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

# Full Based

# User Manual
# Medication Administration Record
# (MAR)

| | |
|---|---|
| **Version** | : 8th EDITION |
| **Document ID** | : FB_U. MANUAL_MAR |

*Reference ID  : FB_U. MANUAL_MAR-8th EDITION*

*Application reference: PhIS & CPS v1.8.1*

**Table of Contents**

## 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
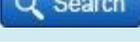- To view active inpatient record only

### 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 | Login to PhIS | Logout | 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 to Excel | Export Report From PDF file to Excel file | OK | OK Button |
| Yes | Yes Button | No | No Button |
| | Radio Button | | Checkbox |
| SPUB56565698 | System Automatic Generate Record No. | HPSF00088304 | Automatically Display/Retrieve Box |
| | Reset Login Screen | i | Show Help |
| Home | Display Home Tab | Search | Search Record |
| | Cancel | | Dropdown Box |
| | Search Icon | * | Mandatory Field |
| | Edit Record | | Empty Text Box |
| Cancel | Cancel Button | | |

| Medication Administration Record (MAR) Module Legend | | | |
|---|---|---|---|
| | | | |
|  | Medication Served On time | Not Administered ☑ | Medication Not Serve |
| Late Administered ☑ | | | |

## *Note*

*To learn more about Login Information, kindly click Login Information module for descriptive steps.*

