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

Pharmacy Based

User Manual
Infusion Order

Version	**: 12th Edition**
Document ID	**: PB_U. MANUAL_INFUSION ORDER**

Reference ID : PB_U. MANUAL_IV-12th E

Application reference: PhIS & CPS v2.5

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 to benefit facility end user in the health care sector.

There are 12 modules to assist services delivery by the health care sector which comprises of:

1.   Order Management

2.   Inpatient Pharmacy

3.   Outpatient Pharmacy

4.   Medication Counselling

5.   Ward Pharmacy

6.   Pharmacy Inventory

7.   Manufacturing of Cytotoxic Drug Reconstitution, Parenteral Nutrition, IV Admixture & Eye Drop, Radiopharmaceuticals and Extemporaneous

8.   Adverse Drug Reaction & Drug Allergic (ADR & DAC)

9.   Clinical Pharmacokinetics Services (TDM)

10.   Drug Information & Consumer Education (DICE)

11.   Medication Therapy Adherence Clinic (MTAC)

12.   Data Mining (PhARM)

1.2   Purpose and Objectives

This user manual outlines the IV Dispensing sub-module and its key features and functionalities. The primary objective is to guide user through the process of completing PhIS application process.

User will understand the following activities in details:
- Transcribing Infusion Order
- Screening & Verification
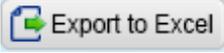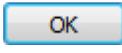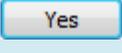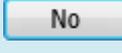- Preparation
- Dispensing
- Release / Discard Batch

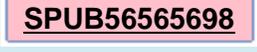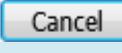### 1.3   Organised Sections

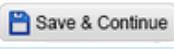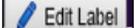These are the sections within this document:
- Section 1 : Introduction
- Section 2 : Application Standard Features
- Section 3 : Infusion Order
- Section 4 : Acronyms
- Section 5 : Links to Clinical Modules

2.0   Application Standard Features

2.1   PhIS Legend

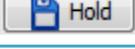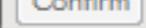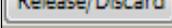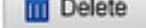| Standard Legend			
LOGIN	Login to PhIS	Logout	Logout from PhIS
🗙	Close All Open Tabs	🔄	Refresh Screen
➕	Expand Menu	➖	Collapse Menu
▷	Expand Module	◿	Collapse Module
➕	Add/Create New Record	💾	Save
✖	Close Window	📅	Calendar Icon
🖨	Save Transaction	🗑	Delete Record
Export to Excel	Export Report From PDF 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
C	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		

IV Dispensing Module Legend

Update	Update Patient's Height and Weight	🖶	Print
Acknowledge	Acknowledge Prescription	📅	Calendar
Prepare	Preparation	Save & Continue	Save and Continue
Edit Label	Edit Label	Dispense	Dispense
Resume	Resume	Print Original Prescription	Print Original Prescription
Hold	Hold	✔ Verify	Verification
Confirm	Confirm	Release/Discard	Release/Discard
Re-Dispense	Re-Dispense	🗑 Delete	Delete
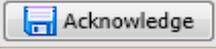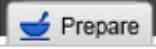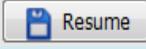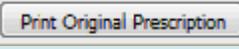
Note

To learn more about Login Information, kindly click <u>Login Information</u> *module for descriptive steps.*

3.0   Order Management-IV Admixture

Overview

The Order Management-Infusion Order module handles all the information to specify the ordered items as per local drug formulary, MOH and non-MOH including registered and non-registered drugs. This function is to enable data mining. All medication orders must be prescribed by authorised personnel only and be in compliance with guidelines on prescribing in the drug formulary (drug category, discipline / specialty) as defined by MOH.

User Group

This module is intended for pharmacist and assistant pharmacist (subject to user assign by the facility)

