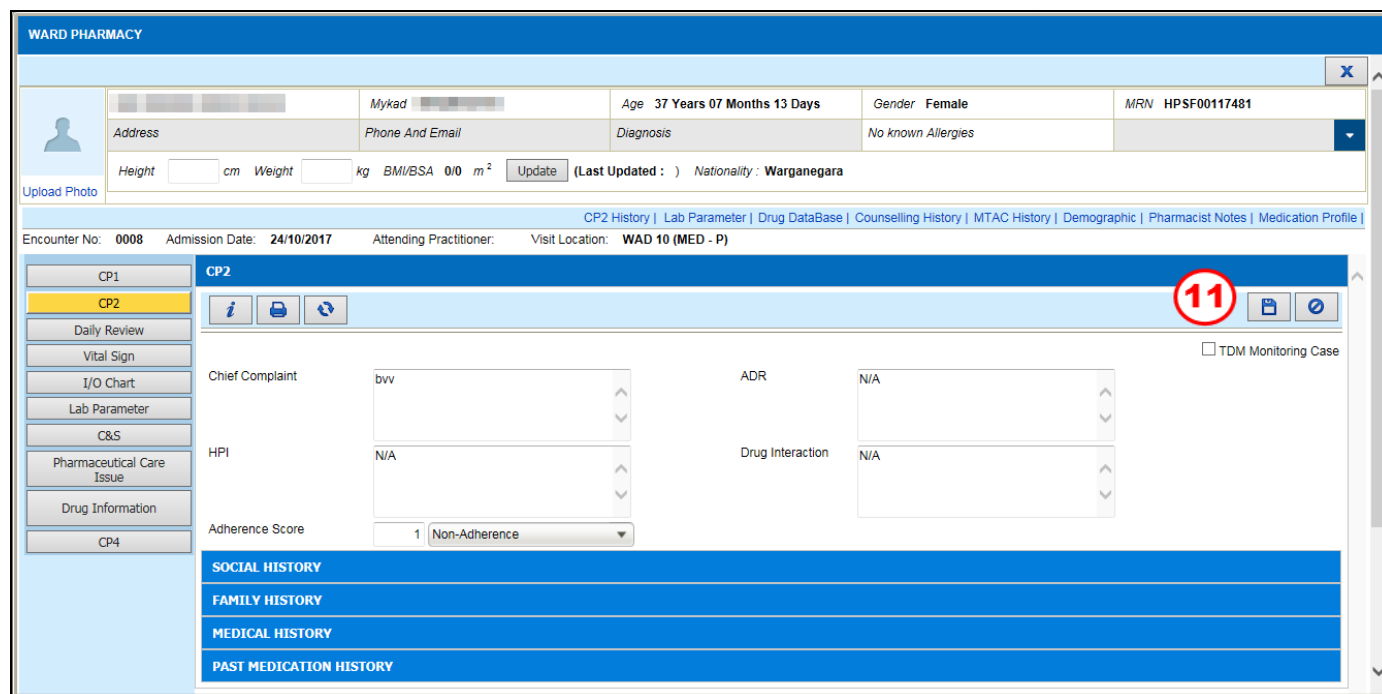
Non-Prescription Medication(Includes Herbal/Vitamin/Other Supplements)	Balance/Comments	Source Of Medication	Reason For Taking
No Records Found!			

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 CP1 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 m² 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 Daily Review Vital Sign I/O Chart Lab Parameter C&S Pharmaceutical Care Issue Drug Information CP4

Chief Complaint: bvv ADR: N/A

HPI: N/A Drug Interaction: N/A

Adherence Score: 1 Non-Adherence

SOCIAL HISTORY

FAMILY HISTORY

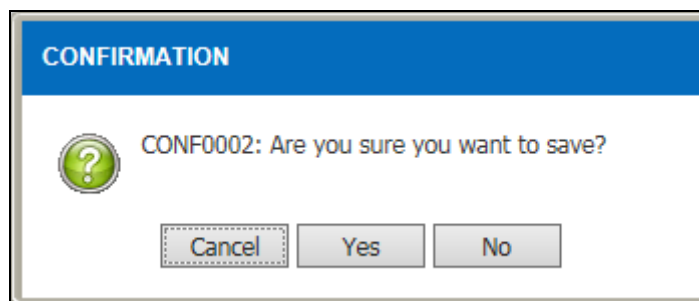
MEDICAL HISTORY

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



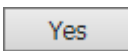
CONFIRMATION

CONF0002: Are you sure you want to save?

Cancel Yes No

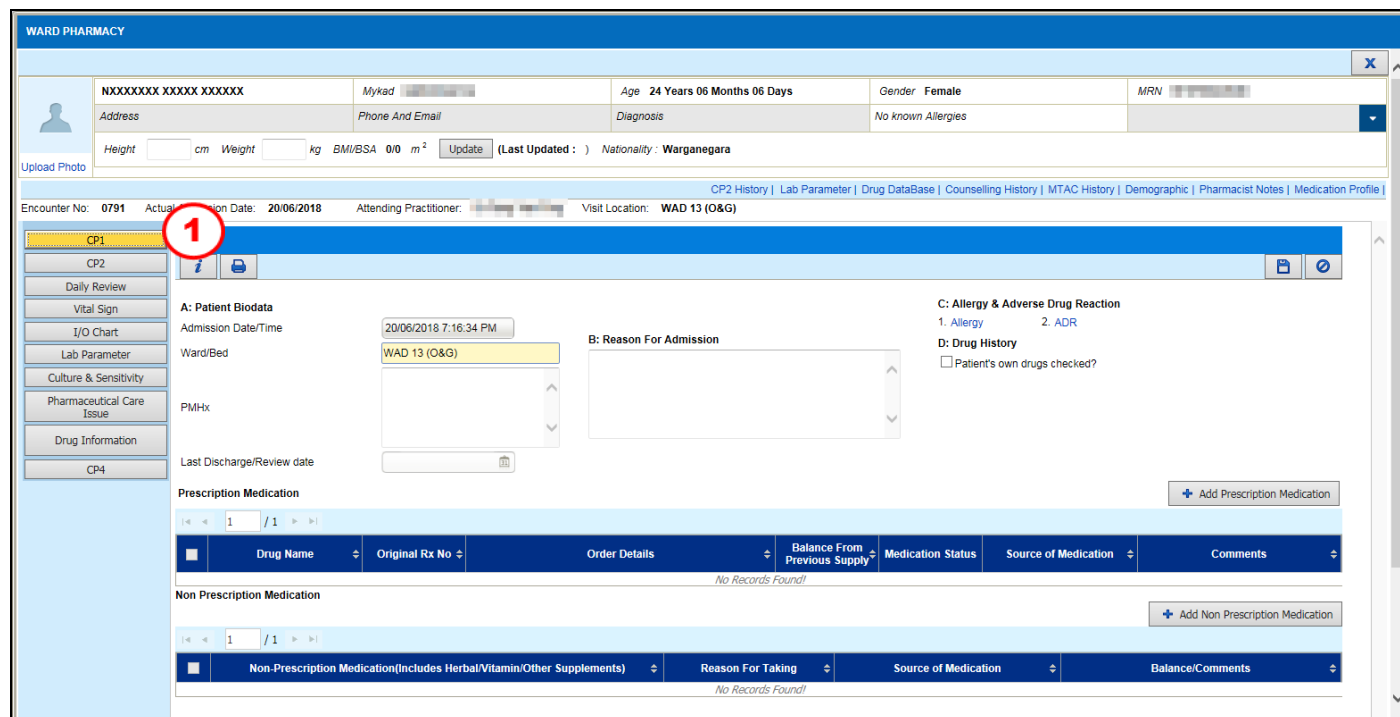
Figure 3.1.1-8 Confirmation Alert

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.



WARD PHARMACY

XXXXXXXX XXXXX XXXXXX Mykad: Age: 24 Years 06 Months 06 Days Gender: Female MRN: No known Allergies

Address: Phone And Email: Diagnosis: Height: cm Weight: kg BMI/BSA: 0/0 m² Update (Last Updated:) Nationality: Warganegara

Encounter No: 0791 Actual Admission Date: 20/06/2018 Attending Practitioner: Visit Location: WAD 13 (O&G)

CP1 CP2 Daily Review Vital Sign I/O Chart Lab Parameter Culture & Sensitivity Pharmaceutical Care Issue Drug Information CP4

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

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
No Records Found!						

