

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

Full Based

User Manual Medication Administration Record (MAR)

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1.1	Maxine Wong (QA)	Application interface changes
1.2	Michelle Foo / Juridah Ayob (QA)	Application interface changes
1.3	Michelle Foo / Junidah Ayob (QA)	Updated to Version 1.3
1.4	Michelle Foo / Junidah Ayob (QA)	Change to latest screenshot and functions for version 1.4.1
1.5	Michelle Foo / Junidah Ayob (QA)	Change to latest screenshot and functions for version 1.5.1



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Reference ID : FB_U. MANUAL_MAR-v1.5

Application reference: PhIS & CPS v1.5.1

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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 medication administration record (MAR) 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:

- Charting and record patient administration in ward based on drug and time
- To view all medication administration details in a chart
- Time range to record the administration
- Different types of administration form non-infusion and infusion
- To view active inpatient record only

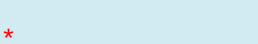
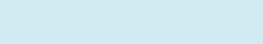
1.3 Organised Sections

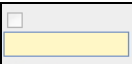
These are the sections within this document:

- Section 1 : Introduction
- Section 2 : Application Standard Features
- Section 3 : MAR
- 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		

Medication Administration Record(MAR) Module Legend			
	Medication Served On time		Medication Not Serve
			

Note

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

2.2 Latest Enhancement and Updates

Latest Functions	Page
Ward Stock	9
MAR Change the range time 30 minutes before & after	

3.0 Medical Administration Record (MAR)

Overview

The Medication Administration Record (MAR) module handles all of the active in-patient charting medication administration record for nurses in safe, organized and efficient way.

User Group

This module is intended for registered staff nurses (RN). (subject to the user assigned by the facility).

Functional Diagram

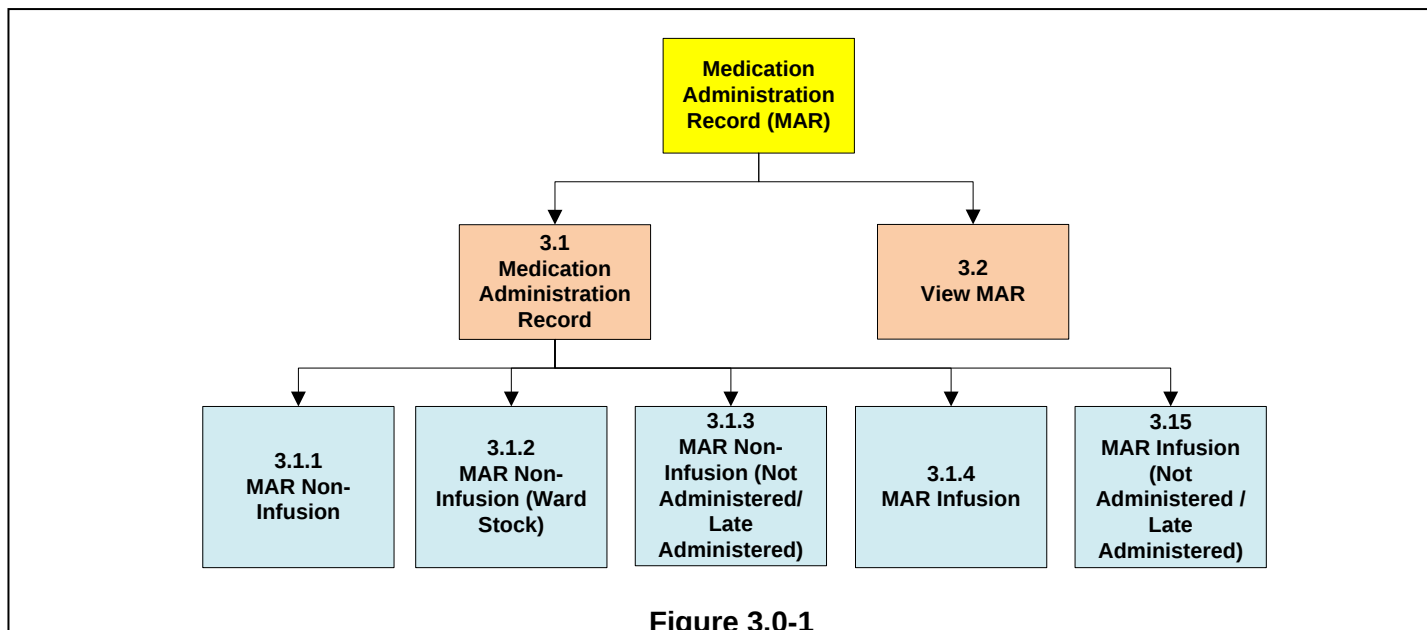


Figure 3.0-1

Functional Description

Medication Administration Record comprises of two (2) main functions:

- **Medication Administration Record**

Medication Administration Record function allows Nurses to chart and record the administration of patient in ward based on drug and time. The time range to record the administration is set to within of thirty (30) hour before and thirty (30) minutes after. If the time recorded is 1 hour more than scheduled time, recording will not be allowed without any remarks.

- **View MAR**

This function allows user to view all medication administration details in a chart. It will only show for active in-patient visit.

3.1 Medication Administration Record (MAR)

3.1.1 MAR Non- Infusion

This function is used to administer the medication to patient within the time range (on time)

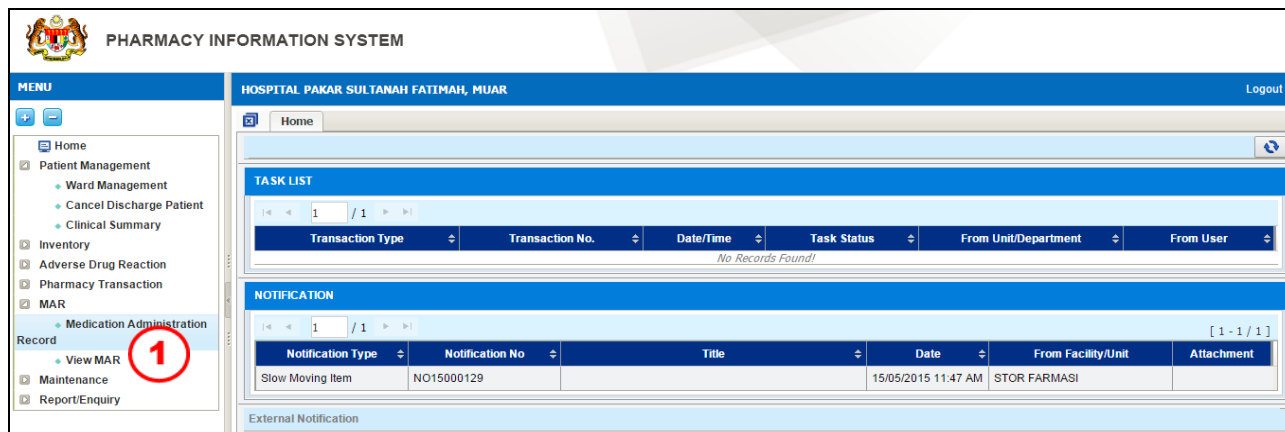


Figure 3.1.1-1 MAR Menu

Note

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

STEP 1

Click on the MAR menu then click on the Medication Administrative record sub menu

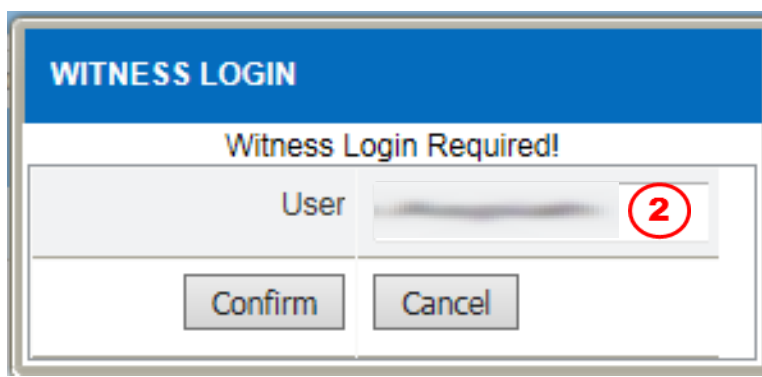


Figure 3.1.1-2 Witness Login

STEP 2

Enter **User ID** in the displayed Witness Login dialog box , then click on the confirm button

Note

- Witness must have system access login
- Witness must be different with user login
- Witness does not require to login for every patient.

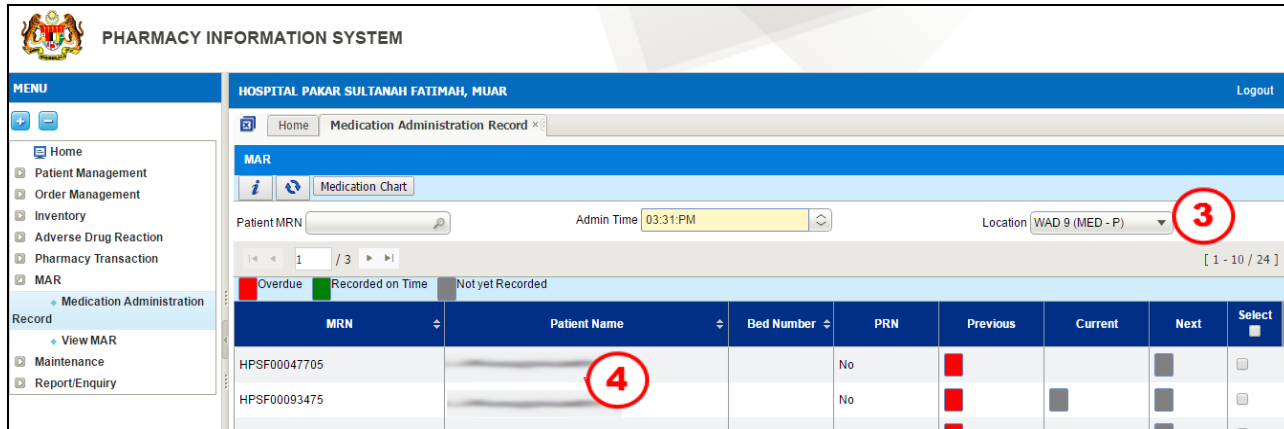


Figure 3.1.1-3 MAR Listing Page

Note

Search MAR record based :-

No	Field	Description	Remark
a	MRN	Patient MRN	Allow to search by patient full or partial MRN No
b	Location	Location assigned base on user Access	Allow to search patient by user assigned location