Functional Diagram
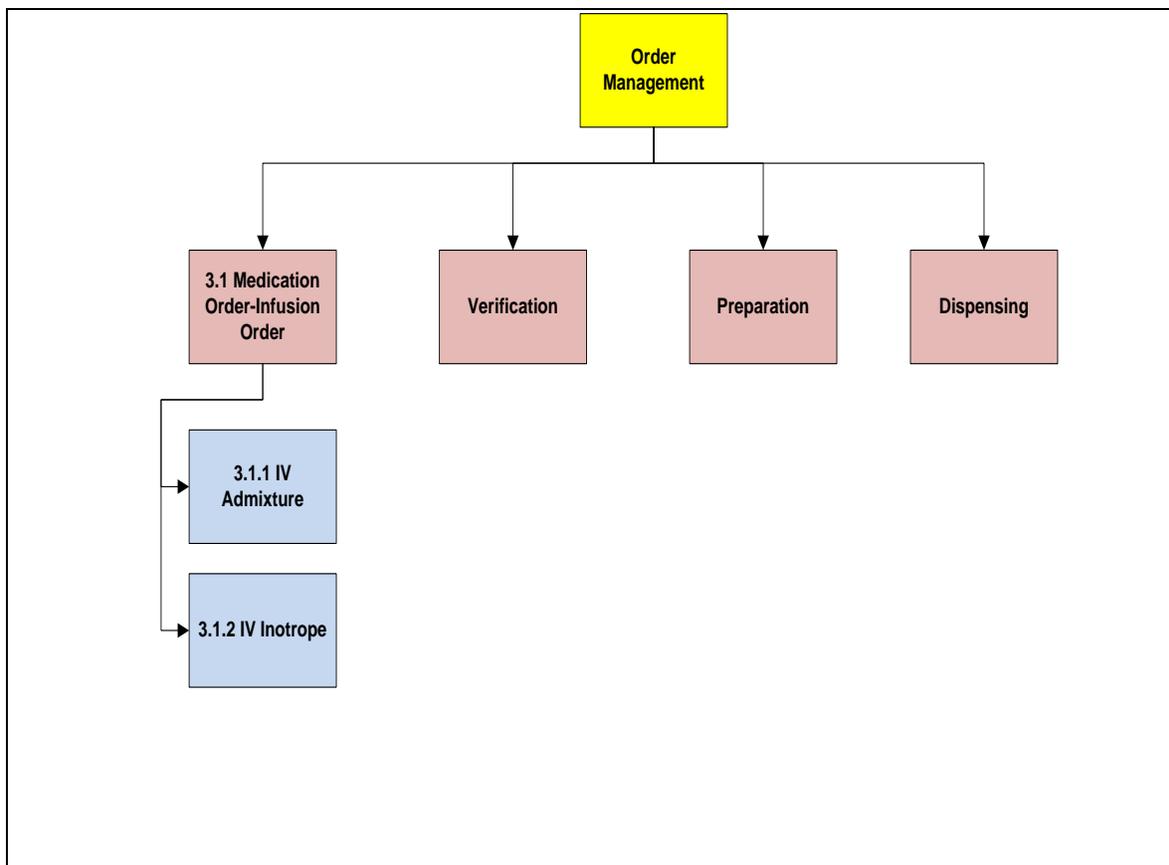
Figure 3.0-1

Functional Description

Admixture comprises of six (6) main functions:

- **Medication Order- Infusion Order**

  To prescribe:
  - IV Admixture
  - Inotrope order

- **Transcribing**
  Transcribing function is used to transfer manual prescription to online prescription. All prescriptions are required to be key in into system in order to proceed with dispensing process such as patient demographic and order details. Transcribing is combination of 2 process which is ordering and dispensing which consist of ordering, verification, preparation and dispensing in single workflow.

- **Screening and Verification**
  Screening and verification function is for user to do the checking and verification on the transcribed prescription ordered from prescriber.

- **Preparation**
  The preparation function allow user to allocate drug quantity and batch to be dispense based on the transcribed prescription. This function is integrated with inventory system where the stock will be auto deducted after dispensing process. Drug label can be generated, and print based on the prepared drugs. Some of the sub-function is available in this screen like alternate, hold/resume and drug interaction (MIMS) is provided to help user with more effectively and efficiency during preparation process for patient safety purpose.

- **Dispensing**
  Dispensing functions is to record and save all the dispensed medication detail information. This function is the mandatory steps to complete the dispense medication process. At this screen, information related with the patient, prescription and prepared drug also is provided.

- **IV Discard Batch**

  Release batch function will be used when user decide to un-packed the reserved/prepared drugs. All the release drugs such as tablets, capsule and other than liquid will be stocked back into inventory

3.1 Transcribe Infusion Order

Infusion order is used for transcribing medicine for Inpatient, Emergency and Day Care departments based on facility setup.