## 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
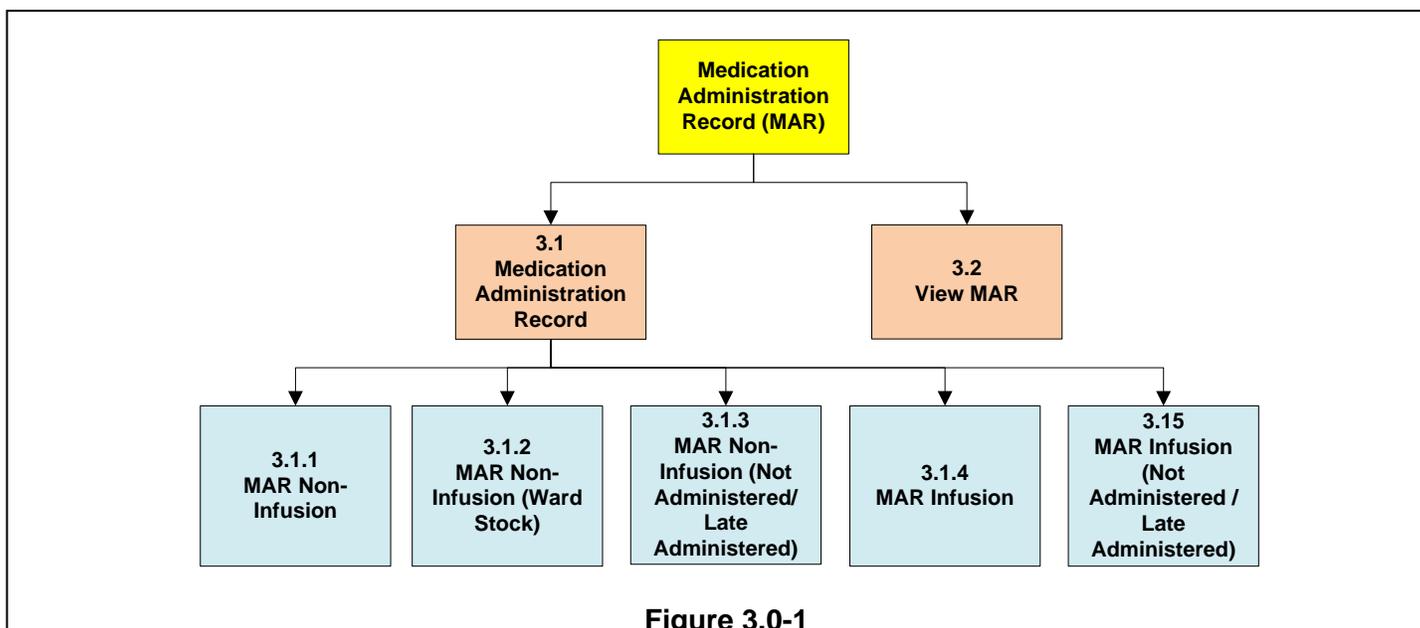


**Figure 3.0-1**

### 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)
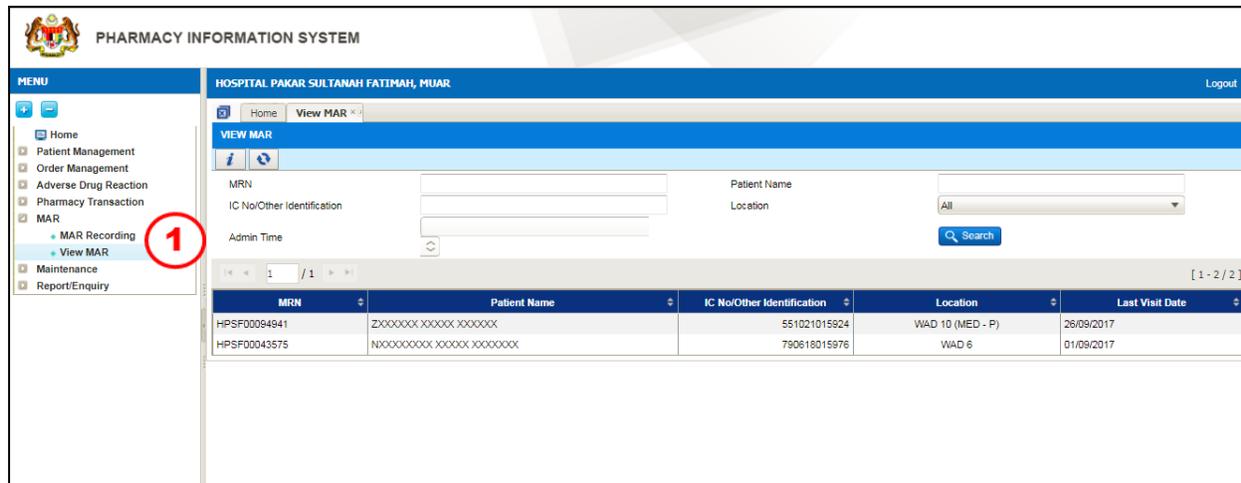


**Figure 3.1.1-1 MAR Menu**

***Note***

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

**STEP 1**

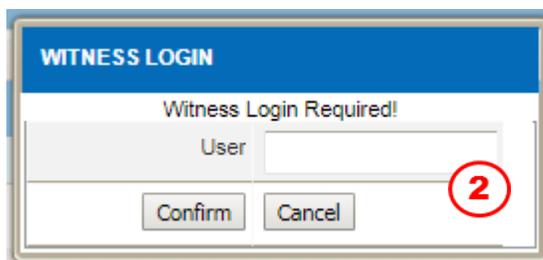Click on the MAR menu then click on the MAR recording sub menu
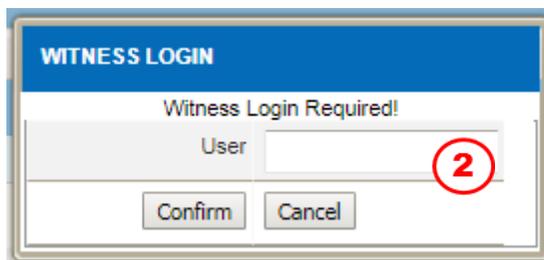


**Figure 3.1.1-2 Witness Login**

**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.*
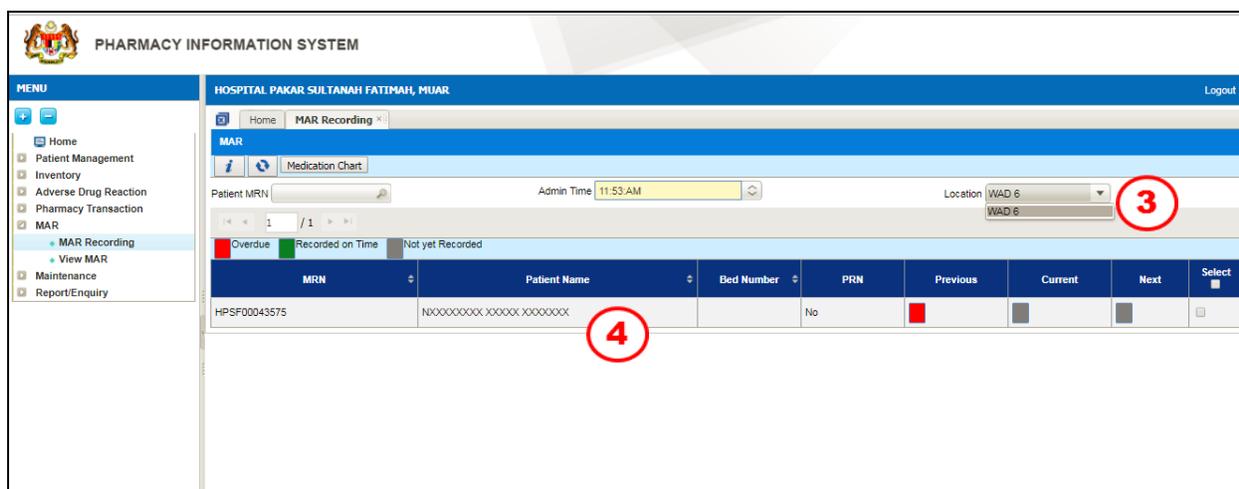
**Figure 3.1.1-3 MAR Listing Page**