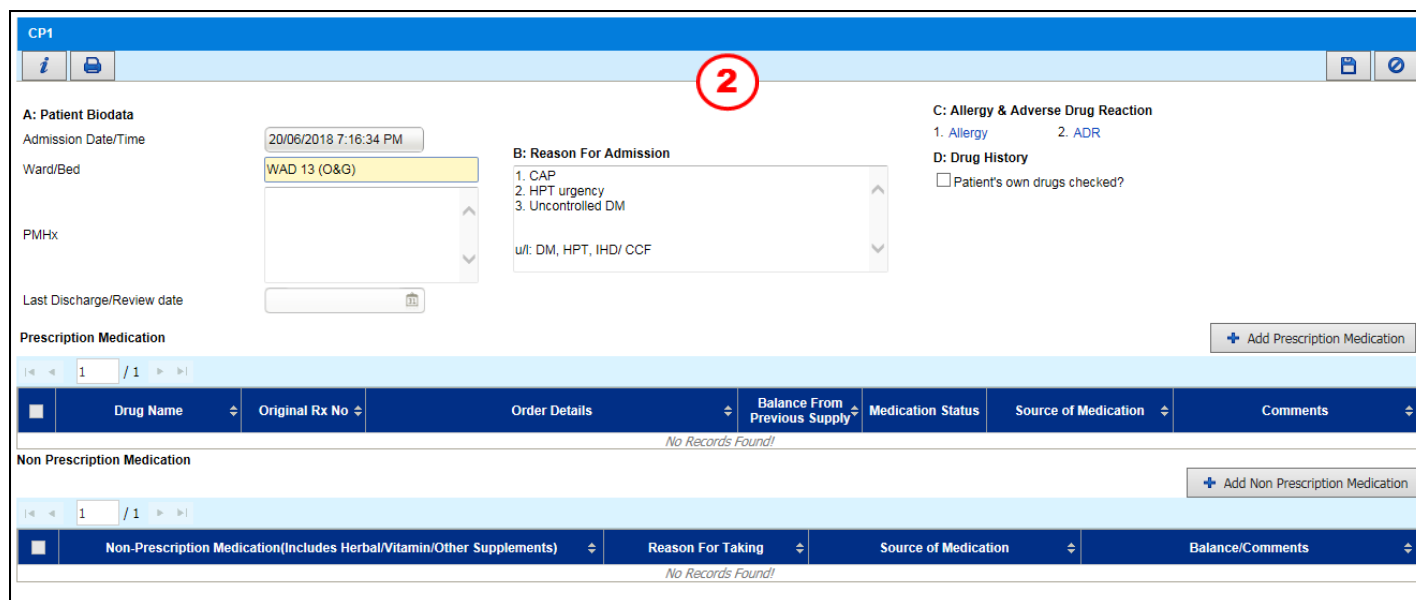
Non Prescription Medication + Add Non Prescription Medication

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

Figure 3.1.2-1 CP1 Button

STEP 1

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



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/I: 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
No Records Found!						

Non Prescription Medication + Add Non Prescription Medication

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

Figure 3.1.2-2 CP1

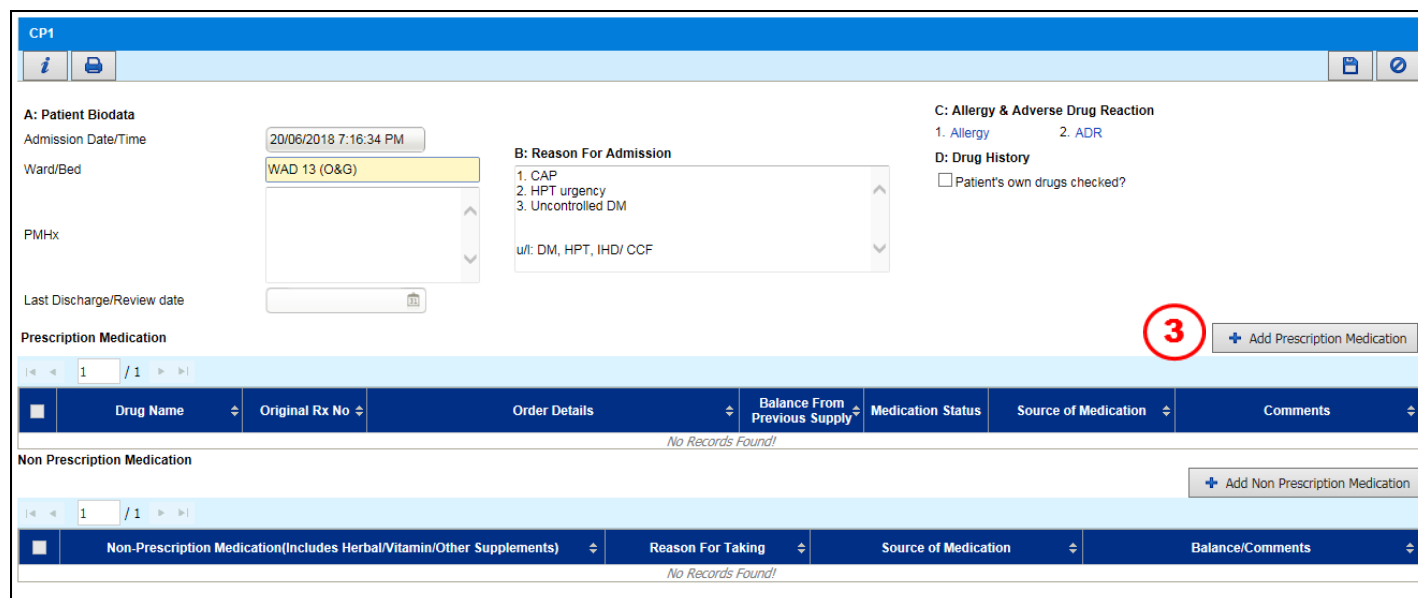
STEP 2

Enter the necessary information

- A: Patient Biodata**
- B: Reason For Admission**
- D: Drug history**

Note

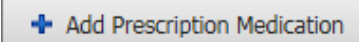
User can view information of patient Allergy and ADR at **C: Allergy & Adverse Drug Reaction** hyperlink

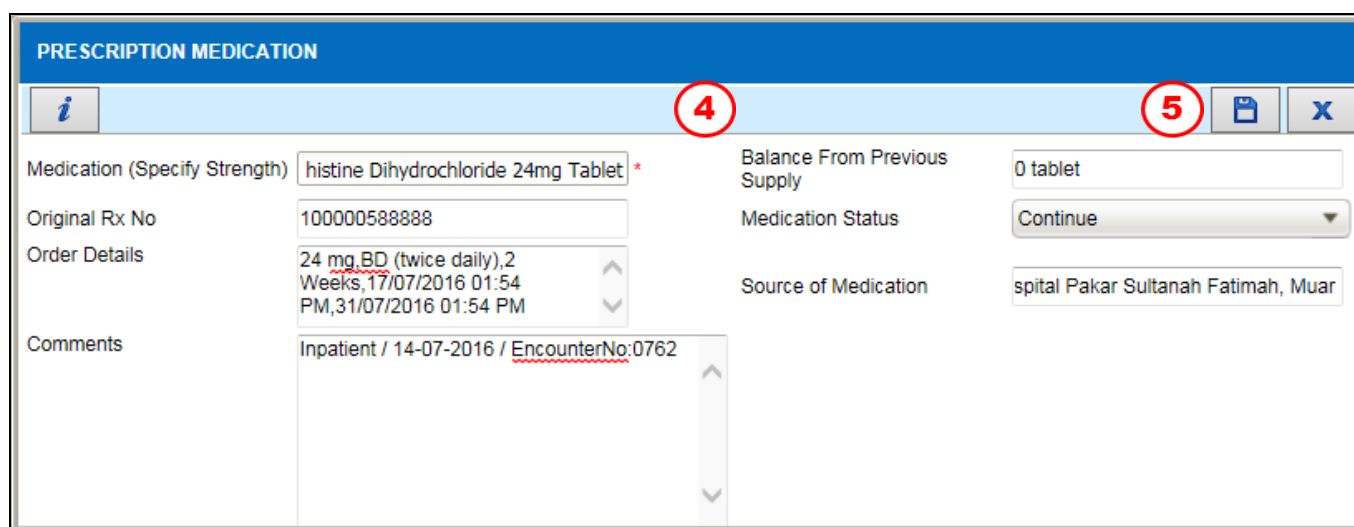


The screenshot shows the CP1 Patient Information Form. It includes sections for Patient Biodata (A), Reason For Admission (B), Allergy & Adverse Drug Reaction (C), and Drug History (D). The Prescription Medication section is highlighted with a red circle 3, showing a table with columns for Drug Name, Original Rx No, Order Details, Balance From Previous Supply, Medication Status, Source of Medication, and Comments. The Non Prescription Medication section is also visible below it.