3.1.1 Search Registered Patient

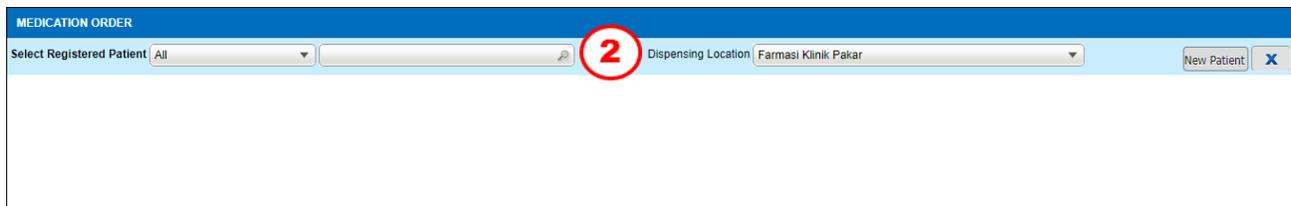To view an existing patient record, please perform the steps below.
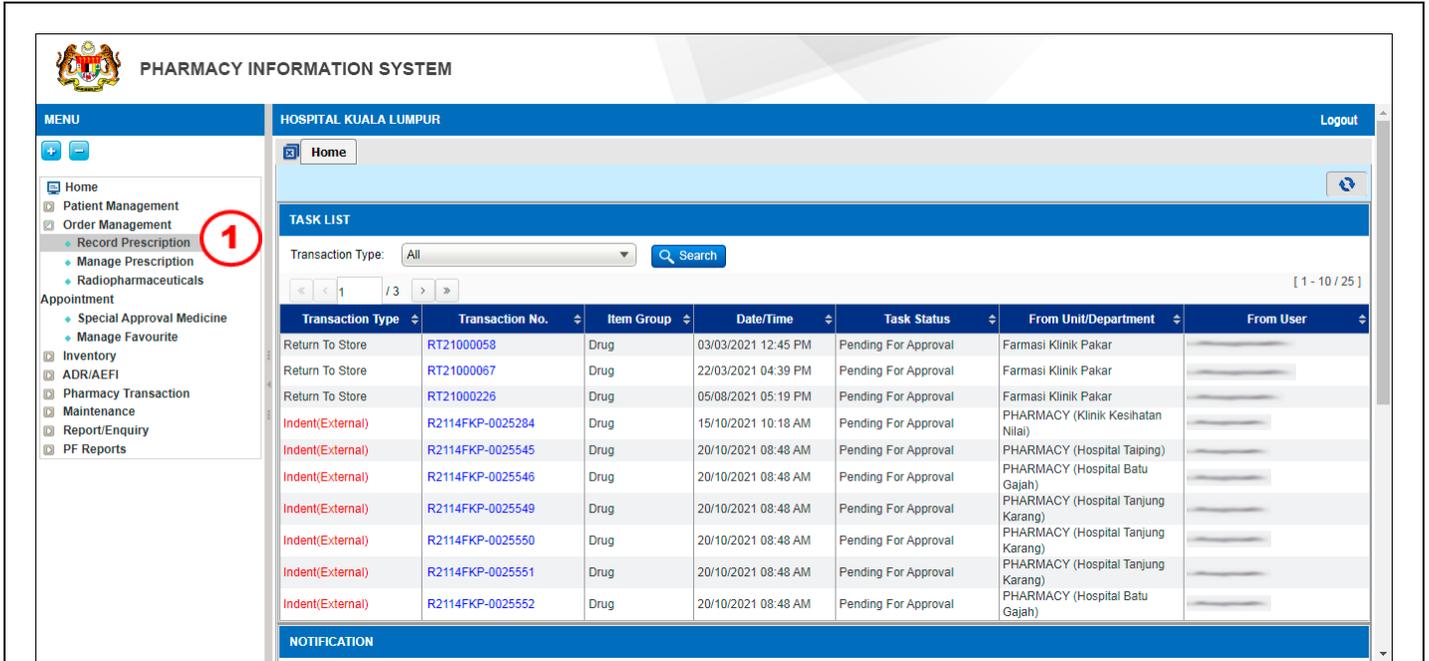
Figure 3.1.1-1 PhIS Home Page

STEP 1

Click on 'Order Management' menu followed by 'Record Prescription' and screen will be displayed as per Figure 3.1.1-1

Note

If the patient is not registered, click on the New Patient *button and the Patient Registration screen will be displayed.*

Figure 3.1.1-2 Medication Order

STEP 2

Click on the select registered patient and then click on 🔍 button to search patient