<u>*Note*</u>
*Search MAR record based :-*

| No | Field | Description | Remark |
|----|-------|-------------|--------|
| a | Patient MRN | Patient MRN | Allow to search by patient full or partial MRN No |
| b | Admin Time | Patient admission time | Allow to search patient by time admitted to ward |
| c | 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
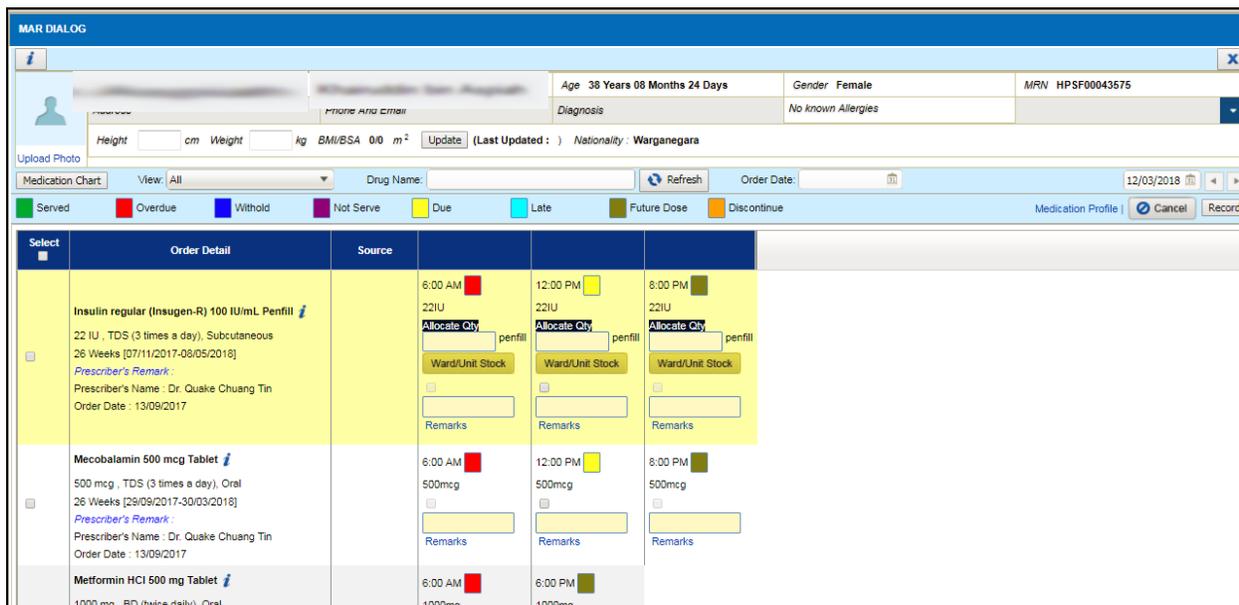


**Figure 3.1.1-4 MAR Patient Screen**

### Note

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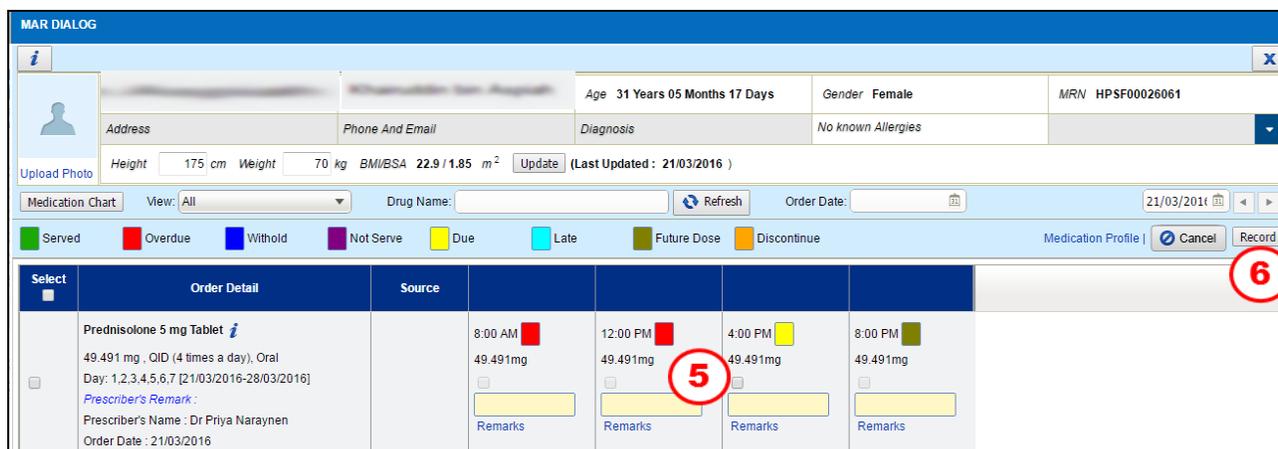


**Figure 3.1.1-5 Patient Medication List**

### 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 [Record] to confirm record
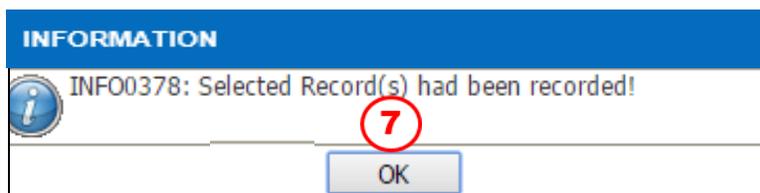