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 includes fields for Medication (Specify Strength), Original Rx No, Order Details, Comments, Balance From Previous Supply, Medication Status, and Source of Medication. The form is highlighted with a red circle 4, and the Save button is highlighted with a red circle 5.

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

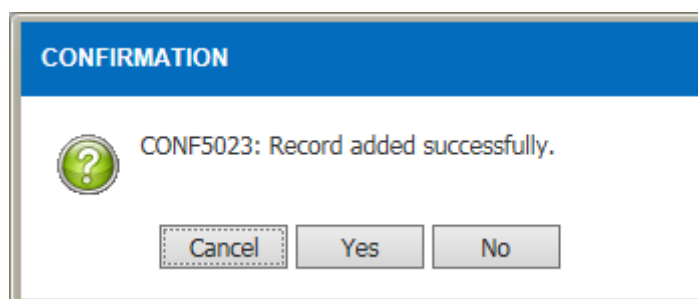
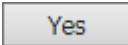


Figure 3.1.2-5 Confirmation alert

Note

- Click on  the button to save the record.

STEP 7

Fill in the necessary information

- Non-prescription Medication**
- Source of Medication**
- Reason for Taking**
- Balance/Comments**

STEP 8

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

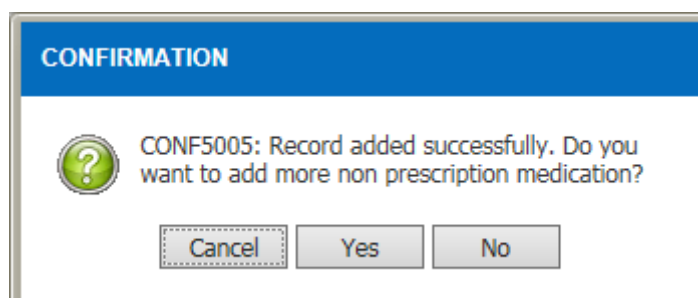
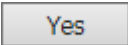
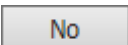


Figure 3.1.2-8 Confirmation Alert

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: 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

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

☐	Drug Name	Original Rx No	Order Details	Balance From Previous Supply	Medication Status	Source of Medication	Comments
☒	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
☐	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
☒	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 >

☐	Non-Prescription Medication(Includes Herbal/Vitamin/Other Supplements)	Reason For Taking	Source of Medication	Balance/Comments
☒	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

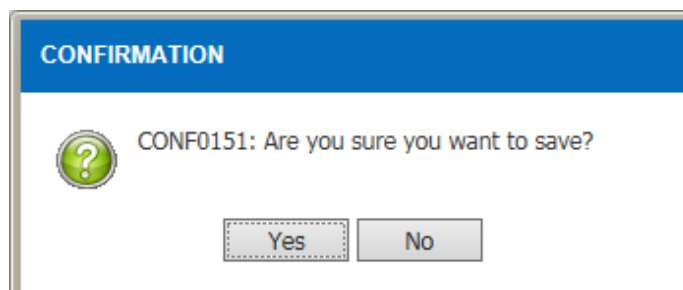


Figure 3.1.2-10 Confirmation Alert

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:

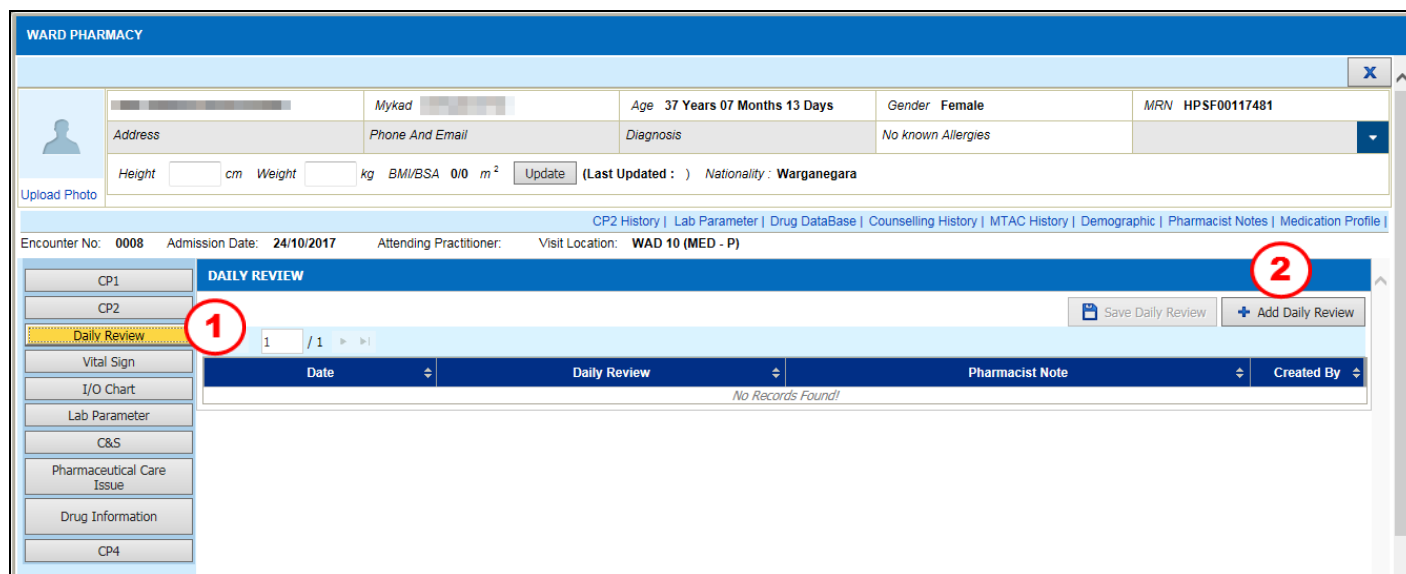


Figure 3.1.3-1 Daily Review

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

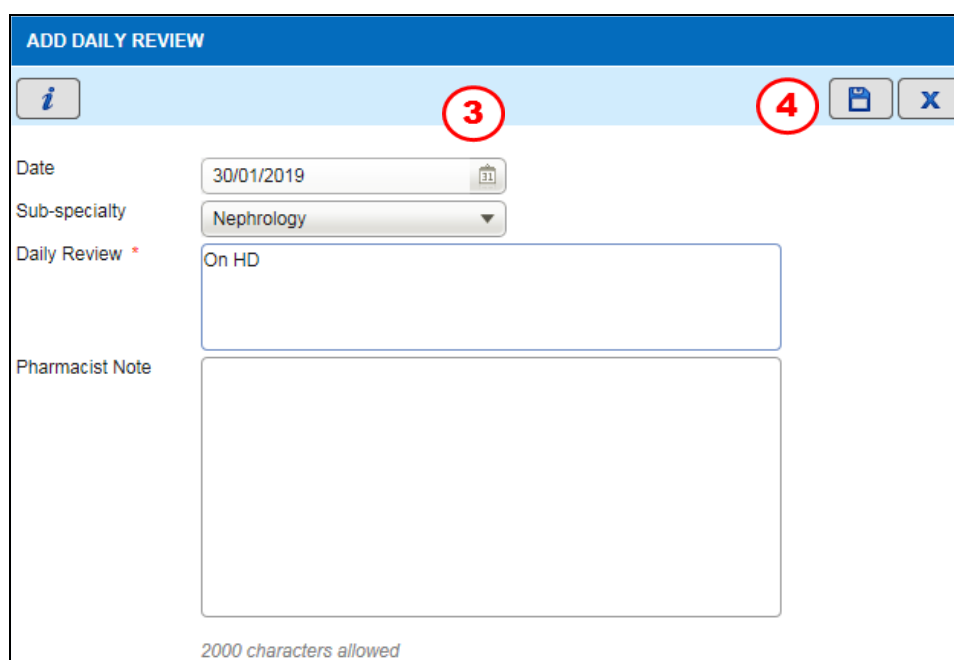


Figure 3.1.3-2 Add Daily Review

STEP 3

Fill in necessary information

- Date**
- Sub-specialty**
- Daily Review (mandatory)**
- Pharmacist Note**

STEP 4

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

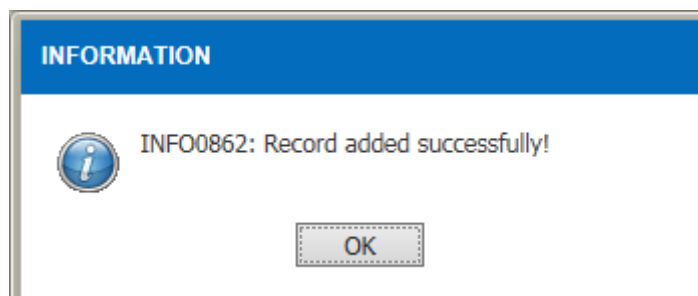
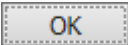