Table 3.1.1

STEP 3

Select location from drop box

STEP 4

Click on the selected patient name and system will display as Figure 3.1.1-4

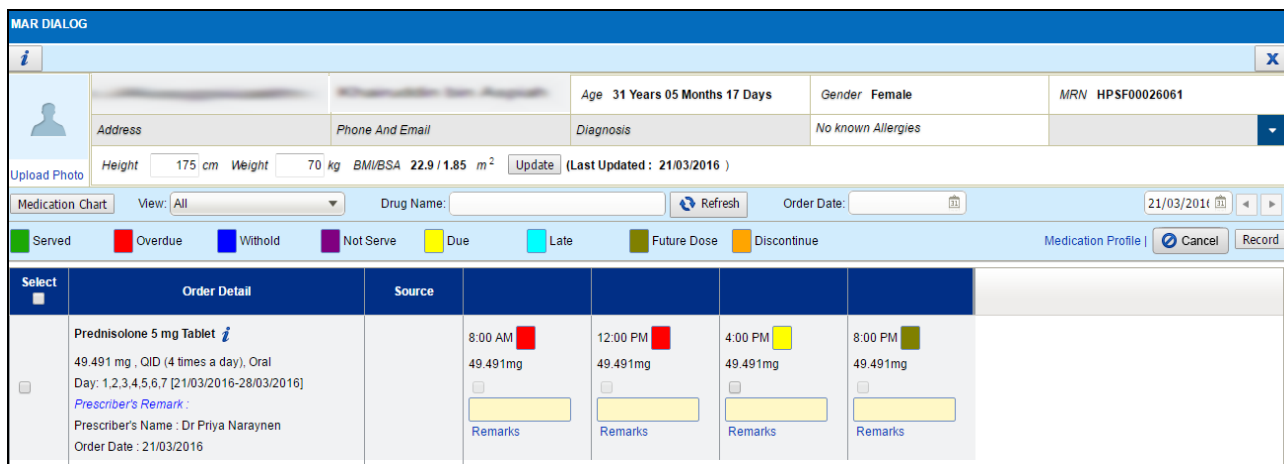


Figure 3.1.1-4 MAR Patient Screen

Note

- Screen will display these two (2) panel functions:
 - Non-Infusion
 - Infusion

- **Administration status:**
 - a) Due - Administration recorded
 - b) Overdue - Record 'Not Administered' checkbox
 - c) Served- Record the administration within time range
 - d) Late - Has not record the administration within time range
 - e) Withhold - Hold by doctors or pharmacist
 - f) Future Dose - Has not reach the schedule time
 - g) Not Serve - Did not Serve
 - h) Discontinue - Discontinued by doctor

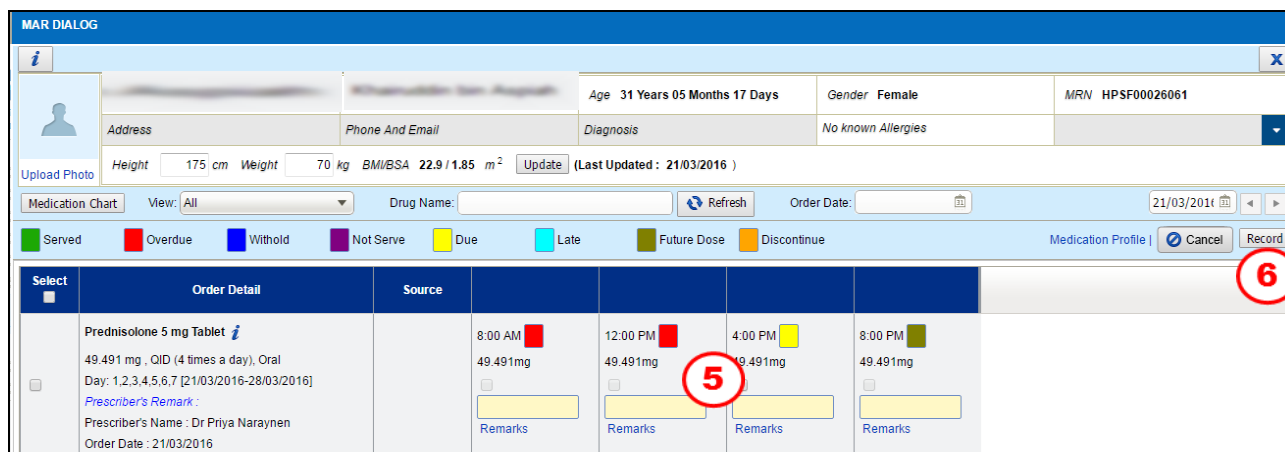


Figure 3.1.1-5 Patient Medication List

STEP 5

Click on the ☒ checkbox to select the drugs

Note

- Allow to select multiple drugs.
- When the checkbox is selected, the current time will be recorded. However, user is allowed to change the current time.
- If the time is one (1) hour more than scheduled time, recording will not be allowed without any remarks.

STEP 6

After select the drugs, click on record button  to confirm record

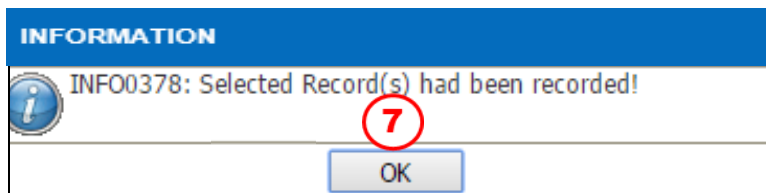
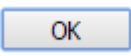


Figure 3.1.1-6 Information Alert Message

STEP 7

Click on the  button to confirm record

Medication Chart		View: All	Drug Name:	Refresh	Order Date:	21/03/2016
☒ Served	☐ Overdue	☐ Withhold	☐ Not Serve	☐ Due	☐ Late	☐ Future Dose
						☐ Discontinue
Medication Profile Cancel Record						

Select	Order Detail	Source	8:00 AM	12:00 PM	4:00 PM
☐	Prednisolone 5 mg Tablet 49.491 mg, QID (4 times a day), Oral Day: 1,2,3,4,5,6,7 [21/03/2016-28/03/2016] <i>Prescriber's Remark:</i> Prescriber's Name: Dr Priya Naraynen Order Date: 21/03/2016		☐ 49.491mg Remarks	☐ 49.491mg Remarks	☒ 49.491mg Remarks
☐	DOXOrubicin HCl 50mg/25ml Inj 81 mg, OD (once daily), Intravenous Bolus Day: 1 [21/03/2016-22/03/2016] <i>Prescriber's Remark:</i> Prescriber's Name: Dr Priya Naraynen Order Date: 21/03/2016		☐ 81mg Remarks		
☐	vinCRISatine Sulphate 1mg Inj 8:00 AM		☐ 8:00 AM		

Prednisolone 5 mg Tablet
 49.491 mg QID (4 times a day) 7 Days
 Dose Administered: 49.491mg
 Scheduled Administration Start: 4:00 PM
 Actual Administration Start: 04:13 PM
 Scheduled Administration End:
 Actual Administration End:
 Administered By: System Administrator
 Remarks: given
 Witness: Siti Faridah Japri
 Discontinue Dr:
 Discontinue Time:
 Withhold By:
 Withhold Reason:
 Name of Authorizer: NA
 Date and Time Authorized: NA

Figure 3.1.1-7 MAR – View MAR notes

Note

- Checkbox will be available for drug with yellow colour box (due status)
- After drug has been recorded, the box will turn to green colour (served status)
- User can view the MAR notes by mouse over on the status box as shown in figure 3.1.1-7

3.1.2 MAR Non-Infusion [Ward Stock (WS)]

This function is used to administer the medication to patient within the time range (on time) using ward stock.

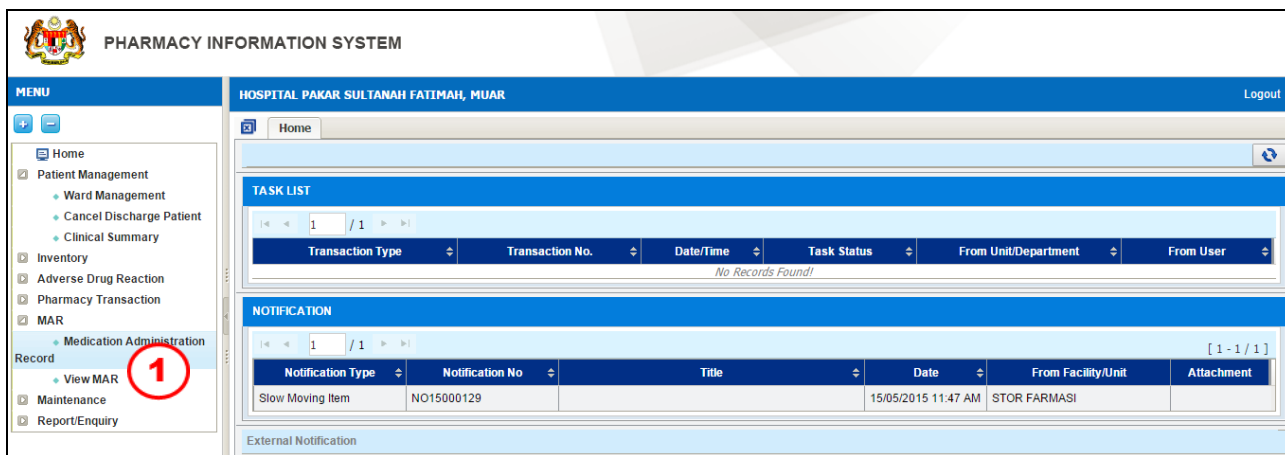


Figure 3.1.2-1 MAR Menu

STEP 1

Click on the MAR menu then click on the Medication Administrative Record sub menu

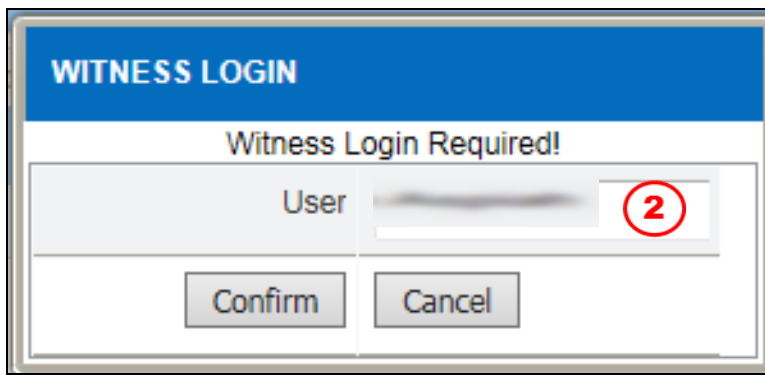


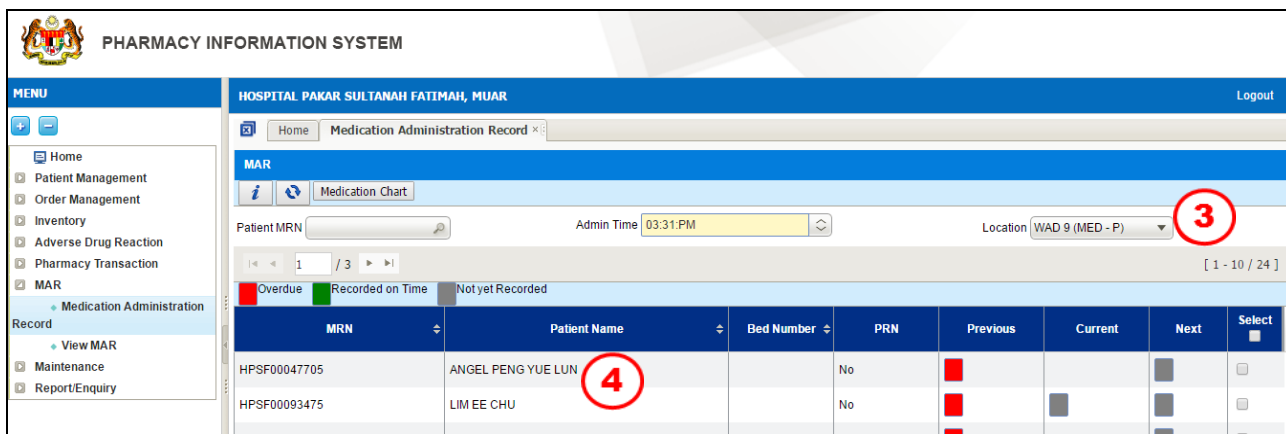
Figure 3.1.2-2 Witness Login

STEP 2

Enter **User ID** in the displayed Witness Login dialog box then click on the confirm button

Note

- Witness must have system access login.
- Witness must be different with user login.
- Witness shall be from the same discipline and the grade of Jururawat must be U29 and above.
- Witness does not require to login for every patient.