**Figure 3.1.1-6 Information Alert Message**

**STEP 7**

Click on the [ OK ] button to confirm record



**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.
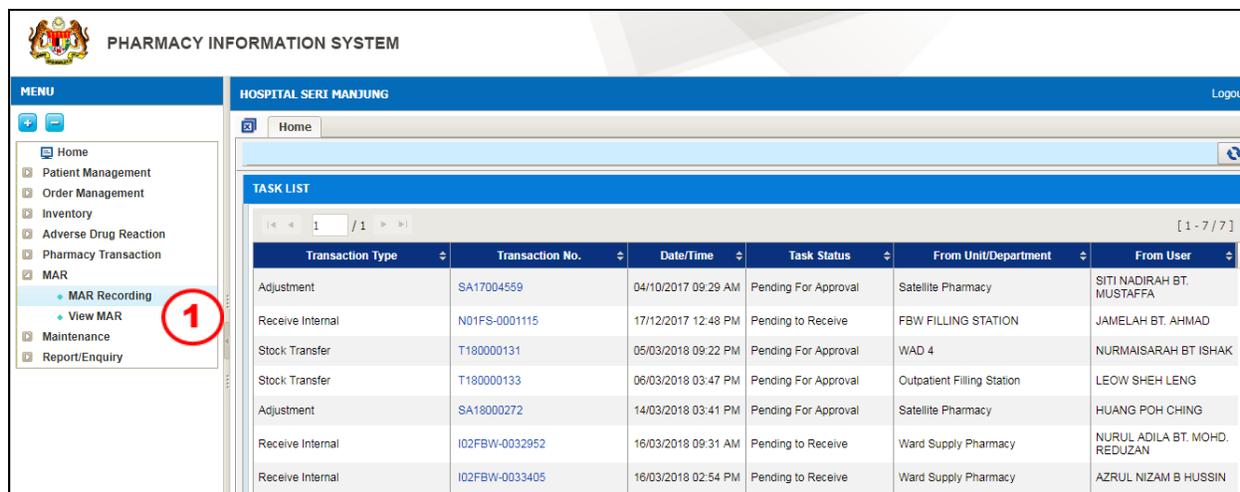


**Figure 3.1.2-1 MAR Menu**

**STEP 1**

Click on the MAR menu then click on the MAR Recording 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.*

**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



**Figure 3.1.2-4 MAR Patient Screen**

*Note*

- *Screen will display two (2) panel functions:*
  - a) *Non-Infusion*
  - b) *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 3.1.2-5 Patient Medication List**

**STEP 5**

Click on the check box ☑ to select the drugs.

**STEP 6**

Click on [Ward/Unit Stock] 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.*

**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 [Yes] button to confirm record

**Figure 3.1.2-8 Drug Served**

**STEP 10**

Click on record button [Record]



**Figure 3.1.2-9 MAR – View MAR notes**

<u>*Note*</u>
- *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).
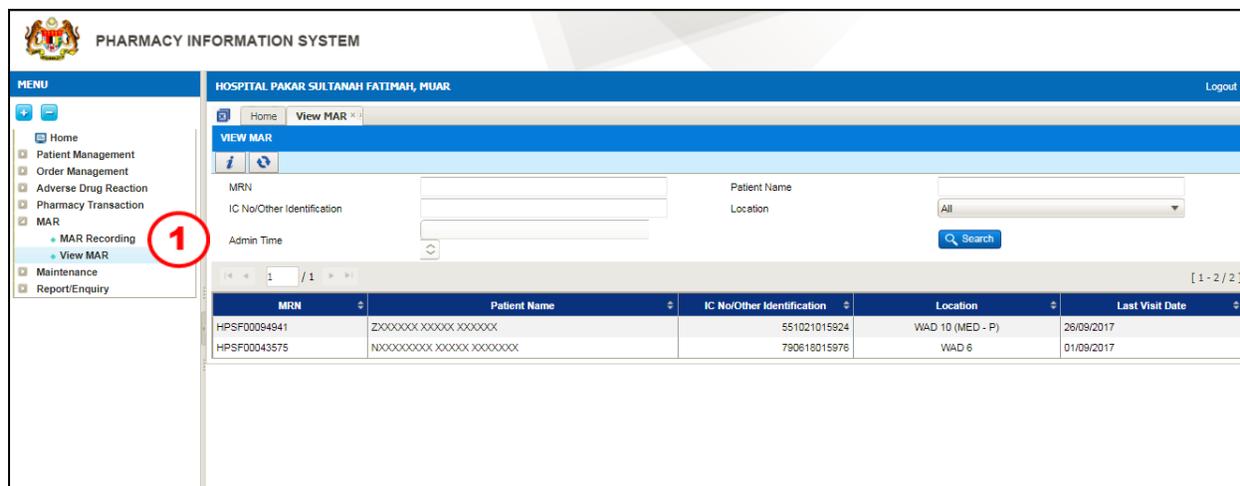


**Figure 3.1.3-1 MAR Menu**

**STEP 1**

Click on the MAR menu then click on the MAR Recording sub menu
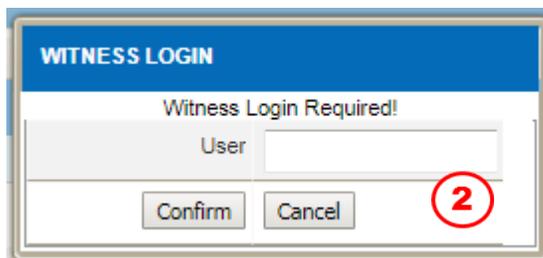