Figure 3.1.3-3 Confirmation Alert

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

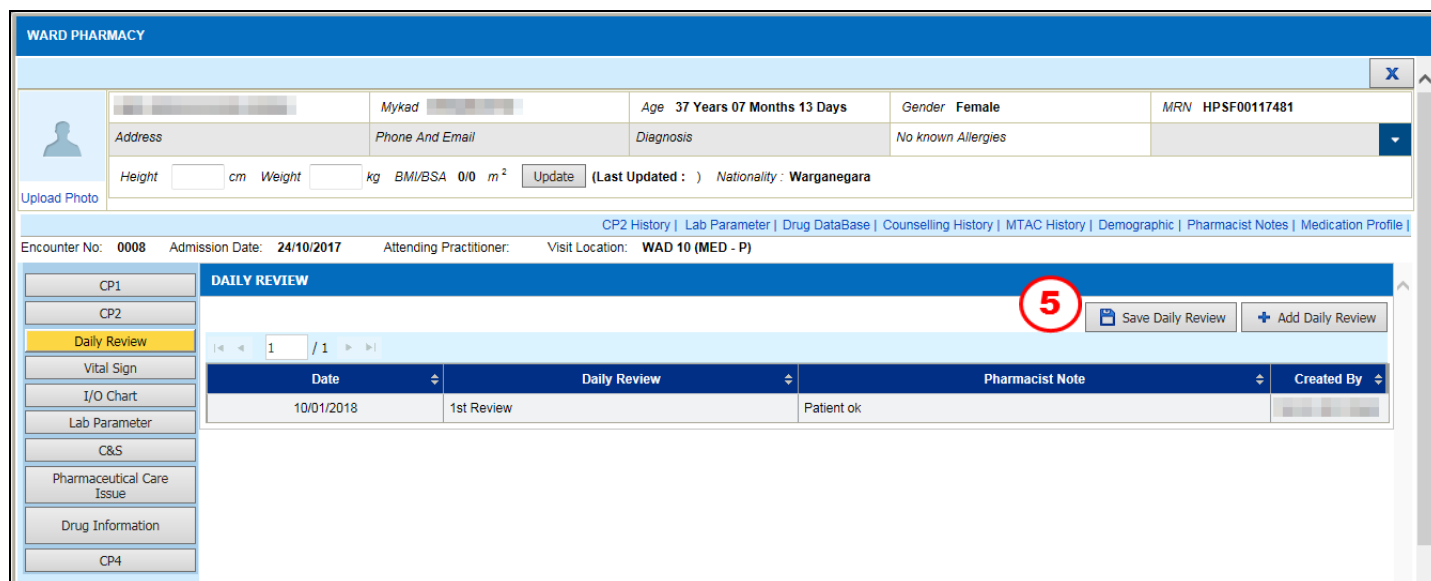
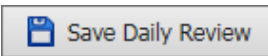


Figure 3.1.3-4 Daily Review

Note

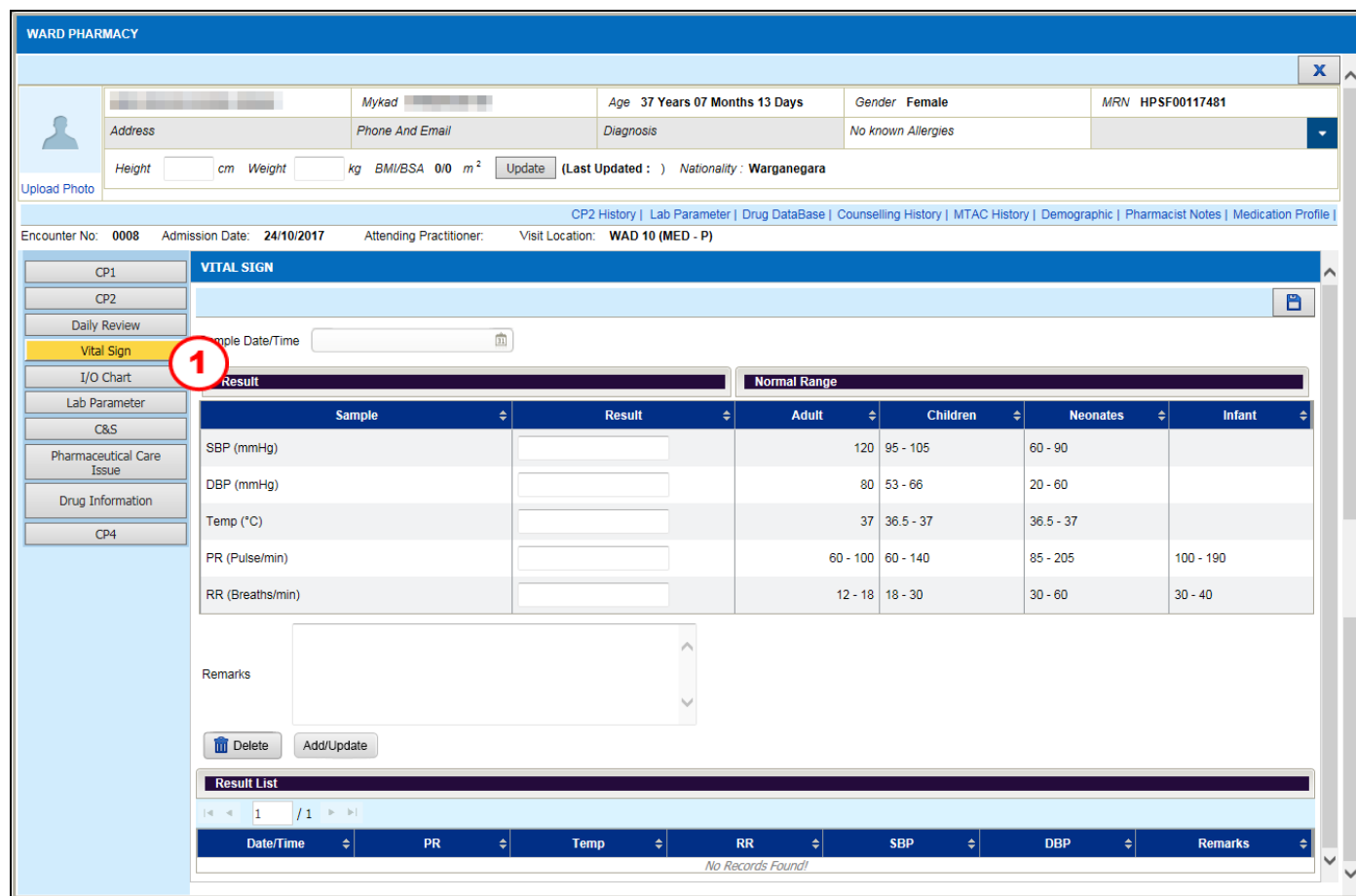
User is allowed to edit the record by double click on the information.

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:



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 m² 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)

VITAL SIGN

Sample Date/Time: [Redacted]

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

Remarks: [Redacted]

Delete Add/Update

Result List

1 / 1

Date/Time	PR	Temp	RR	SBP	DBP	Remarks
No Records Found!						