PHARMACY INFORMATION SYSTEM

HOSPITAL PAKAR SULTANAH FATIMAH, MUAR Logout

Home Medication Administration Record x

MAR

Medication Chart

Patient MRN Admin Time 03:31:PM Location WAD 9 (MED - P) **3**

1 / 3 [1 - 10 / 24]

Overdue Recorded on Time Not yet Recorded

MRN	Patient Name	Bed Number	PRN	Previous	Current	Next	Select
HPSF00047705	ANGEL PENG YUE LUN 4		No				
HPSF00093475	LIM EE CHU		No				

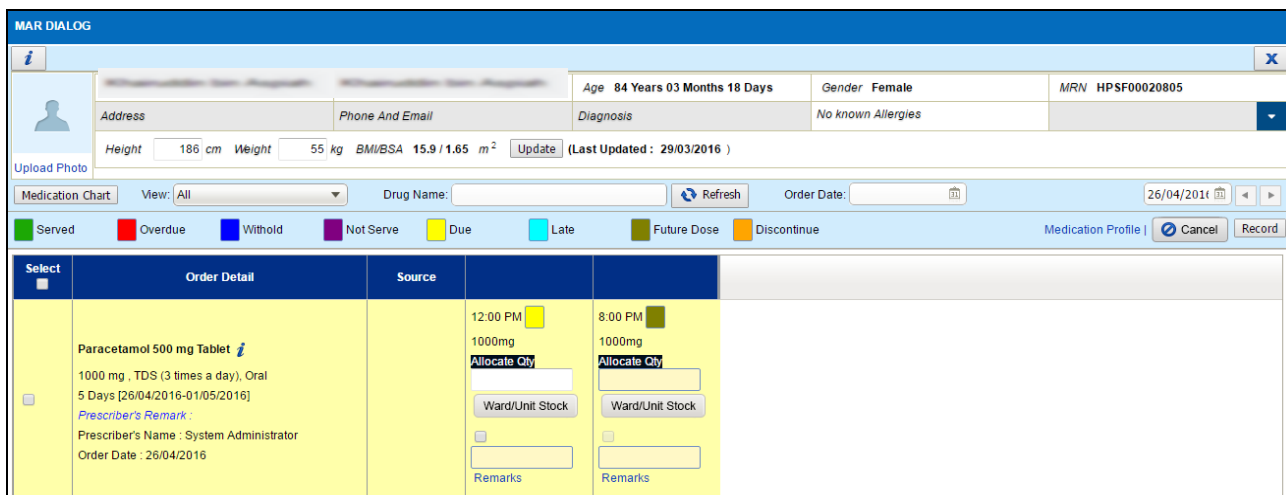
Figure 3.1.2-3 MAR Listing Page

STEP 3

Select location from drop box

STEP 4

Click on the selected patient name and system will display as Figure 3.1.2-4



MAR DIALOG

Age 84 Years 03 Months 18 Days Gender Female MRN HPSF00020805

Address Phone And Email Diagnosis No known Allergies

Height 186 cm Weight 55 kg BMI/BSA 15.9 / 1.65 m² Update (Last Updated: 29/03/2016)

Medication Chart View: All Drug Name Refresh Order Date: 26/04/2016

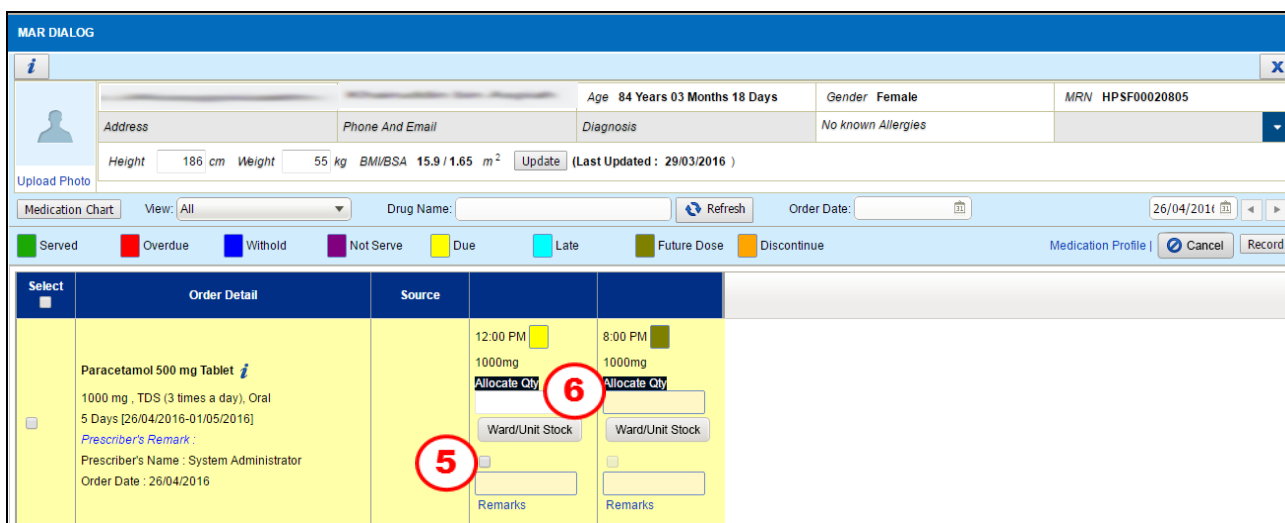
Served Overdue Withhold Not Serve Due Late Future Dose Discontinue Medication Profile Cancel Record

Select	Order Detail	Source	12:00 PM	8:00 PM
	Paracetamol 500 mg Tablet 1000 mg .TDS (3 times a day), Oral 5 Days [26/04/2016-01/05/2016] Prescriber's Remark : Prescriber's Name : System Administrator Order Date : 26/04/2016		1000mg Allocate Qty Ward/Unit Stock Remarks	1000mg Allocate Qty Ward/Unit Stock Remarks

Figure 3.1.2-4 MAR Patient Screen

Note

- Screen will display two (2) panel functions:
 - Non-Infusion
 - Infusion
- Administration status:
 - Due - Administration recorded
 - Overdue - Record 'Not Administered' checkbox
 - Served- Record the administration within time range
 - Late - Has not record the administration within time range
 - Withhold - Hold by doctors or pharmacist
 - Future Dose - Has not reach the schedule time
 - Not Serve - Did not Serve
 - Discontinue - Discontinued by doctor



MAR DIALOG

Age: 84 Years 03 Months 18 Days | Gender: Female | MRN: HPSF00020805

Address: | Phone And Email: | Diagnosis: | No known Allergies

Height: 186 cm | Weight: 55 kg | BMI/BSA: 15.9 / 1.65 m² | Update (Last Updated: 29/03/2016)

Medication Chart | View: All | Drug Name: | Refresh | Order Date: 26/04/2016

☒ Served
 ☐ Overdue
 ☐ Withhold
 ☐ Not Serve
 ☐ Due
 ☐ Late
 ☐ Future Dose
 ☐ Discontinue
 Medication Profile |

Select	Order Detail	Source
☐	Paracetamol 500 mg Tablet 1000 mg, TDS (3 times a day), Oral 5 Days [26/04/2016-01/05/2016] <i>Prescriber's Remark:</i> Prescriber's Name: System Administrator Order Date: 26/04/2016	12:00 PM ☐ 8:00 PM ☐ 1000mg ☐ 1000mg ☐ Allocate Qty 6 Allocate Qty Ward/Unit Stock Ward/Unit Stock 5 ☐ ☐ Remarks Remarks

Figure 3.1.2-5 Patient Medication List

STEP 5

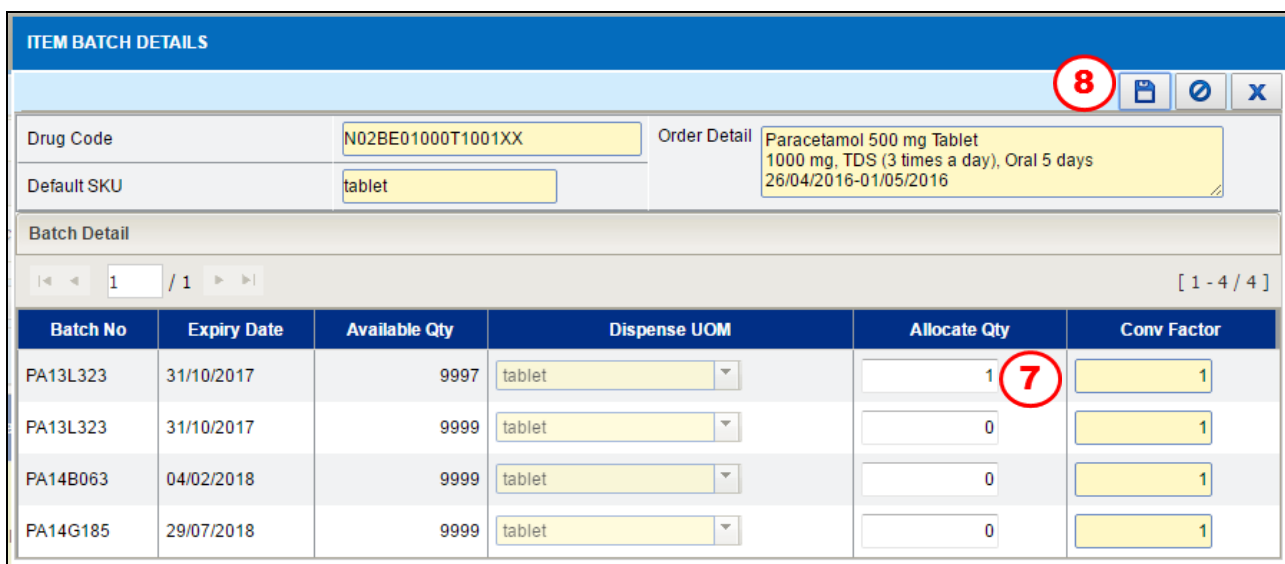
Click on the check box ☒ to select the drugs.

STEP 6

Click on and **WHAT** will display as shown in figure 3.1.2-5

Note

- User is allowed to select for multiple drugs.
- When the checkbox is selected, the current time will be recorded. However, user is allowed to change the current time.



ITEM BATCH DETAILS

Drug Code: N02BE01000T1001XX | Order Detail: Paracetamol 500 mg Tablet 1000 mg, TDS (3 times a day), Oral 5 days 26/04/2016-01/05/2016

Default SKU: tablet

Batch Detail

1 / 1 [1 - 4 / 4]

Batch No	Expiry Date	Available Qty	Dispense UOM	Allocate Qty	Conv Factor
PA13L323	31/10/2017	9997	tablet	1 7	1
PA13L323	31/10/2017	9999	tablet	0	1
PA14B063	04/02/2018	9999	tablet	0	1
PA14G185	29/07/2018	9999	tablet	0	1

Figure 3.1.2-6 Ward Stock

STEP 7

Choose the batch no and insert the **Allocate Qty** field

Note

Batch nearest to expiration will be selected automatically and calculated for the drugs to be administered.