**Figure 3.1.3-2 Witness Login**

**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.*
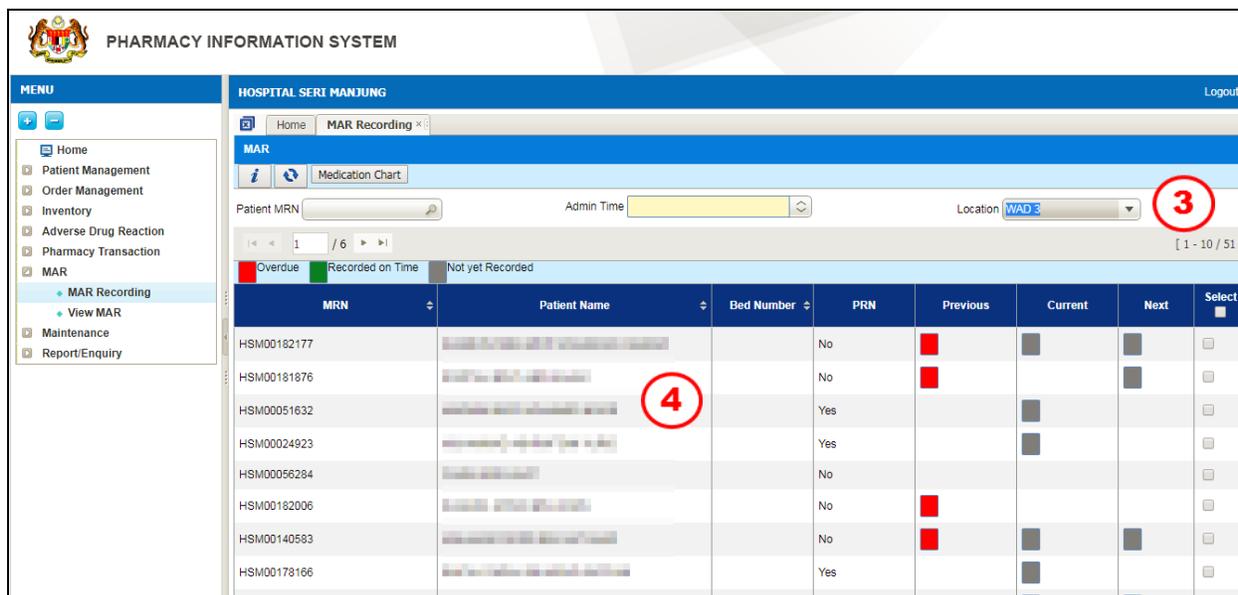
**Figure 3.1.3-3 MAR Listing Page**

**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
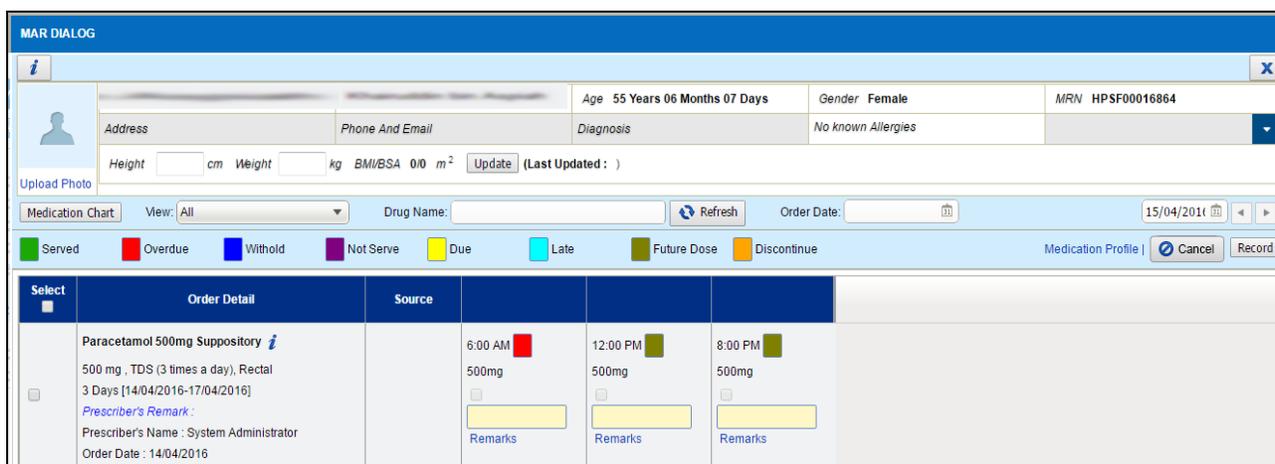


**Figure 3.1.3-4 MAR Patient Screen**

***Note***

- *Screen will display two (2) panel functions:*
  - *a) Non-Infusion*
  - *b) Infusion*

- *Administration status:*
  - *a) Due - Administration has been 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 3.1.3-5 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**