Figure 3.1.4-1 Vital Sign

STEP 1

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

VITAL SIGN

Sample Date/Time

02/01/2018 03:46 PM

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

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

- SBP (mmHg)**
- DBP (mmHg)**
- Temp (°C)**
- PR (Pulse/min)**
- RR (Breaths/min)**
- Remarks**

STEP 4

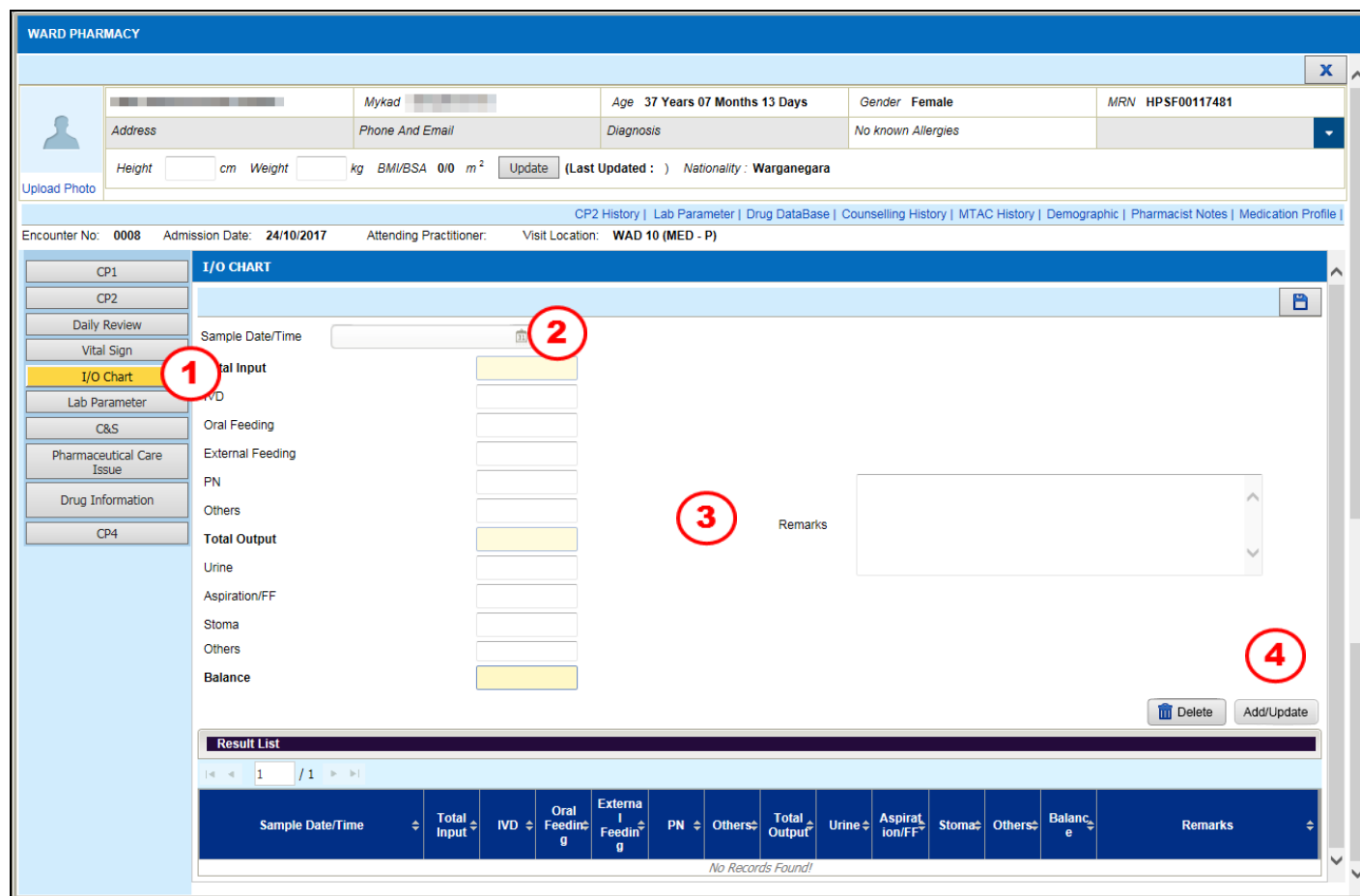
Click on the **Add/Update** button to add the information in to Result List

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 m² 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)

I/O CHART

Sample Date/Time: [Redacted] (1)

Total Input (2)

IVD

Oral Feeding

External Feeding

PN

Others

Total Output (3)

Urine

Aspiration/FF

Stoma

Others

Balance

Remarks (4)

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

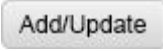
Select **Sample Date/Time**

STEP 3

Fill in all necessary information

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

STEP 4

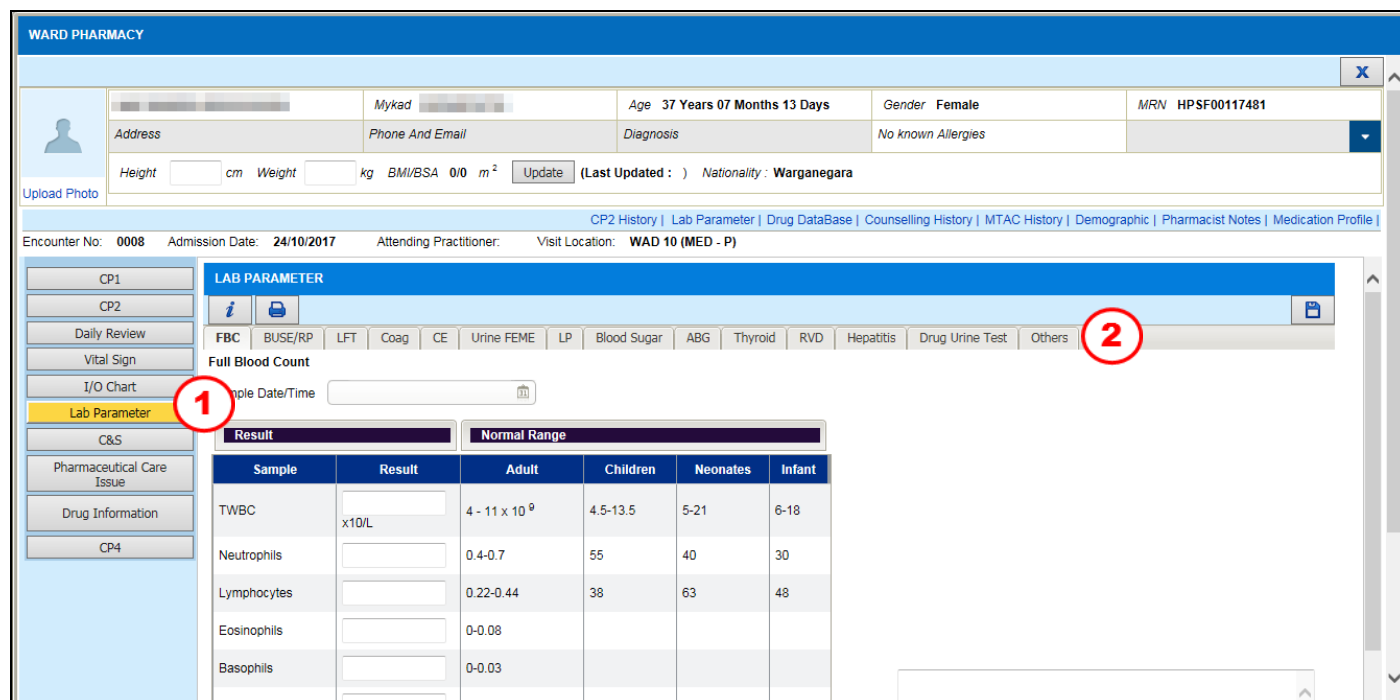
Click on the  button to add the information in to Result List

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 m² 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
TWBC	x10 ⁹ /L	4 - 11 x 10 ⁹
Neutrophils		4.5-13.5
Lymphocytes		5-21
Eosinophils		6-18
Basophils		

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:

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

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

Result		Normal Range			
Sample	Result	Adult	Children	Neonates	Infant
TWBC	x10/L	4 - 11 x 10 ⁹	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			
RBC (/L)	x10<sup>6</sup>	4.5- 6.3 x 10 ¹²	3.7 - 6.5 x 10 ¹²	3.7 - 6.5 x 10 ¹²	
Monocytes					
Hb (g/dL)	g	Male 13.5 - 17.5 Female 12 - 16			
HCT		Male 0.41 - 0.53 Female 0.36 - 0.46	0.31 - 0.37	0.28 - 0.55	0.33 - 0.39
Platelet (/L)	x	150 - 400 x 10 ⁹			
MPV					
MCV (fL)	fL	80 - 100	76 - 80		70 - 74
MCH (pg/cell)		26 - 34	26-32	29	27
MCHC (g/L)		310 - 370	310 - 370	290 - 380	