Note

User able to change dispensing location by click on dropdown button.
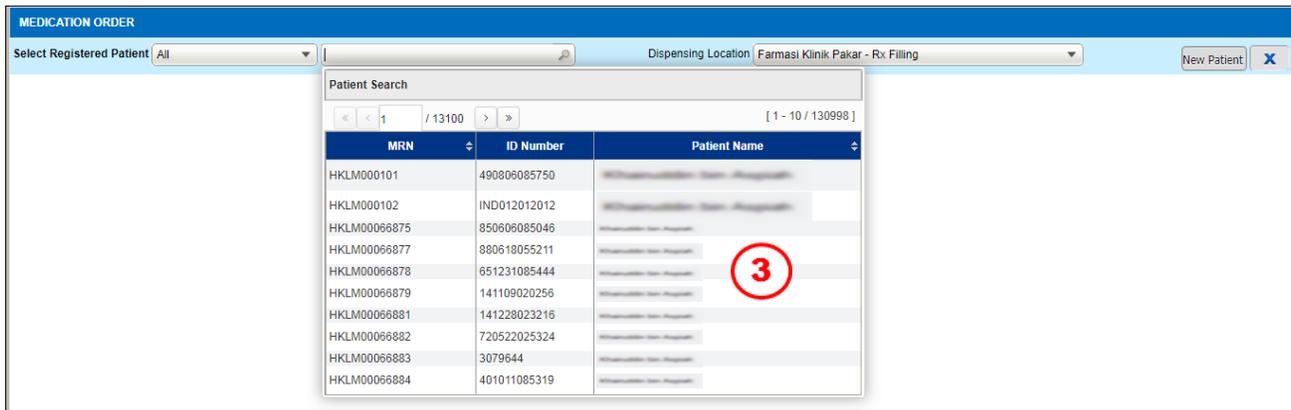
Figure 3.1.1-3 Medication Order

STEP 3
Double-click on the selected patient and the details will be displayed as per Figure 3.1.1-4
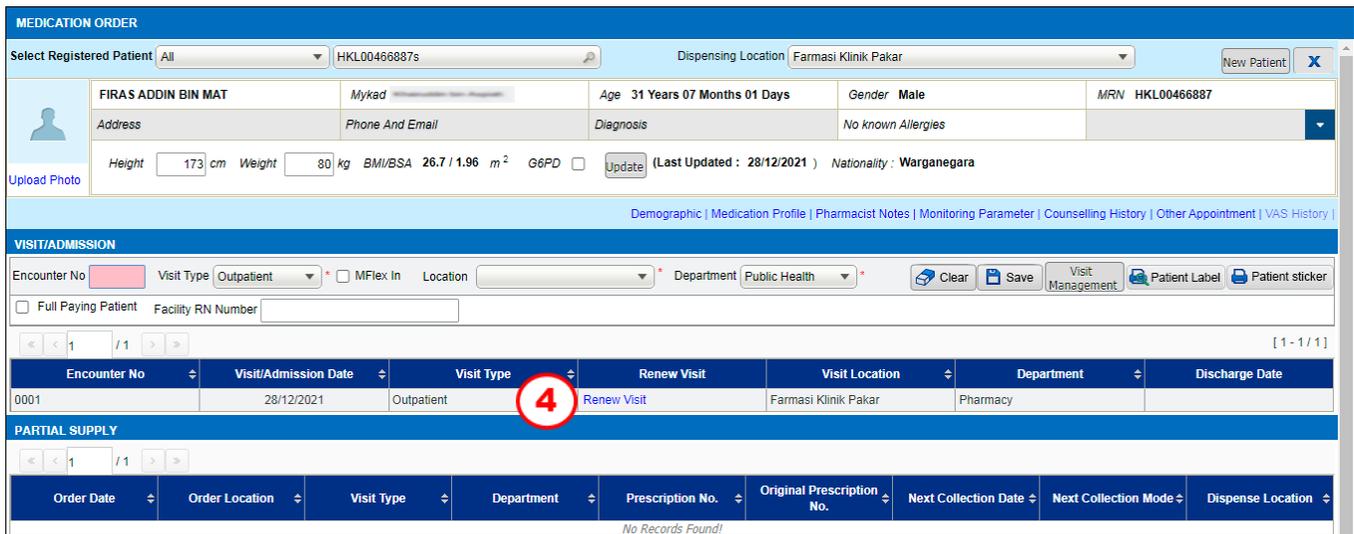
Figure 3.1.1-4 Medication Order

Note
- *Click on the 'Renew Visit' hyperlink to renew a visit for the same location.*
- *Select the 'Visit Type' and 'Location' to create a new visit.*
- *Click on the* Visit Management *to assess 'Visit Management' Screen.*

STEP 4
Double-click on the selected visit and the details will be displayed as per Figure 3.1.1-5

Figure 3.1.1-5 Medication Order

3.1.2 New Patient Registration

To register a new patient, please perform the steps below.