**Figure 3.1.3-6(a) MAR Remarks**

**STEP 1**

Click on [pencil icon] 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 [save button] button to save record

**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**


**Figure 3.1.3-7 MAR Remarks**

**STEP 1**

Click on [pencil icon] button to edit or add the new remarks


**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 [save icon] button to save record



**Figure 3.1.3-9 MAR Not Administered**

<u>*Note*</u>
- *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.
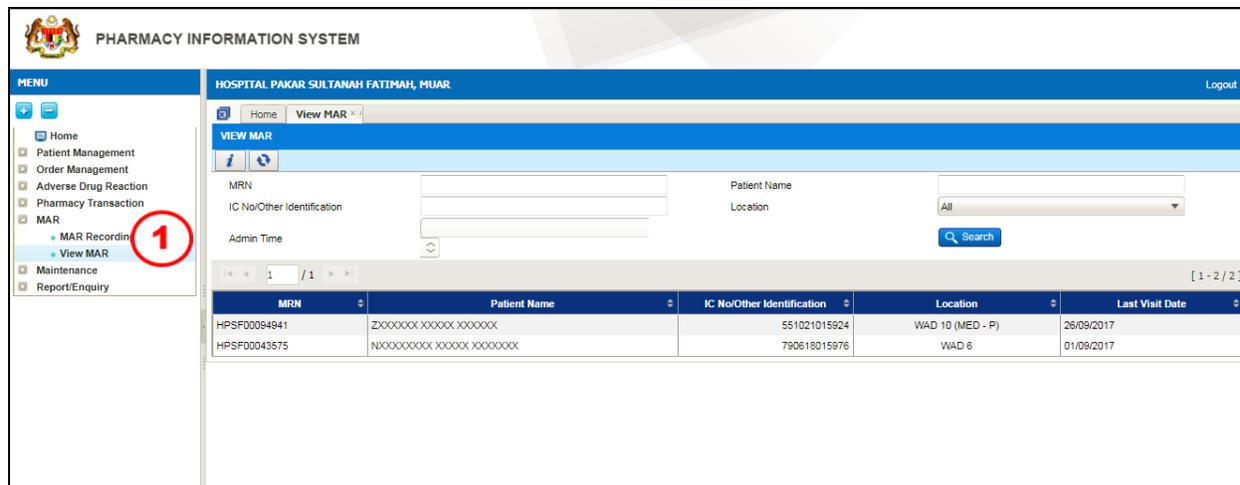


**Figure 3.1.4-1 MAR Menu**

**STEP 1**

Click on the MAR menu then click on the MAR Recording sub menu
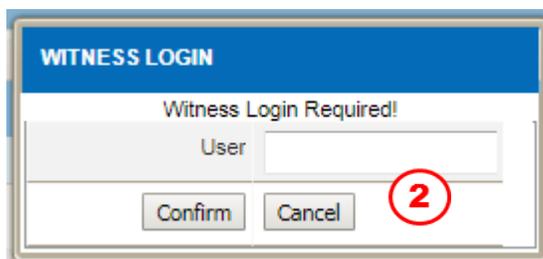


**Figure 3.1.4-2 Witness Login**

**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.*

**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



**Figure 3.1.4-4 MAR Patient Screen**

## *Note*

- *Screen will display two (2) panel functions and which is*
  - *a) Non-Infusion*
  - *b) Infusion*

- *Administration status:*
  - *a) Due - Already record the administration*
  - *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 3.1.4-5 Start Infusion**

**STEP 5**

Click on the [ Start ] button to enter the start time

***Note***

- *When [ Start ] 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.*



**Figure 3.1.4-6 End Infusion**

**STEP 6**

Click on the [ End ] button to enter the end time.

***Note***

- [ Start ] *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.
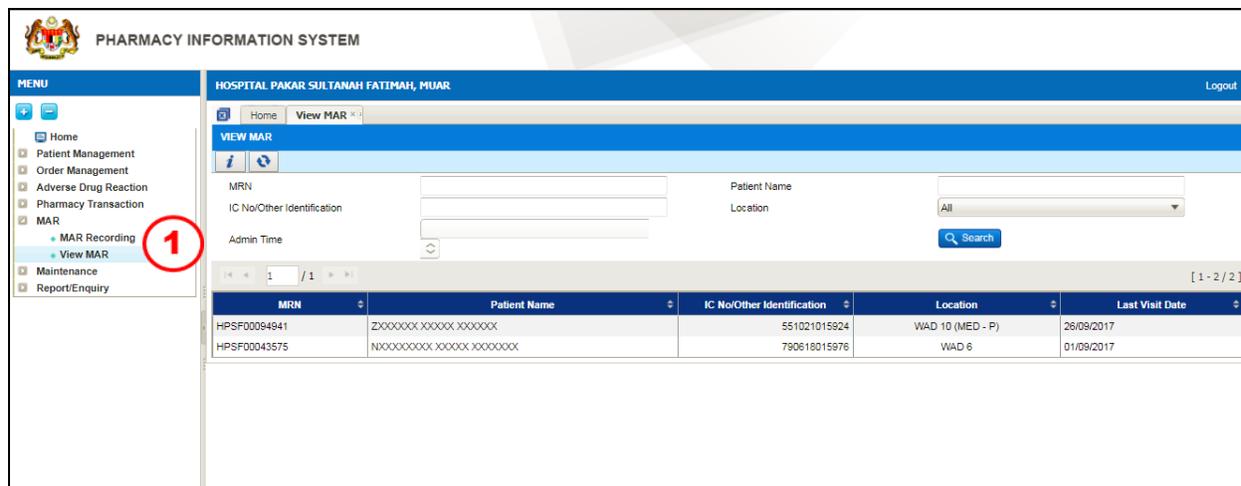