Remarks

Delete

Add/Update

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

Add/Update

 button to add the information in to Result List

Note

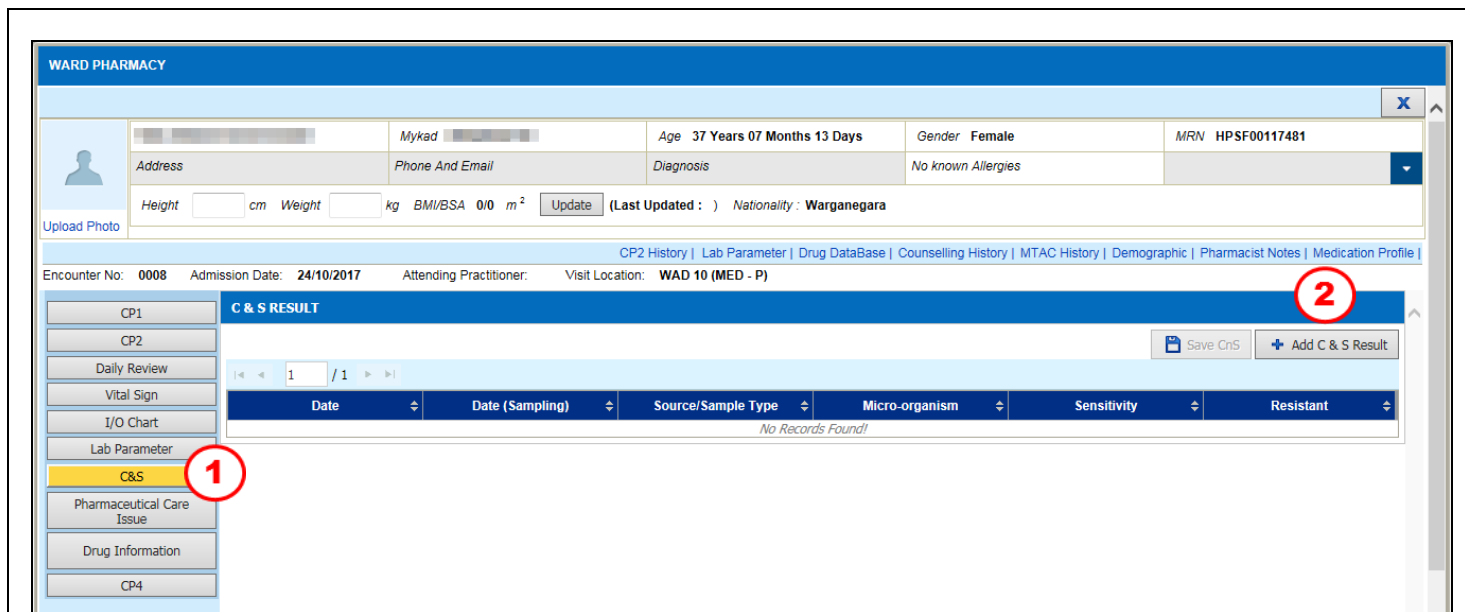
- User is allowed to delete the record by click on the

Delete

 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 area displays the 'C & S RESULT' section, which is also circled with a red circle labeled '2'. The patient information at the top includes Mykad, Age (37 Years 07 Months 13 Days), Gender (Female), MRN (HPSF00117481), Address, Phone And Email, Diagnosis, No known Allergies, Height, Weight, BMI/BSA, and Nationality (Warganegara). The encounter details show Encounter No: 0008, Admission Date: 24/10/2017, and Visit Location: WAD 10 (MED - P). The C & S RESULT section has a table with columns: Date, Date (Sampling), Source/Sample Type, Micro-organism, Sensitivity, and Resistant. The table currently shows 'No Records Found!'. There are buttons for 'Save C&S' and '+ Add C & S Result'.

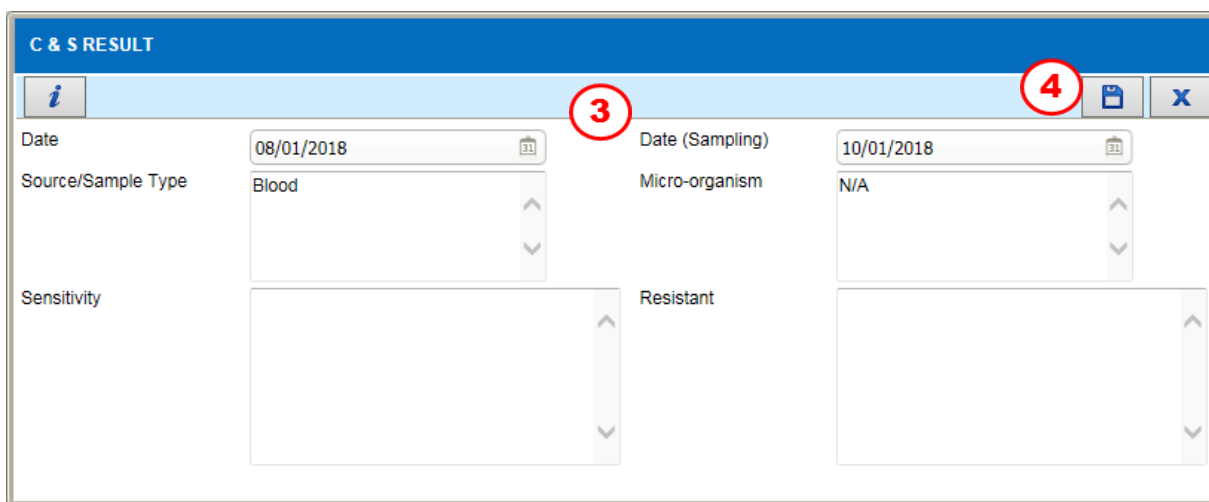
Figure 3.1.7-1 C&S

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 form has a header bar with an information icon (i) and a close button (X). The form contains several input fields: 'Date' (08/01/2018), 'Date (Sampling)' (10/01/2018), 'Source/Sample Type' (Blood), 'Micro-organism' (N/A), 'Sensitivity', and 'Resistant'. The form is circled with a red circle labeled '3', and the top right area is circled with a red circle labeled '4'.

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

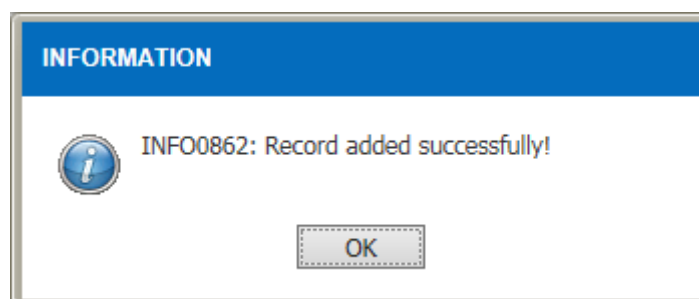
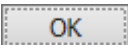


Figure 3.1.7-3 Information Alert

Note

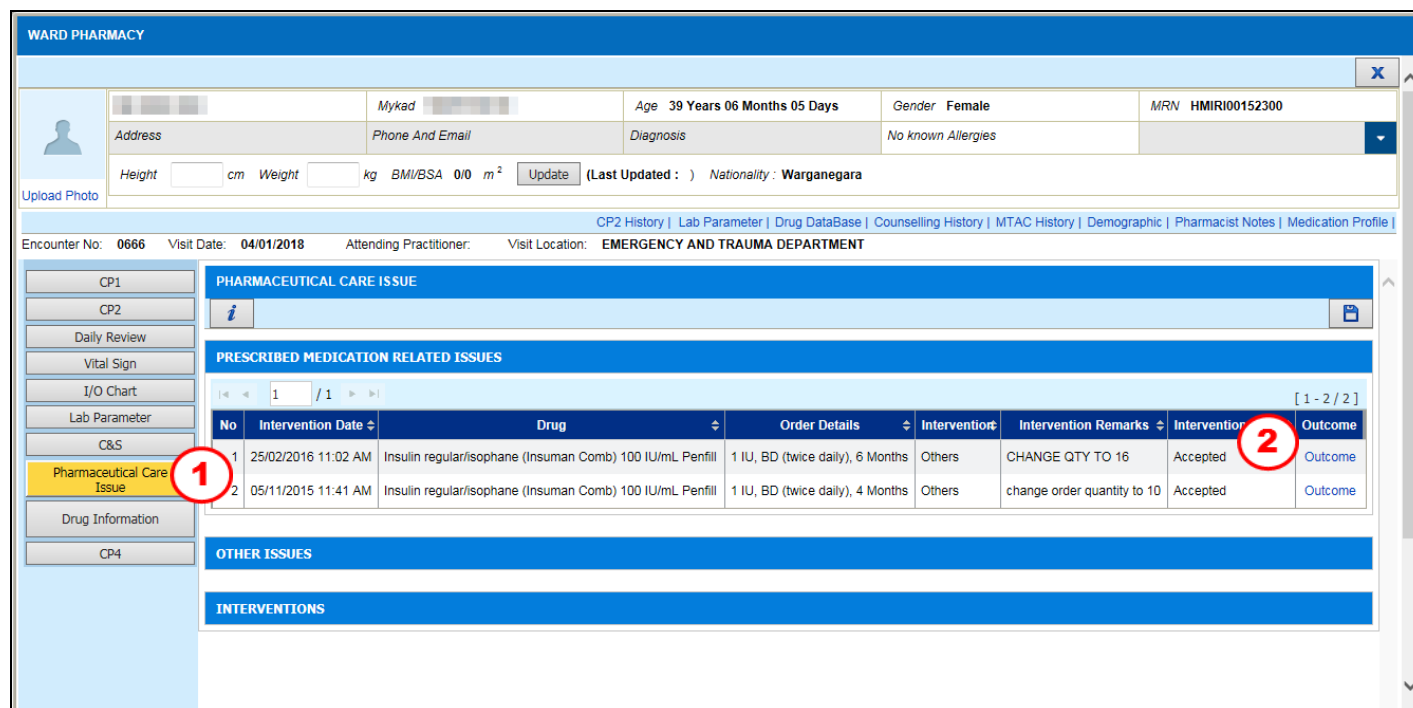
- Click on the  button to successfully save the record
- After saved, the information will be display at the C&S main screen as Figure 3.1.7-4