Figure 3.1.2-1 PhIS Home page

STEP 1

Click on 'Order Management' menu followed by 'Record Prescription' and screen will be displayed as per Figure 3.1.2-1
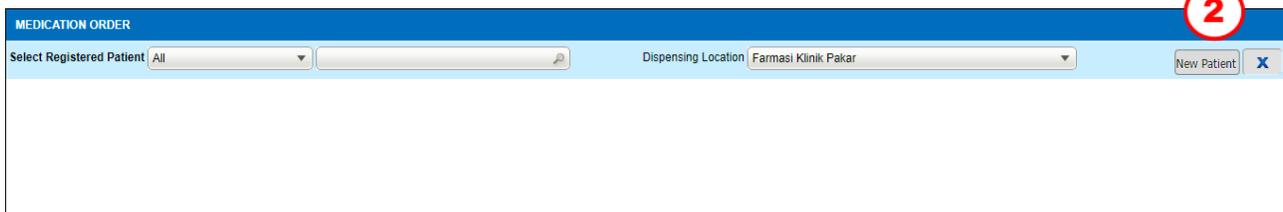
Figure 3.1.2-2 Transcribe Order Create New Patient

STEP 2

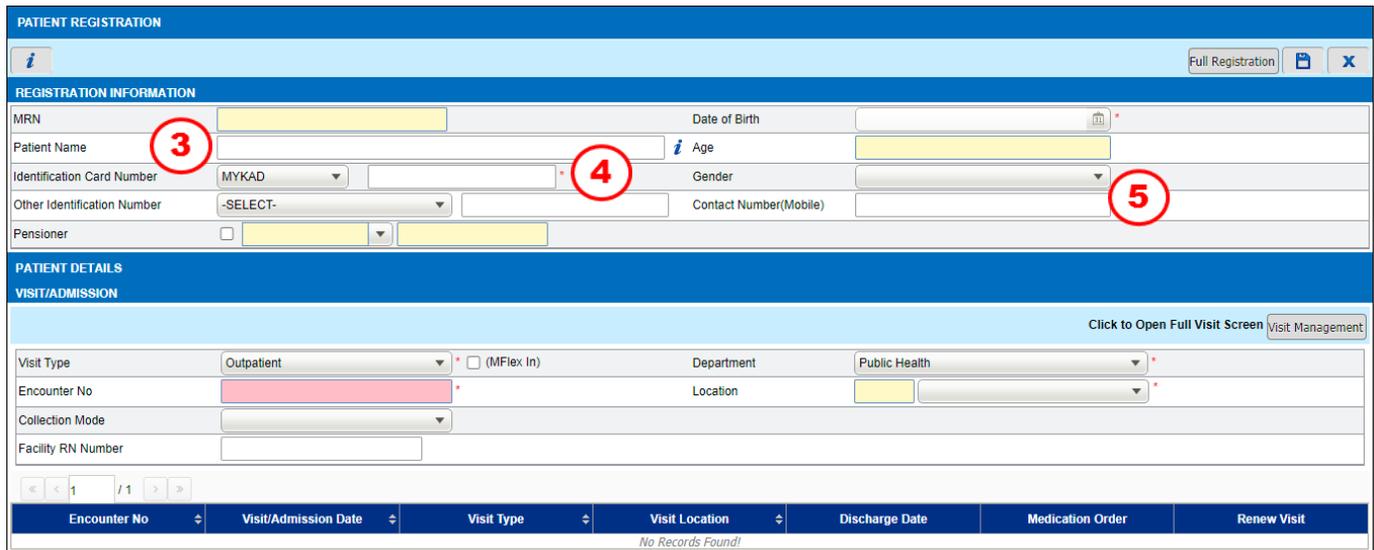Click on New Patient button to create new patient

Figure 3.1.2-3 Registration Information

STEP 3
Enter *Patient Name*

STEP 4
Select from *Identification Card Number* drop down box:
- MYKAD
- MYKID

and enter the relevant number

Note
- *After enter the **Identification Card Number** the below details will be displayed:*
  - *Date of Birth (dd/mm/yy)*
  - *Age (42Y 05M 21D)*
  - *Gender (Male/Female)*