STEP 8

Click on save  button to save record

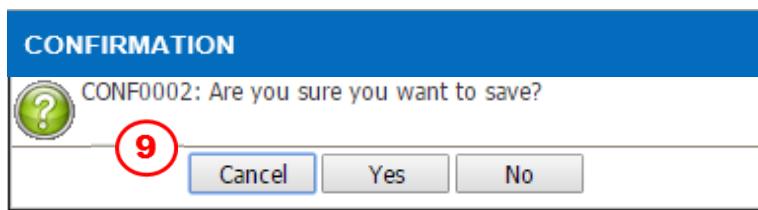
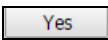
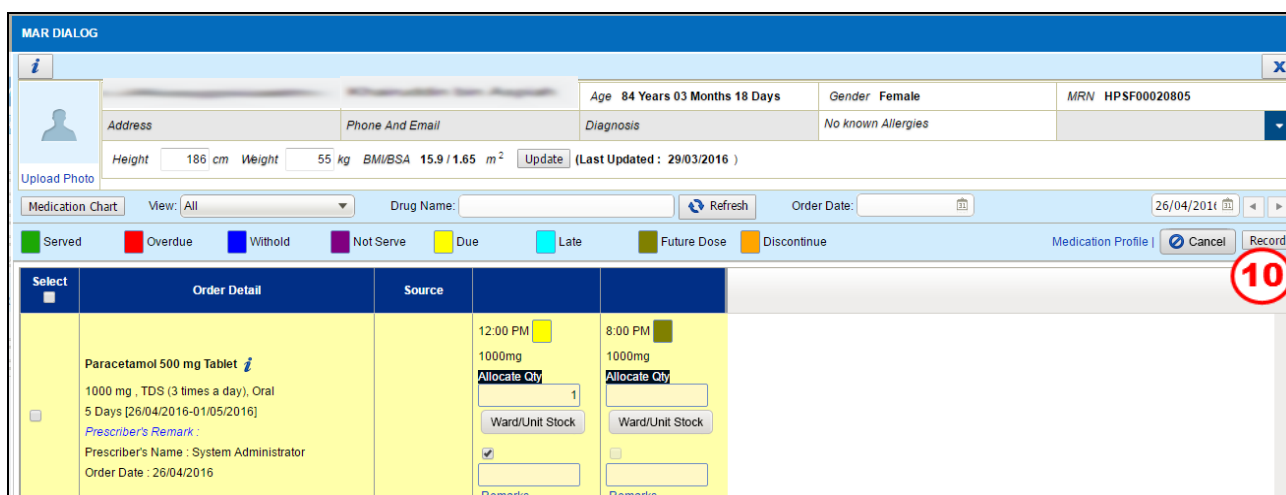


Figure 3.1.2.7 Confirm Message

STEP 9

Click on the  button to confirm record



Select	Order Detail	Source	12:00 PM	8:00 PM
☐	Paracetamol 500 mg Tablet 1000 mg , TDS (3 times a day), Oral 5 Days [26/04/2016-01/05/2016] <i>Prescriber's Remark :</i> Prescriber's Name : System Administrator Order Date : 26/04/2016		1000mg Allocate Qty: 1 Ward/Unit Stock: ☒	1000mg Allocate Qty: Ward/Unit Stock: ☐

Figure 3.1.2-8 Drug Served

STEP 10

Click on record button 

☐	Paracetamol 500 mg Tablet 1000 mg , TDS (3 times a day), Oral 5 Days [26/04/2016-01/05/2016] <i>Prescriber's Remark :</i> Prescriber's Name : System Administrator Order Date : 26/04/2016		1000mg Allocate Qty: Ward/Unit: ☐ Remarks:	Paracetamol 500 mg Tablet 1000 mg TDS (3 times a day) 5 Days Dose Administered: 1000mg Scheduled Administration Start: 12:00 PM Actual Administration Start: Scheduled Administration End: Actual Administration End: Administered By: Remarks: Witness:
☐	Cisplatin 50mg Inj 165 mg , OD (once daily), Intravenous Infusion Day: 1 [26/04/2016-27/04/2016]		8:00 AM ☒	Discontinue Dr: Discontinue Time: Withhold By: Withhold Reason: Name of Authorizer: NA Date and Time Authorized: NA

Figure 3.1.2-9 MAR – View MAR notes

Note

- Checkbox will be available for drug with yellow colour box (due status)
- After drug has been recorded, the box will turn to green colour (served status)
- User can view the MAR notes by mouse over on the status box as shown figure 3.1.2-9

3.1.3 MAR Non-Infusion (Late Administered/Not Administered)

This function is used to administer the medication to patient outside the time range (overdue) and for cancel administration (not served).

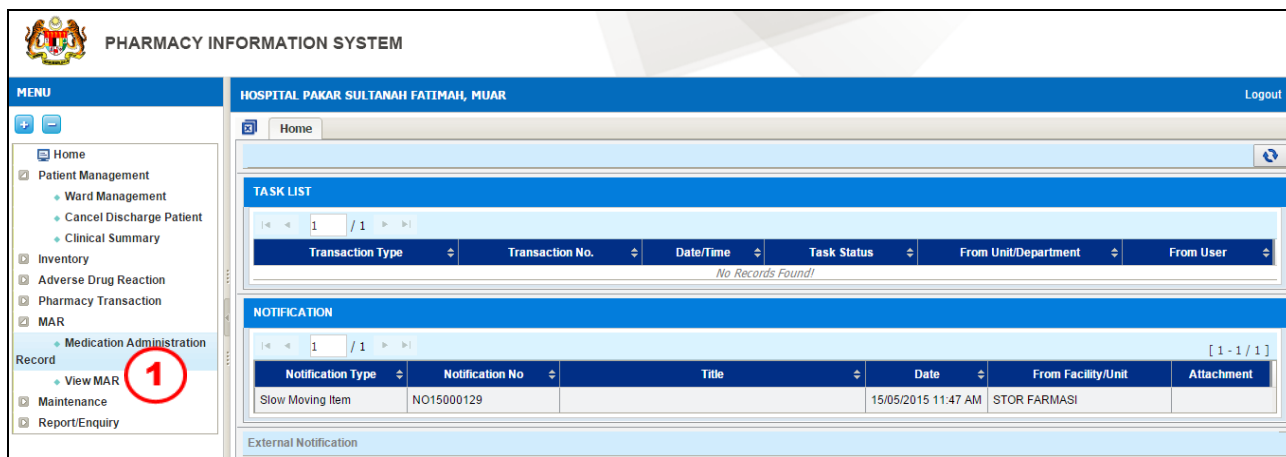


Figure 3.1.3-1 MAR Menu

STEP 1

Click on the MAR menu then click on the Medication Administrative Record sub menu

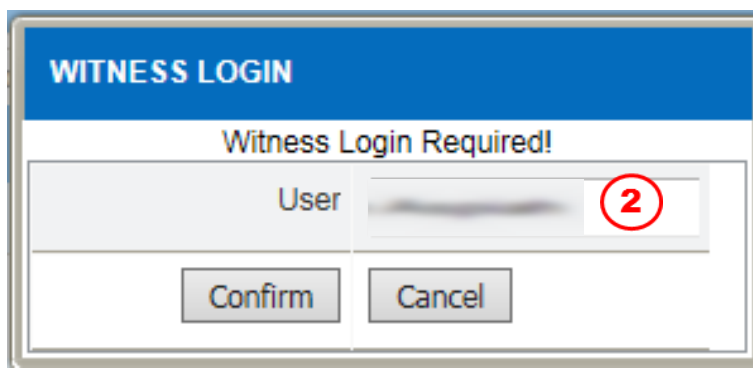


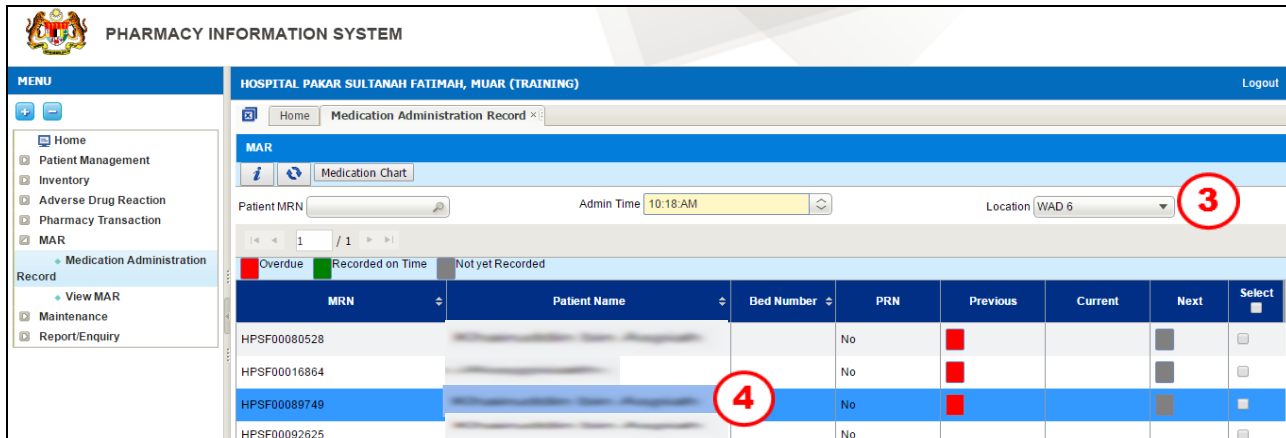
Figure 3.1.3-2 Witness Login

STEP 2

Enter **User ID** in the displayed Witness Login dialog box then click on the confirm button

Note

- Witness must have system access login.
- Witness must be different with user login.
- Witness shall be from the same discipline and the grade of Jururawat must be U29 and above.
- Witness does not require to login for every patient.



PHARMACY INFORMATION SYSTEM

HOSPITAL PAKAR SULTANAH FATIMAH, MUAR (TRAINING) Logout

Home Medication Administration Record x

MAR

Medication Chart

Patient MRN: Admin Time: 10:18 AM Location: WAD 6 **3**

1 / 1

Overdue Recorded on Time Not yet Recorded

MRN	Patient Name	Bed Number	PRN	Previous	Current	Next	Select
HPSF00080528			No				
HPSF00016864			No				
HPSF00089749			No				
HPSF00092625			No				