**Figure 3.1.5-1 MAR Menu**

**STEP 1**

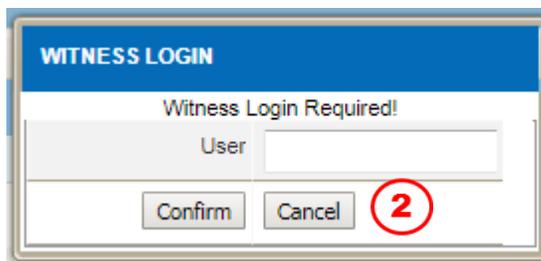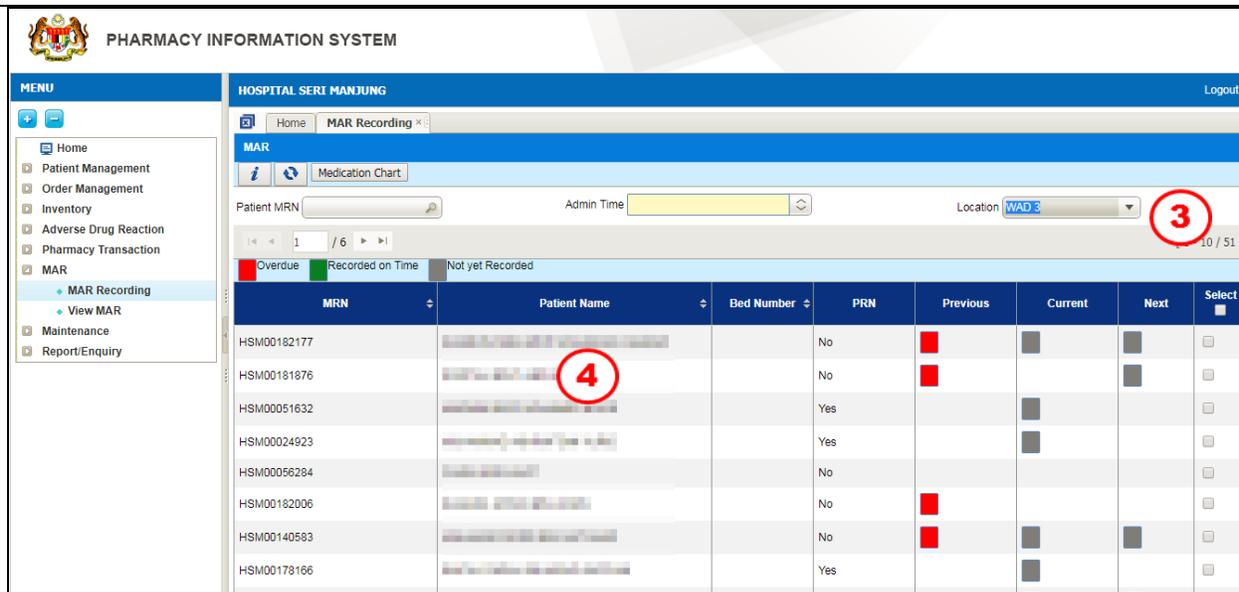Click on the MAR menu then click on the MAR Recording sub menu



**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*
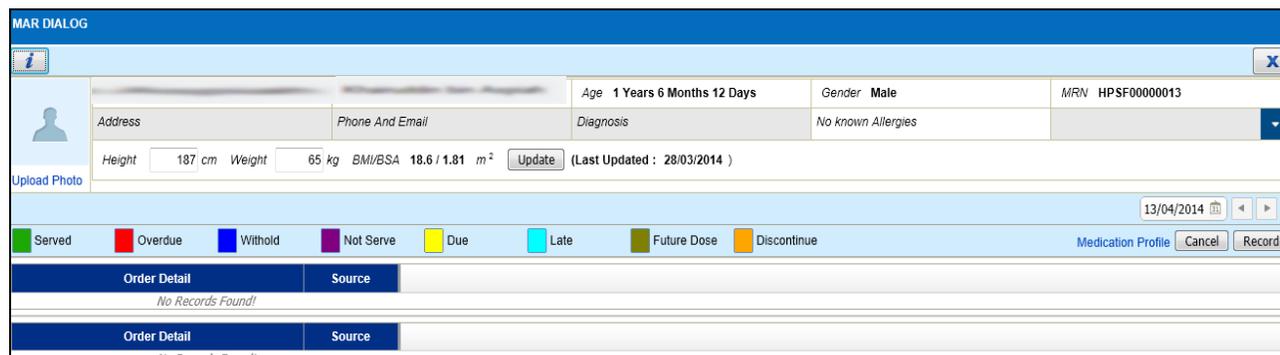- *Witness does not require to login for every patient.*