C & S RESULT					
				 Save CnS	 Add C & S Result
1 / 1					
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 m² Update (Last Updated:) Nationality: Warganegara

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

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

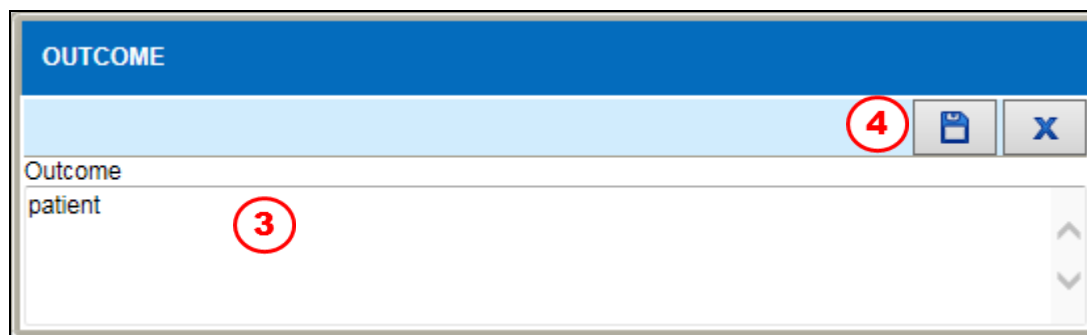
Figure 3.1.8-1 Pharmaceutical Care Issue

STEP 1

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

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

10/01/2018

5

Interventions/Requests Encountered

Type of Intervention

Incomplete Prescriptions *

Description

Dose *

PCI

Status of Intervention *

☒ Accepted
 ☐ Not Accepted

Pharmacist Recommendation

Outcome

Delete

Add/Update

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

- Date
- Type of Intervention
- PCI
- Pharmacist Recommendation
- Description
- Status of Intervention
 - Accepted
 - Not Accepted
- 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 **Add/Update** 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 **Delete** button.

PHARMACEUTICAL CARE ISSUE


7


PRESCRIBED MEDICATION RELATED ISSUES

<<

1

/ 1

>>

[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

OTHER ISSUES

INTERVENTIONS

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

CONFIRMATION


CONF0002: Are you sure you want to save?

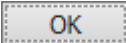
Cancel

Yes

No

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

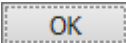
INFORMATION


INFO00869: The Pharmaceutical Care Issue record succesfully added.

OK

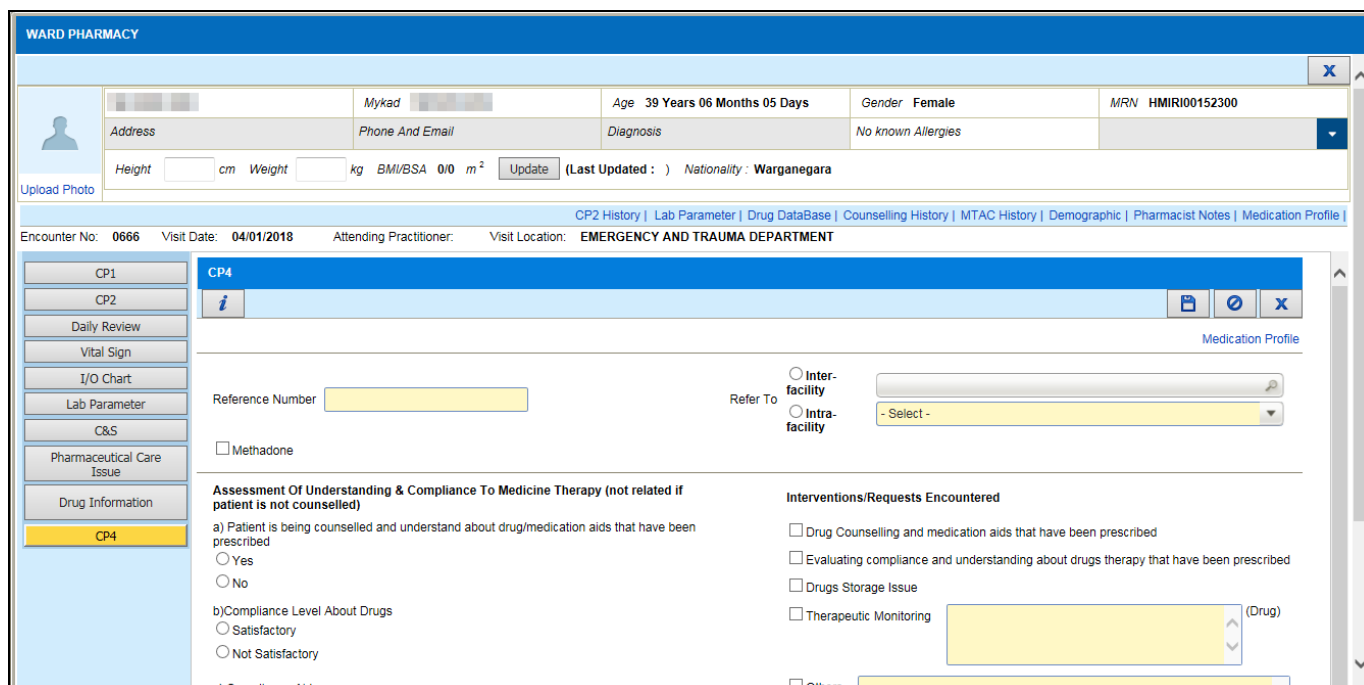
Figure 3.1.8-7 Information Alert

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 m² 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

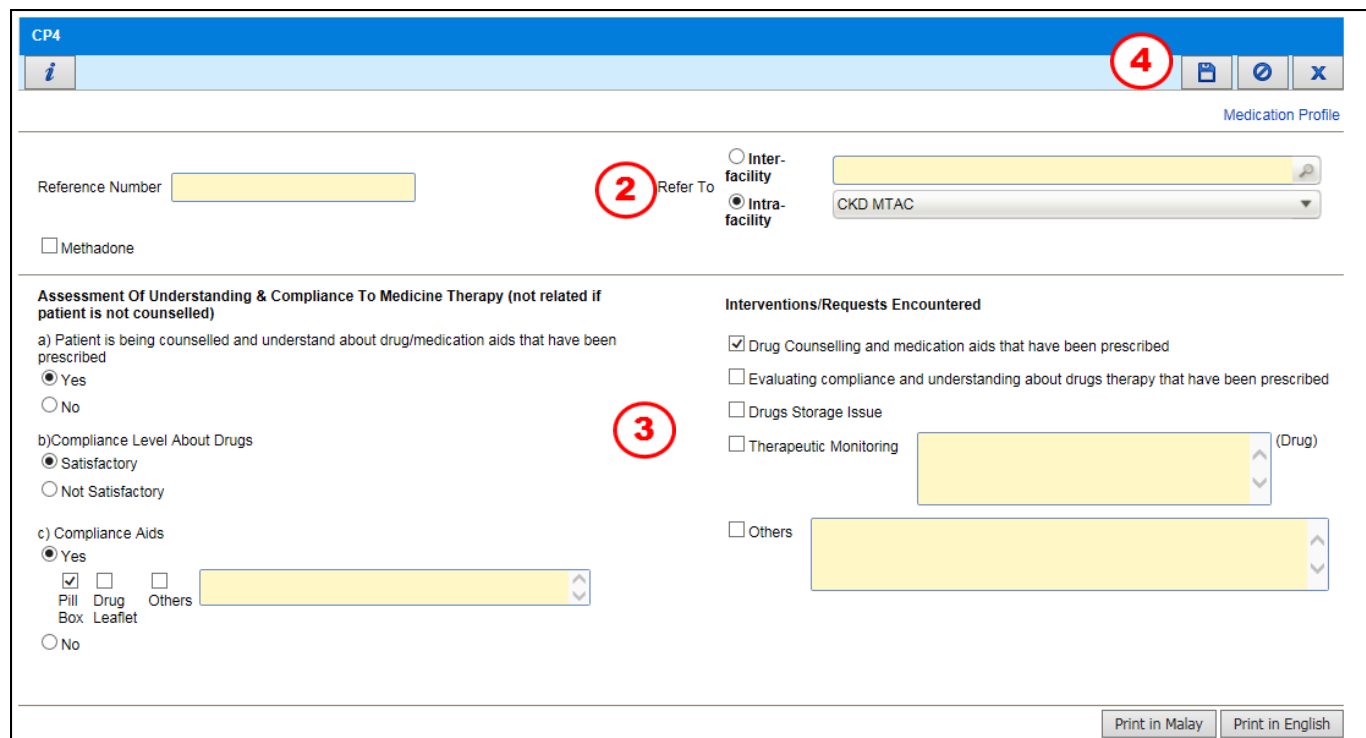
☐ Therapeutic Monitoring (Drug) [Redacted]