4

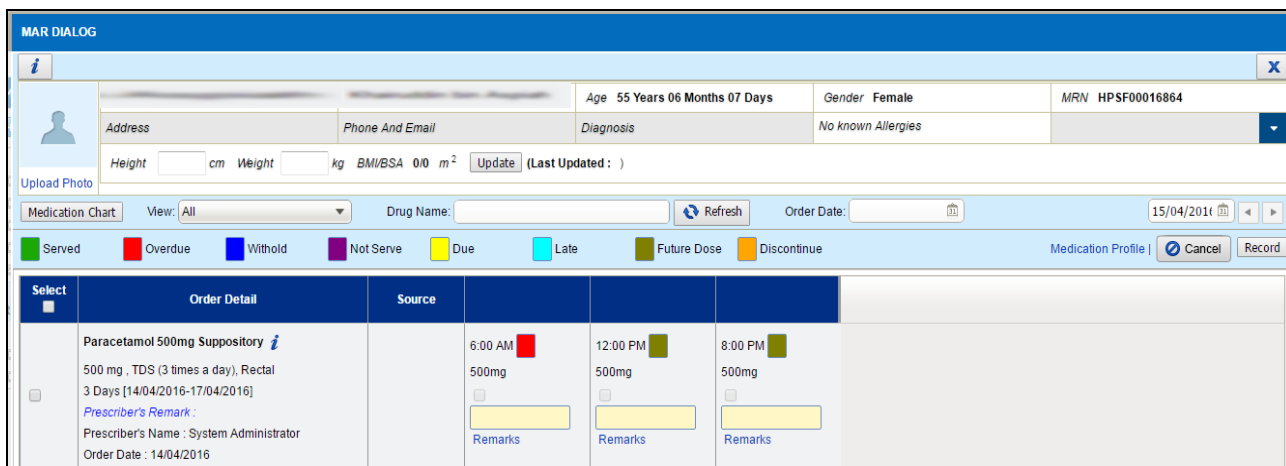
Figure 3.1.3-3 MAR Listing Page

STEP 3

Select location from drop box

STEP 4

Click on the selected patient name and system will display as Figure 3.1.3-4



MAR DIALOG

Age 55 Years 06 Months 07 Days Gender Female MRN HPSF00016864

Address Phone And Email Diagnosis No known Allergies

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

Medication Chart View: All Drug Name: Refresh Order Date: 15/04/2016

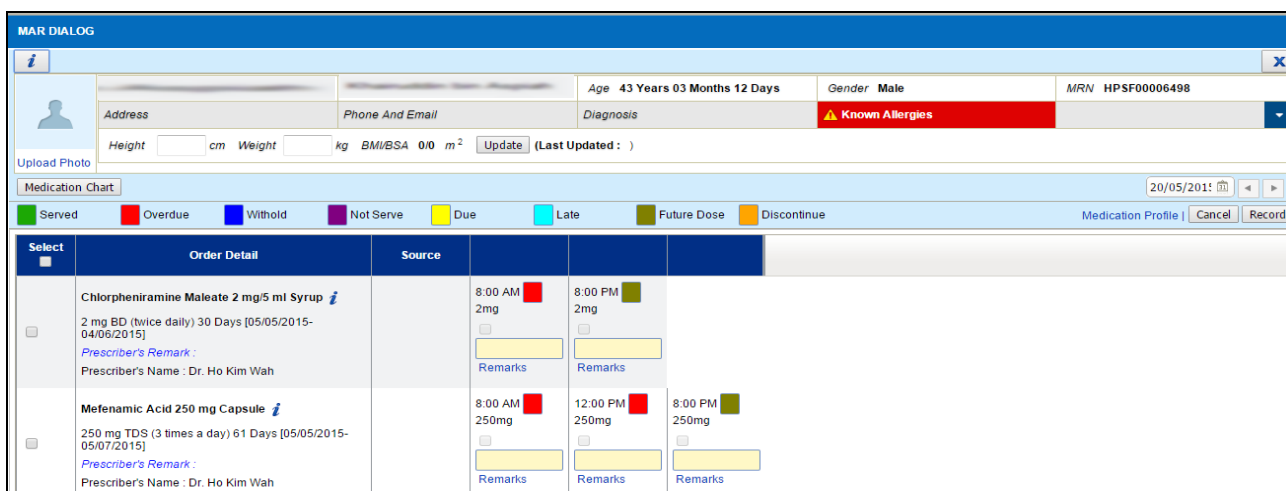
Served Overdue Withhold Not Serve Due Late Future Dose Discontinue Medication Profile Cancel Record

Select	Order Detail	Source	6:00 AM	12:00 PM	8:00 PM
☐	Paracetamol 500mg Suppository 500 mg , TDS (3 times a day), Rectal 3 Days [14/04/2016-17/04/2016] Prescriber's Remark : Prescriber's Name : System Administrator Order Date : 14/04/2016		500mg ☐ Remarks	500mg ☐ Remarks	500mg ☐ Remarks

Figure 3.1.3-4 MAR Patient Screen

Note

- Screen will display two (2) panel functions:
 - Non-Infusion
 - Infusion
- Administration status:
 - Due - Administration has been recorded
 - Overdue - Record 'Not Administered' checkbox
 - Served- Record the administration within time range
 - Late - Has not record the administration within time range
 - Withhold - Hold by doctors or pharmacist
 - Future Dose - Has not reach the schedule time
 - Not Serve - Did not Serve
 - Discontinue - Discontinued by doctor



MAR DIALOG

Age: 43 Years 03 Months 12 Days | Gender: Male | MRN: HPSF00006498

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

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

Upload Photo

Medication Chart | 20/05/2015 | ■ Served ■ Overdue ■ Withhold ■ Not Serve ■ Due ■ Late ■ Future Dose ■ Discontinue | Medication Profile | Cancel | Record

Select	Order Detail	Source	8:00 AM	8:00 PM
☐	Chlorpheniramine Maleate 2 mg/5 ml Syrup 2 mg BD (twice daily) 30 Days [05/05/2015-04/06/2015] <i>Prescriber's Remark:</i> Prescriber's Name: Dr. Ho Kim Wah		■ 8:00 AM 2mg ☐ Remarks	■ 8:00 PM 2mg ☐ Remarks
☐	Mefenamic Acid 250 mg Capsule 250 mg TDS (3 times a day) 61 Days [05/05/2015-05/07/2015] <i>Prescriber's Remark:</i> Prescriber's Name: Dr. Ho Kim Wah		■ 8:00 AM 250mg ☐ Remarks	■ 12:00 PM 250mg ☐ Remarks

Figure 3.1.3-5 Remarks

STEP 5

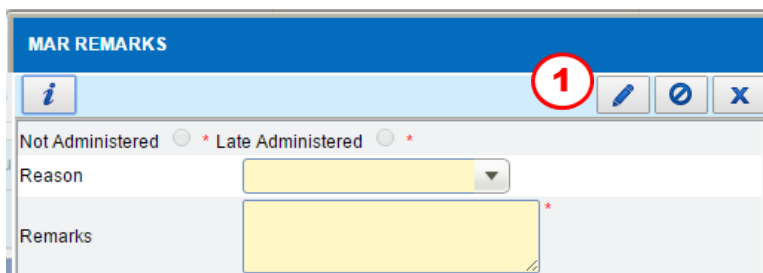
To record the late administration or not administered, click on [Remarks](#) and system will display as figure 3.1.3-6(a)

Note

Remarks can be entered if:

- Drug status still active.
- Reach and exceeding the time range of Administration time

Late Administered



MAR REMARKS

i 1 ✎ ⌂ ✕

Not Administered ☐ * Late Administered ☐ *

Reason: ▼

Remarks: *

Figure 3.1.3-6(a) MAR Remarks

STEP 1

Click on  button to edit or add the new remarks

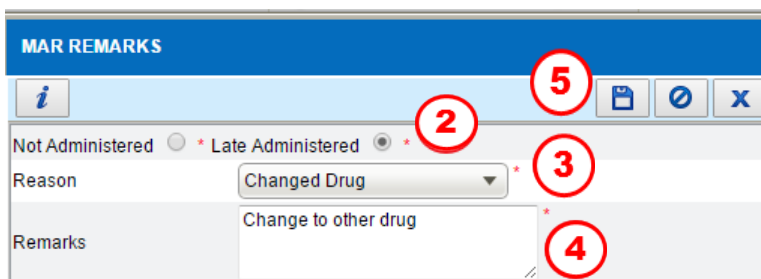


Figure 3.1.3-6(b) MAR Remarks

STEP 2

Click on the Late Administered checkbox

STEP 3

Chose one(1) reason from the drop down box:

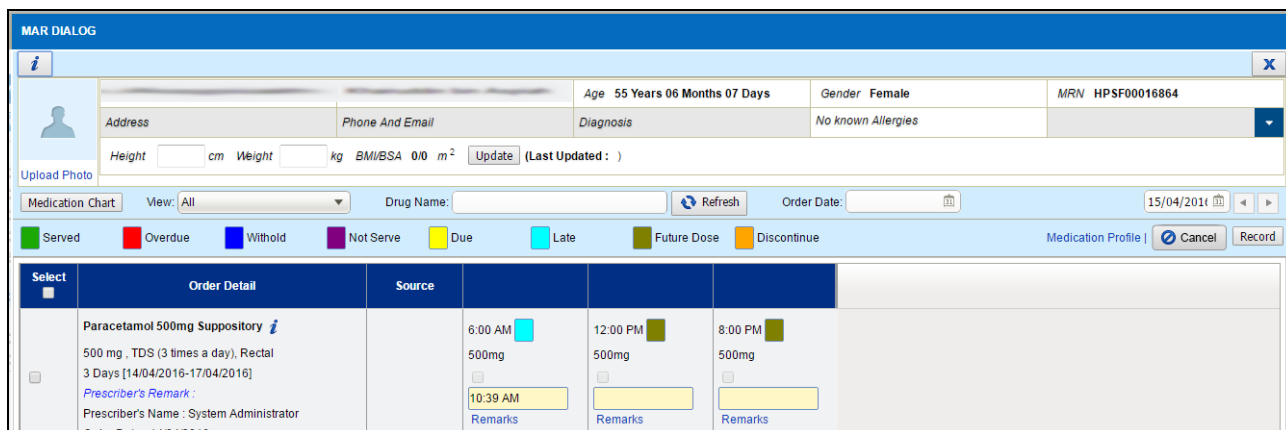
- Allergy
- Change Drug
- Hemodialysis
- Medication/Drug With Hold
- Nil By Mouth
- Nil In Stock
- No IV Access
- Not In Bed
- Others
- Patient Discharge
- Refused

STEP 4

Enter the remarks

STEP 5

Click on save  button to save record



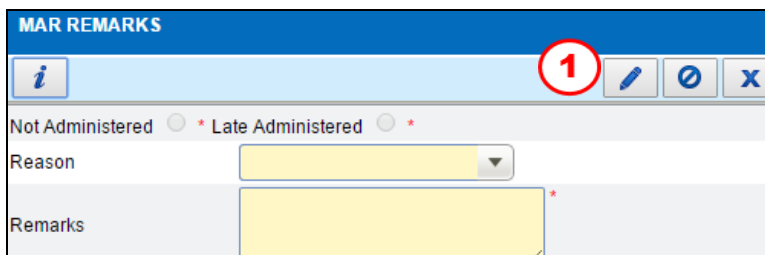
Select	Order Detail	Source	6:00 AM	12:00 PM	8:00 PM
☐	Paracetamol 500mg Suppository 500 mg, TDS (3 times a day), Rectal 3 Days [14/04/2016-17/04/2016] Prescriber's Remark : Prescriber's Name : System Administrator Order Date : 14/04/2016		500mg 10:39 AM Remarks	500mg Remarks	500mg Remarks

Figure 3.1.3-6(c) MAR Remarks

Note

- Checkbox will be available for drug with yellow colour box (due status)
- When step 5 is performed, the box will turn to cyan colour (late status)

Not Administered

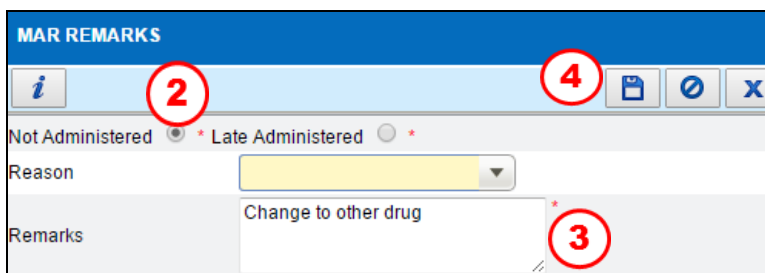


The dialog box titled "MAR REMARKS" contains an information icon (i) and a close button (X). A red circle with the number 1 highlights the information icon. Below the header, there are two radio buttons: "Not Administered" (selected) and "Late Administered". There is a "Reason" dropdown menu and a "Remarks" text area.