**Figure 3.1.5-3 MAR Listing Page**

**STEP 3**

Select location from drop box

**STEP 4**

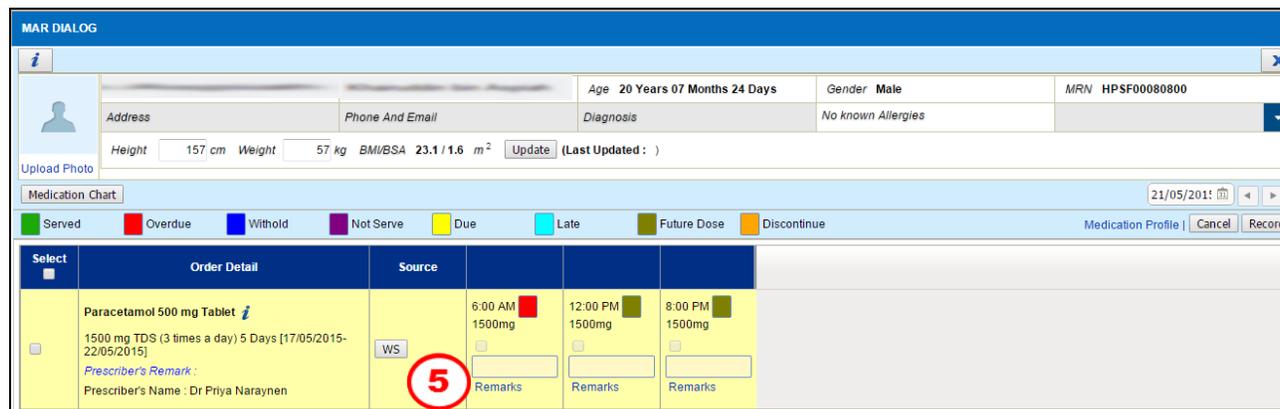Click on the selected patient name and system will display as Figure 3.1.5-4



**Figure 3.1.5-4 MAR Patient Screen**

***Note***
- *Screen will display two (2) panel functions:*
  - *a) Non-Infusion*
  - *b) 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
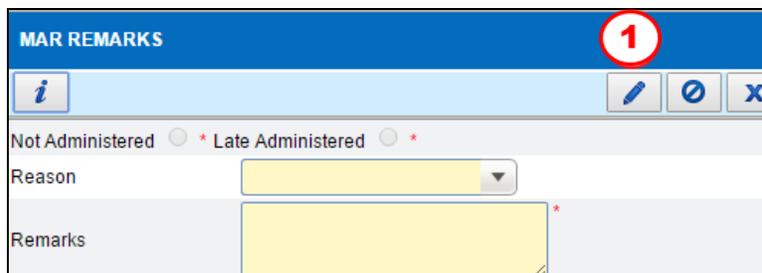


**Figure 3.1.5-5 Remarks**

**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**



**Figure 3.1.5-6(a) MAR Remarks**

**STEP 1**

Click on [pencil icon] button to edit or add the new remarks

**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
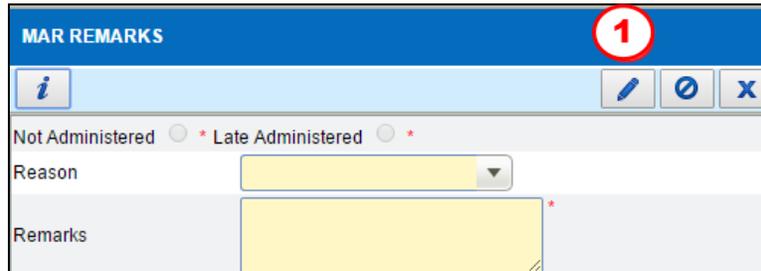- Refused

**STEP 4**

Enter the remarks

**STEP 5**

Click on save  button to save record



**Figure 3.1.5-7 MAR Late**

## NOT ADMINISTERED



**Figure 3.1.5-8 MAR Remarks**

**STEP 1**

Click on  button to edit or add the new remarks
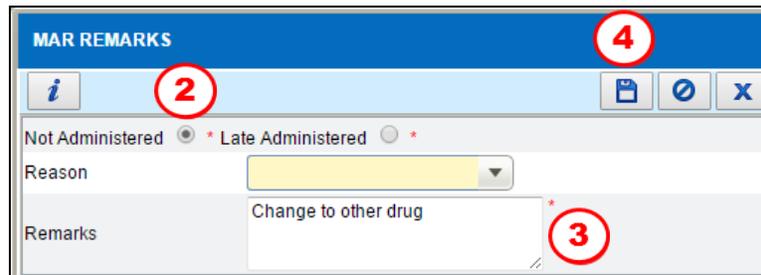


**Figure 3.1.5-9 MAR Not Administered**

**STEP 2**

Click on the **_Not Administered_** radio button

**STEP 3**

Enter the remarks

**STEP 4**

Click on save  button to save record

**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 | | |