Figure 3.1.9-1 CP4

STEP 1

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

To Record CP4



The screenshot shows the CP4 form interface. At the top, there is a blue header bar with 'CP4' and an information icon (labeled 4). Below the header, there is a 'Medication Profile' section. The main form area contains several sections:

- Reference Number:** A text input field.
- Refer To:** A section with two radio buttons: 'Inter-facility' and 'Intra-facility' (labeled 2). The 'Intra-facility' option is selected. Below this is a dropdown menu showing 'CKD MTAC'.
- 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. Radio buttons for 'Yes' (selected) and 'No'.
 - b) Compliance Level About Drugs. Radio buttons for 'Satisfactory' (selected) and 'Not Satisfactory' (labeled 3).
 - c) Compliance Aids. Radio buttons for 'Yes' (selected) and 'No'. Under 'Yes', there are checkboxes for 'Pill Box', 'Drug Leaflet', and 'Others' with a corresponding text input field.
- 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. This is followed by a text input field and the label '(Drug)'.
 - ☐ Others. This is followed by a text input field.

At the bottom right, there are two buttons: 'Print in Malay' and 'Print in English'.

Figure 3.1.9-2 CP4

STEP 2

Select **Refer To**

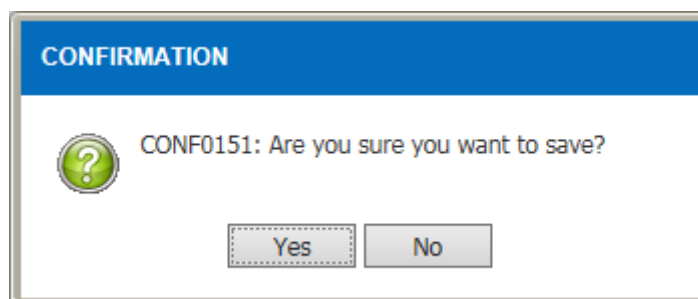
- a) **Inter-facility**
- b) **Intra-facility**

STEP 3

Fill up the question

STEP 4

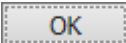
Click on the  button to save the record



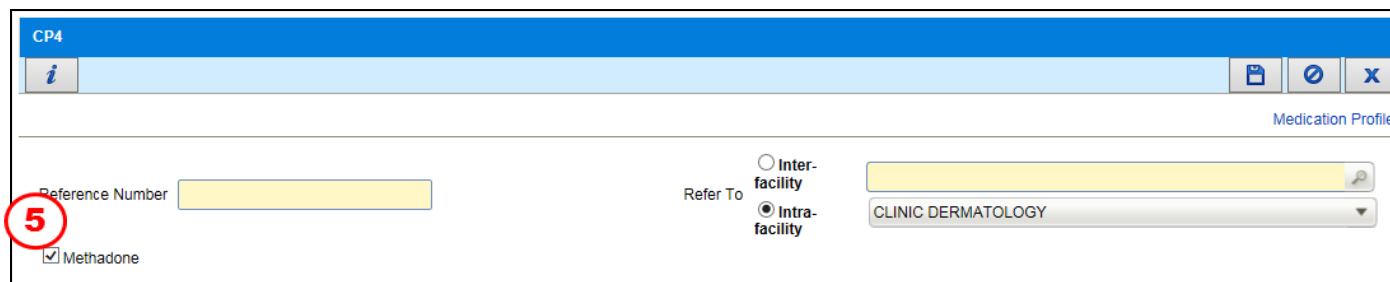
The confirmation alert dialog box has a blue header with the word 'CONFIRMATION'. Below the header, there is a green question mark icon and the text 'CONF0151: Are you sure you want to save?'. At the bottom, there are two buttons: 'Yes' and 'No'.

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

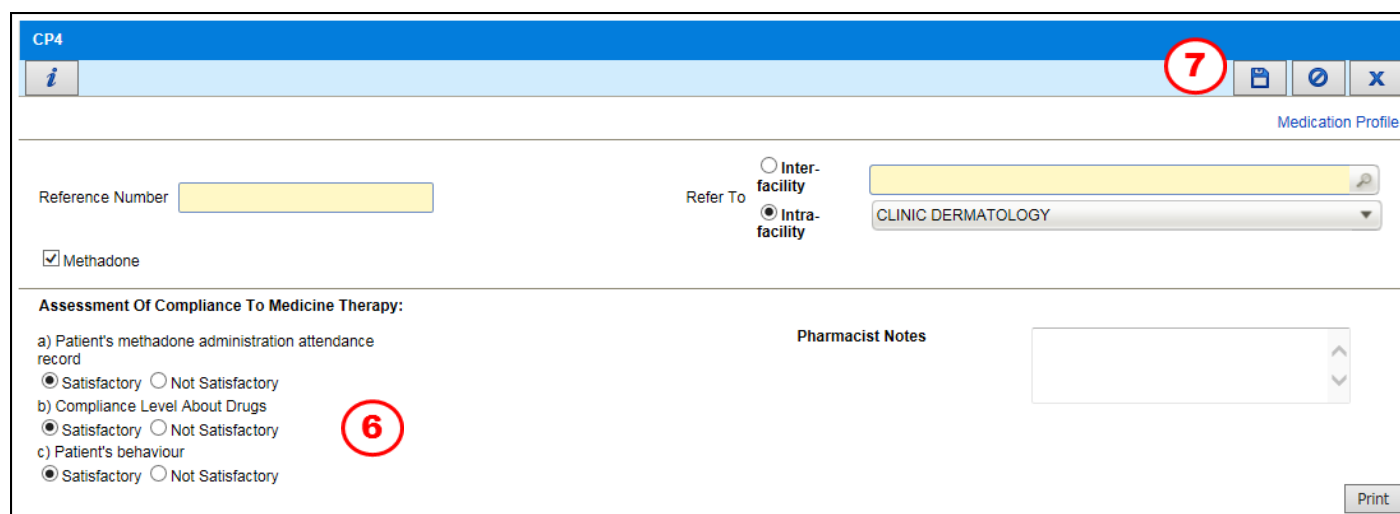
☒ Methadone

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

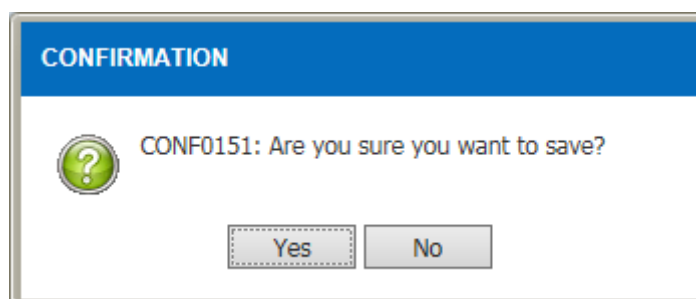
Figure 3.1.9-5 CP4 Methadone

STEP 6

Fill up the question

STEP 7

Click on the  button to save the record



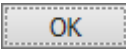
CONFIRMATION

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	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
5	IV Order	Click Here	16	Patient Management	Click Here
6	Prepacking	Click Here	17	Radiopharmaceuticals	Click Here
7	Galenical	Click Here	18	Outpatient	Click Here
8	MTAC	Click Here	19	Special Drug Request	Click Here
9	ADR & DAC	Click Here	20	MAR	Click Here
10	Medication Counselling	Click Here	21	DICE	Click Here
11	Ward Pharmacy	Click Here	22		