Figure 3.1.3-7 MAR Remarks

STEP 1

Click on  button to edit or add the new remarks



The dialog box is shown with annotations: a red circle with the number 2 highlights the pencil icon, a red circle with the number 4 highlights the save icon (floppy disk), and a red circle with the number 3 highlights the "Remarks" text area. The "Reason" dropdown menu now shows "Change to other drug".

Figure 3.1.3-8 MAR Not Administered

STEP 2

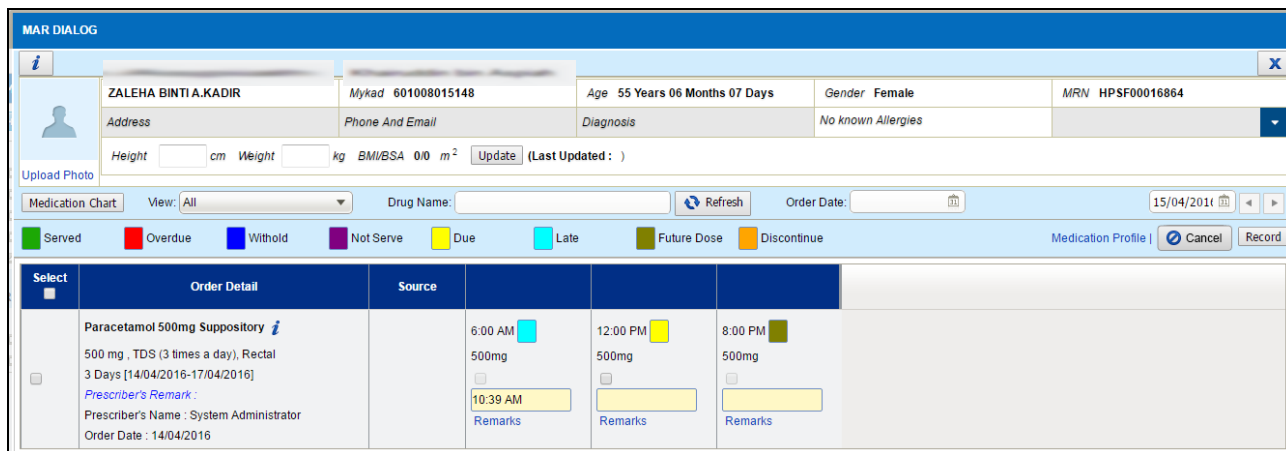
Click on the Not Administered checkbox

STEP 3

Enter the remarks

STEP 4

Click on save  button to save record



The "MAR DIALOG" window displays patient information for ZALEHA BINTI A.KADIR. It includes fields for Mykad, Age, Gender, MRN, Address, Phone And Email, Diagnosis, and No known Allergies. Below this is a "Medication Chart" section with a "View:" dropdown set to "All". The chart shows a table of medication orders for Paracetamol 500mg Suppository. The table has columns for "Select", "Order Detail", "Source", and time slots (6:00 AM, 12:00 PM, 8:00 PM). The "6:00 AM" slot is highlighted in yellow, indicating a "Due" status. The "12:00 PM" and "8:00 PM" slots are highlighted in green, indicating a "Served" status. The "Order Detail" column shows "500 mg, TDS (3 times a day), Rectal 3 Days [14/04/2016-17/04/2016]". The "Source" column shows "System Administrator". The "Remarks" column is empty. The "Medication Chart" section also includes a "Refresh" button, an "Order Date:" field, and a "Medication Profile" button. The "Medication Profile" button is highlighted in blue.

Figure 3.1.3-9 MAR Not Administered

Note

- Checkbox will be available for drug with yellow colour box (due status)
- When step 5 is performed, the box will turn to purple colour box (Not Serve status)

3.1.4 MAR Infusion

This function is used to administer the medication to patient within the time range (on time) for infusion type of medication.

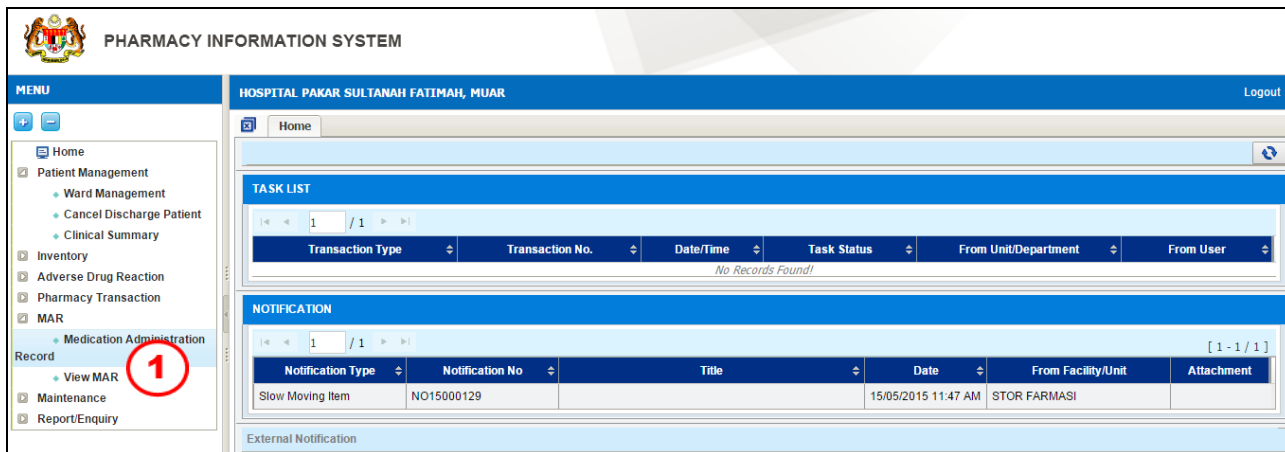


Figure 3.1.4-1 MAR Menu

STEP 1

Click on the MAR menu then click on the Medication Administrative Record sub menu

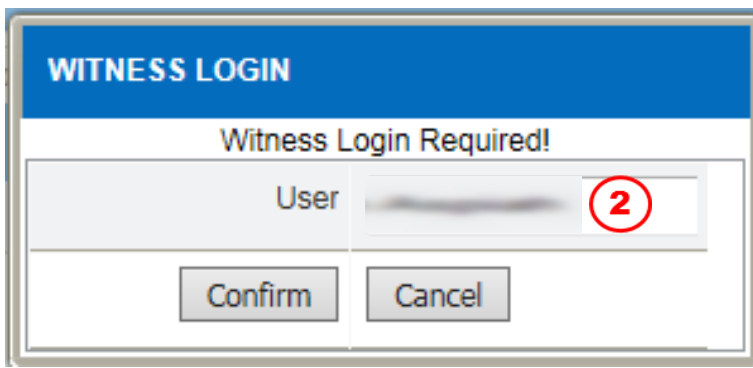


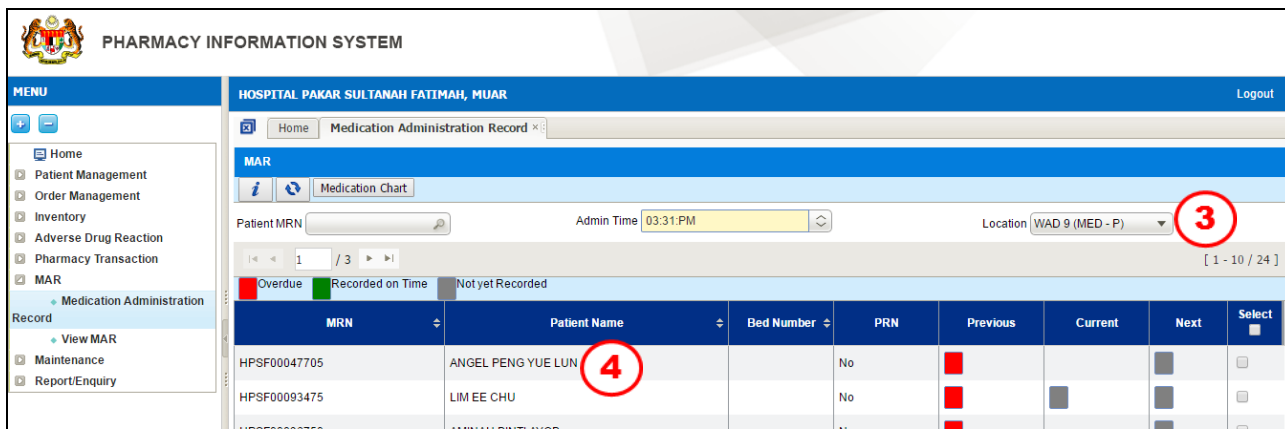
Figure 3.1.4-2 Witness Login

STEP 2

Enter **User ID** in the displayed Witness Login dialog box screen and click confirm

Note

- Witness must have system access login.
- Witness must be different with user login.
- Witness shall be from the same discipline and the grade of Jururawat must be U29 and above.
- Infusion drug only available after pharmacist do the dispensing.
- The drug that displayed at infusion Panel will be with 'INF' Intravenous Infusion or 'INSB' Intravenous Slow Bolus admin route.
- There is no STAT or PRN dose for Infusion drug.
- Witness does not require to login for every patient.



PHARMACY INFORMATION SYSTEM

HOSPITAL PAKAR SULTANAH FATIMAH, MUAR

Logout

Home Medication Administration Record

MAR

Medication Chart

Patient MRN Admin Time 03:31:PM Location WAD 9 (MED - P)

1 / 3 [1 - 10 / 24]

Overdue Recorded on Time Not yet Recorded

MRN	Patient Name	Bed Number	PRN	Previous	Current	Next	Select
HPSF00047705	ANGEL PENG YUE LUN		No				
HPSF00093475	LIM EE CHU		No				

Figure 3.1.4-3 MAR Listing Page

STEP 3

Select location from drop box

STEP 4

Click on the selected patient name and system will display as Figure 3.1.4-4

Select	Order Detail	Source	
☐	Smof Kabiven Central 1600kcal, 1.5L 1477 ml , OD (once daily), Intravenous Infusion 48 null [14/03/2016-16/03/2016] Infuse Over : 24 Hour 0 Min Infusion Rate : 61.54ml/hour <i>Prescriber's Remark : testing</i> Prescriber's Name : Dr Priya Naraynen Order Date : 14/03/2016		5:00 PM 1477ml Start End Remarks

Figure 3.1.4-4 MAR Patient Screen

Note

- Screen will display two (2) panel functions and which is
 - Non-Infusion
 - Infusion
- Administration status:
 - Due - Already record the administration
 - Overdue - Record 'Not Administered' checkbox
 - Served- Record the administration within time range
 - Late - Has not record the administration within time range
 - Withhold - Hold by doctors or pharmacist
 - Future Dose - Has not reach the schedule time
 - Not Serve - Did not Serve
 - Discontinue - Discontinued by doctor

Select	Order Detail	Source	
☐	Smof Kabiven Central 1600kcal, 1.5L  1477 ml , OD (once daily), Intravenous Infusion 48 null [14/03/2016-16/03/2016] Infuse Over : 24 Hour 0 Min Infusion Rate : 61.54ml/hour Prescriber's Remark : testing Prescriber's Name : Dr Priya Naraynen Order Date : 14/03/2016		5:00 PM  1477ml 5  Start End Remarks

Figure 3.1.4-5 Start Infusion

STEP 5

Click on the  button to enter the start time

Note

- When  button is clicked, the current time will be recorded.
- If the time is one (1) hour more than duration time, recording will be not allowed without any remarks.

Select	Order Detail	Source	
☐	Smof Kabiven Central 1600kcal, 1.5L  1477 ml , OD (once daily), Intravenous Infusion 48 null [14/03/2016-16/03/2016] Infuse Over : 24 Hour 0 Min Infusion Rate : 61.54ml/hour Prescriber's Remark : testing Prescriber's Name : Dr Priya Naraynen Order Date : 14/03/2016		5:00 PM  1477ml 6  Start 04:50 PM End Remarks

Figure 3.1.4-6 End Infusion

STEP 6

Click on the  button to enter the end time.

Note

-  button will be available for drug with yellow colour box (due status)
- After recording is performed, the box will turn to green colour box (served status)

3.1.5 MAR Infusion (Late Administered/Not Administered)

This function is used to administer the medication to patient within the Time range (on time) for infusion type of medication.

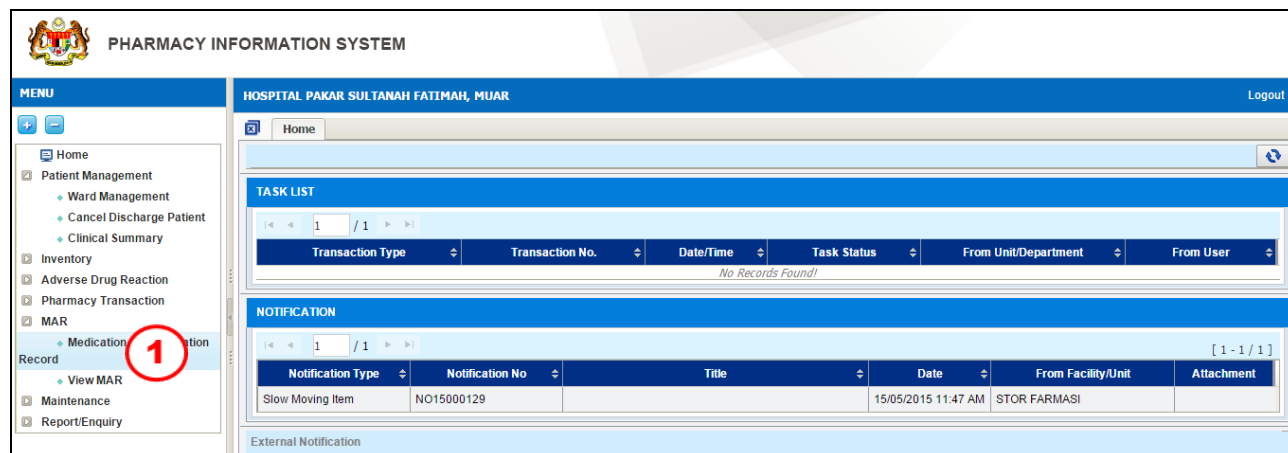


Figure 3.1.5-1 MAR Menu

STEP 1

Click on the MAR menu then click on the Medication Administrative Record sub menu

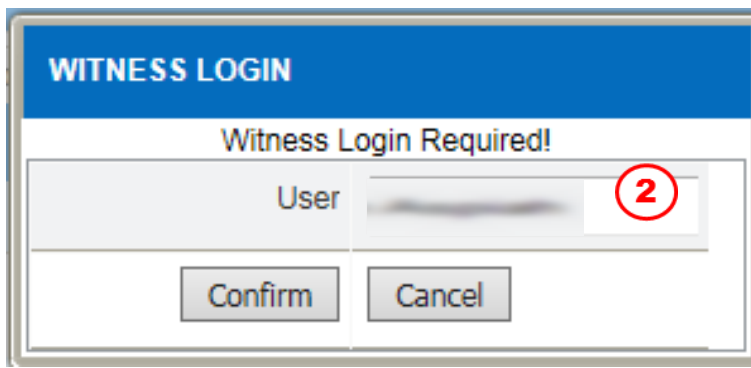


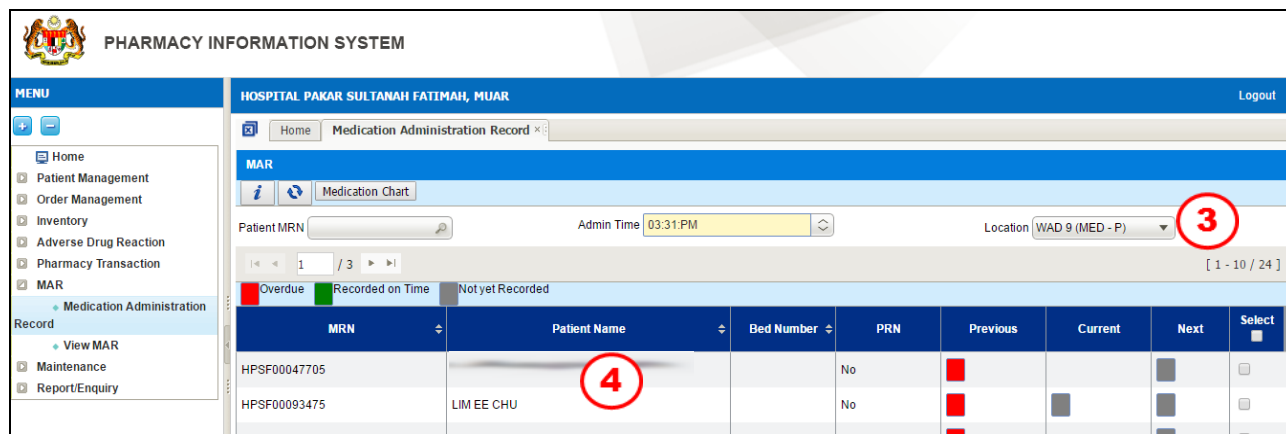
Figure 3.1.5-2 Witness Login

STEP 2

Enter User ID in Witness Login Dialog Box screen and click confirm

Note

- Witness must have system access login.
- Witness must be different with user login.
- Witness shall be from the same discipline and the grade of Jururawat must be U29 and above.
- Infusion drug will be available after pharmacist do the dispensing.
- Drug which are displayed at infusion Panel will be with 'INF' Intravenous Infusion or 'INSB' Intravenous Slow Bolus admin route.
- There is no STAT or PRN dose for Infusion drug
- Witness does not require to login for every patient.



PHARMACY INFORMATION SYSTEM

HOSPITAL PAKAR SULTANAH FATIMAH, MUAR

Logout

Home Medication Administration Record

MAR

Medication Chart

Patient MRN Admin Time 03:31 PM Location WAD 9 (MED - P)

1 / 3 [1 - 10 / 24]

Overdue Recorded on Time Not yet Recorded

MRN	Patient Name	Bed Number	PRN	Previous	Current	Next	Select
HPSF00047705			No				
HPSF00093475	LIM EE CHU		No				

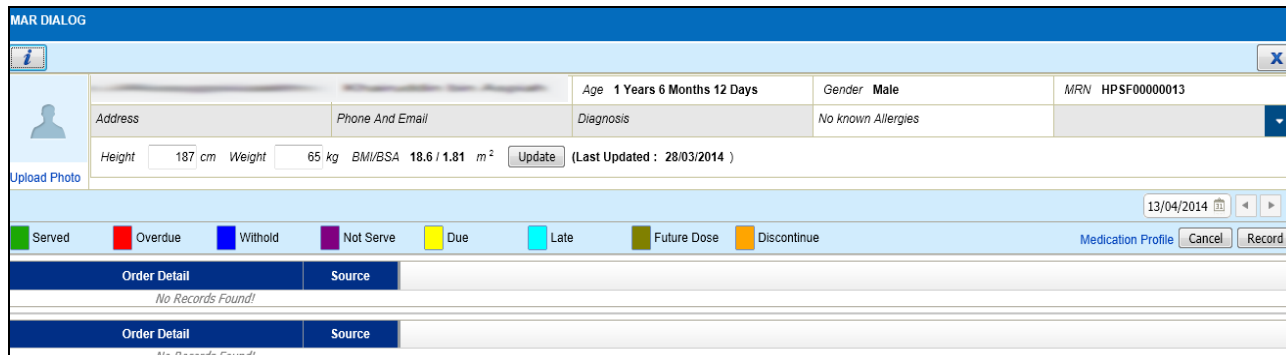
Figure 3.1.5-3 MAR Listing Page

STEP 3

Select location from drop box

STEP 4

Click on the selected patient name and system will display as Figure 3.1.5-4



MAR DIALOG

Address Phone And Email Age 1 Years 6 Months 12 Days Gender Male MRN HPSF00000013

Height 187 cm Weight 65 kg BMI/BSA 18.6 / 1.81 m² Update (Last Updated : 28/03/2014)

Upload Photo

13/04/2014

Served Overdue Withhold Not Serve Due Late Future Dose Discontinue

Medication Profile Cancel Record

Order Detail Source

No Records Found!

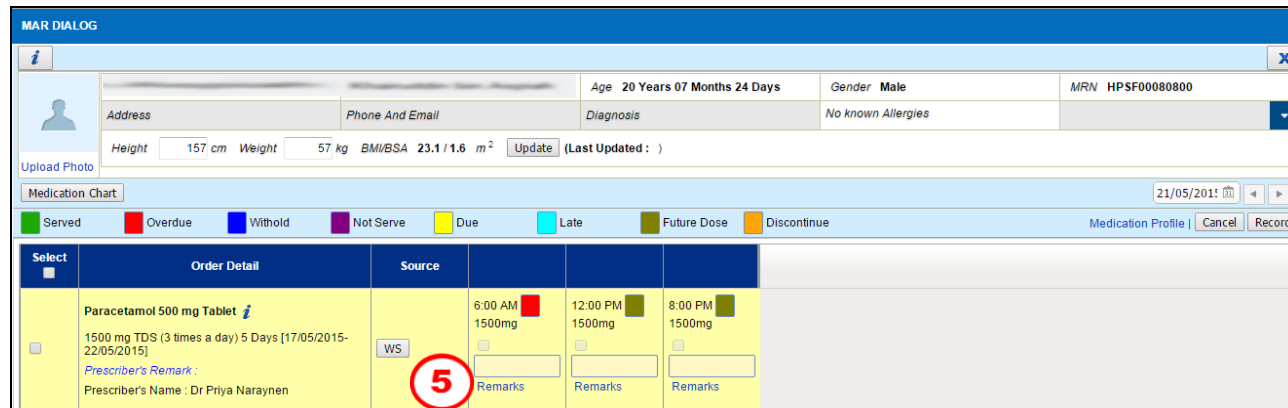
Order Detail Source

No Records Found!

Figure 3.1.5-4 MAR Patient Screen

Note

- Screen will display two (2) panel functions:
 - Non-Infusion
 - Infusion
- Administration status:
 - Due - Administration recorded
 - Overdue - Record 'Not Administered' checkbox
 - Served- Record the administration within time range
 - Late - Has not record the administration within time range
 - Withhold - Hold by doctors or pharmacist
 - Future Dose - Has not reach the schedule time
 - Not Serve - Did not Serve
 - Discontinue - Discontinued by doctor



MAR DIALOG

Age: 20 Years 07 Months 24 Days | Gender: Male | MRN: HPSF00080800

Address: | Phone And Email: | Diagnosis: | No known Allergies

Height: 157 cm | Weight: 57 kg | BMI/BSA: 23.1 / 1.6 m² | Update (Last Updated:)

Medication Chart | 21/05/2015

Served Overdue Withhold Not Serve Due Late Future Dose Discontinue | Medication Profile | Cancel Record

Select	Order Detail	Source	6:00 AM	12:00 PM	8:00 PM
☐	Paracetamol 500 mg Tablet 1500 mg TDS (3 times a day) 5 Days [17/05/2015-22/05/2015] Prescriber's Remark: Prescriber's Name : Dr Priya Naraynen	WS	1500mg	1500mg	1500mg
			Remarks	Remarks	Remarks

Figure 3.1.5-5 Remarks

STEP 5

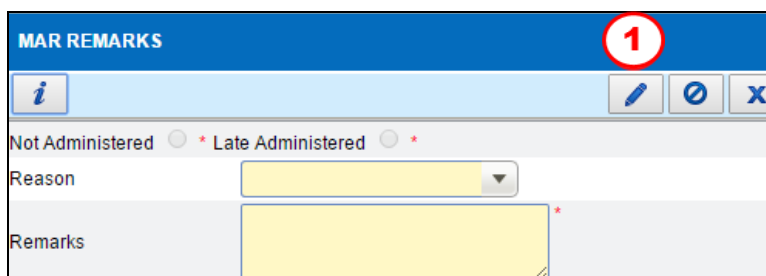
To record the late administration or not administered, click on **Remarks** and system will display as Figure 3.1.5-6(a)

Note

Remarks can be entered if:

- Drug status is Active.
- Time range is reaching and exceeding of Administration time

LATE ADMINISTERED



MAR REMARKS

Not Administered ☐ * Late Administered ☒ *

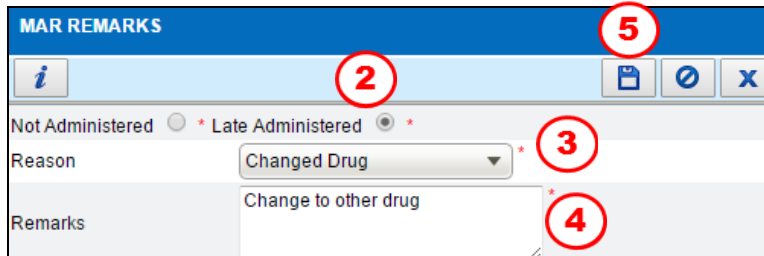
Reason:

Remarks:

Figure 3.1.5-6(a) MAR Remarks

STEP 1

Click on  button to edit or add the new remarks



The image shows a 'MAR REMARKS' dialog box. It has a title bar with a close button (X) and a save button (floppy disk). Below the title bar, there are radio buttons for 'Not Administered' and 'Late Administered'. The 'Late Administered' button is selected. Below the radio buttons, there is a 'Reason' dropdown menu with 'Changed Drug' selected. Below the dropdown menu, there is a 'Remarks' text area with the text 'Change to other drug'. The dialog box is numbered 1 through 5: 1 is the title bar, 2 is the 'Late Administered' radio button, 3 is the 'Reason' dropdown menu, 4 is the 'Remarks' text area, and 5 is the save button.

Figure 3.1.5-6(b) MAR Remarks

STEP 2

Click on the **Late Administered** radio button

STEP 3

Chose one reason from the drop down box:

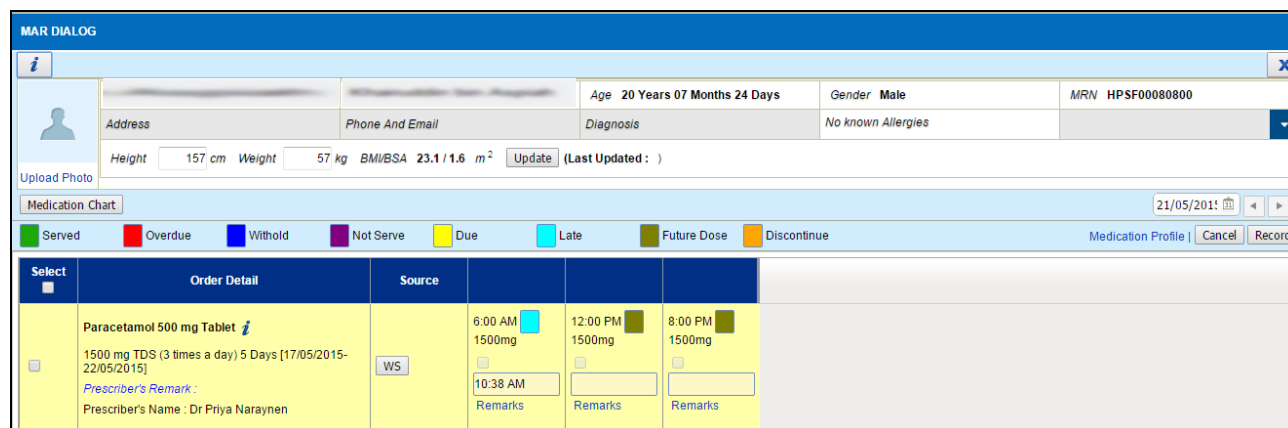
- Allergy
- Change Drug
- Hemodialysis
- Medication/Drug With Hold
- Nil By Mouth
- Nil In Stock
- No IV Access
- Not In Bed
- Others
- Patient Discharge
- Refused

STEP 4

Enter the remarks

STEP 5

Click on save  button to save record



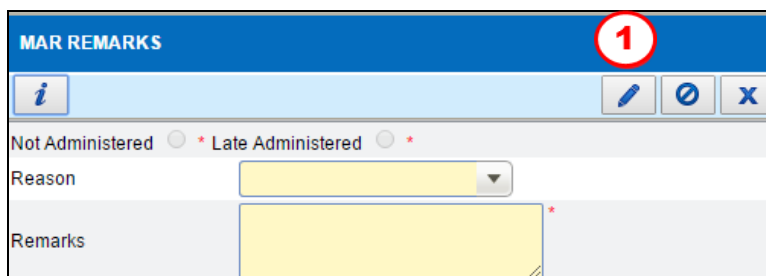
The image shows a 'MAR DIALOG' box. It has a title bar with a close button (X). Below the title bar, there is a patient information section with fields for Address, Phone And Email, Age (20 Years 07 Months 24 Days), Gender (Male), and MRN (HPSF00080800). Below the patient information section, there is a 'Medication Chart' section. It has a 'Medication Chart' button and a date field (21/05/2015). Below the date field, there is a legend for medication status: Served (green), Overdue (red), Withhold (blue), Not Serve (purple), Due (yellow), Late (cyan), Future Dose (dark green), and Discontinue (orange). Below the legend, there is a table with columns for 'Select', 'Order Detail', 'Source', and 'Remarks'. The table contains one row for 'Paracetamol 500 mg Tablet' with a 'Due' status (yellow box) and a 'Late' status (cyan box). The 'Remarks' column has three entries: '10:38 AM', 'Remarks', and 'Remarks'.

Figure 3.1.5-7 MAR Late

Note

- Checkbox will be available for drug with yellow colour box (due status)
- When step 5 is performed, the box will turn to cyan colour (late status)

NOT ADMINISTERED

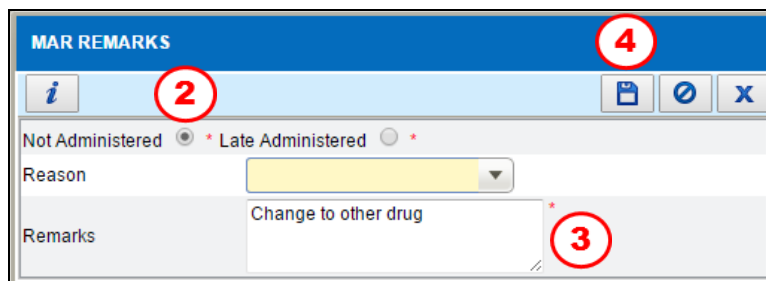


The dialog box titled "MAR REMARKS" has a blue header bar with a red circle '1' next to the title. Below the header is a light blue bar with an information icon 'i' on the left and edit, delete, and close icons on the right. The main area contains three radio buttons: "Not Administered" (selected), "* Late Administered", and "*". Below these are two text input fields: "Reason" and "Remarks". The "Remarks" field has a red asterisk next to it.

Figure 3.1.5-8 MAR Remarks

STEP 1

Click on  button to edit or add the new remarks



The dialog box is annotated with red circles: '2' is next to the information icon 'i', '4' is next to the title bar, and '3' is next to the "Change to other drug" text in the "Remarks" field. The "Late Administered" radio button is now selected.

Figure 3.1.5-9 MAR Not Administered

STEP 2

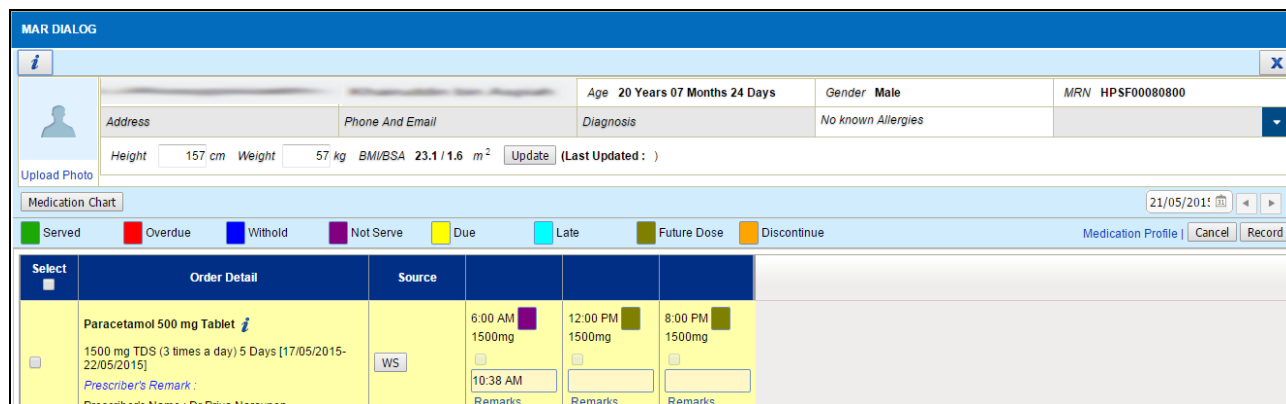
Click on the **Not Administered** radio button

STEP 3

Enter the remarks

STEP 4

Click on save  button to save record



The "MAR DIALOG" window displays patient information and a medication chart. The patient information section includes fields for Address, Phone And Email, Age (20 Years 07 Months 24 Days), Gender (Male), MRN (HPSF00080800), Height (157 cm), Weight (57 kg), BMI/BSA (23.1 / 1.6 m²), and an Update button. The medication chart section shows a table with columns for Select, Order Detail, Source, and time slots (6:00 AM, 12:00 PM, 8:00 PM). The "Not Administered" status is indicated by a purple square. The "Prescriber's Remark" field is visible at the bottom.

Figure 3.1.5-10 MAR Not Administered

4.0 Acronyms

Abbreviation	Definition
PhIS	Pharmacy Information System
CPS	Clinical Pharmacy System
MRN	Medical Registration Number
MAR	Medication Administration Report
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	Radiopharmaceutical	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		