- *If MYKAD/MYKID is unavailable, user is required to select the **Other Identification Number** dropdown box:*
  - *BIRTH CERTIFICATE*
  - *DRIVING LICENSE*
  - *FATHER IC*
  - *MILITARY CARD NUMBER*
  - *MOTHER IC*
  - *MYKAS*
  - *MYPR*
  - *OLD IC*
  - *OTHERS*
  - *PASSPORT*
  - *PENSION CARD*
  - *POLICE CARD NUMBER*
  - *UNHCR*
  - *UNKNOWN PATIENT*
  - *WORK PERMIT*
  - *and enter the relevant number.*

STEP 5
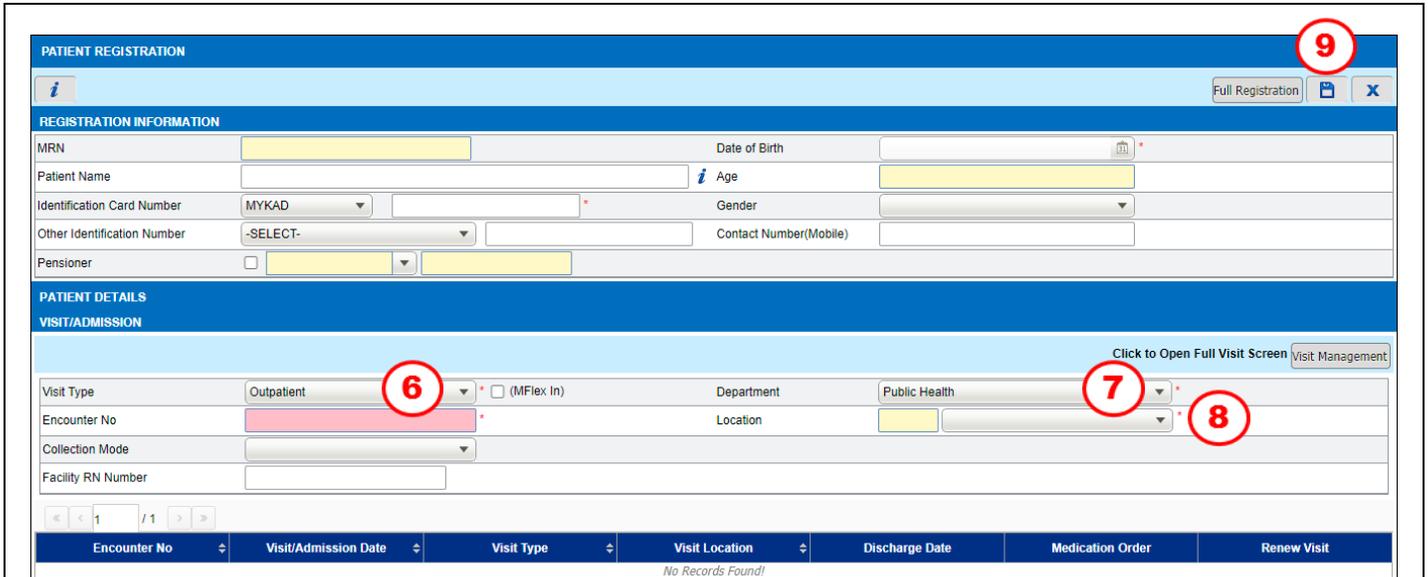Enter *Contact Number (Mobile)*

Figure 3.1.2-4 Visit/Admission

STEP 6

Select the **Visit Type** from dropdown box
- Daycare
- Emergency
- Inpatient
- Outpatient
- Outsource
- PAC
- SPUB
- Walk-In

Note

- *User able to use* ☐ (MFlex In) *checkbox. (MFlex In) is not necessary used to create new visit for Methadone patient but it's used to indicate that this patient as Methadone patient.*
- *User able to select collection mode as:*
  - *Appointment Card*
  - *Email and Take*
  - *Fax and Take*
  - *Normal Collection*
  - *Others*
  - *Comm. Apps in Smart Phone*
  - *Telephone And Take*
  - *UMP*
  - *Locker4U*
  - *Leave and Collect*
  - *Walk-in/Without Appointment*

STEP 7
Select the **Department** from dropdown box:

Note
Department *will tie to the selected visit type.*

STEP 8
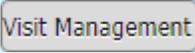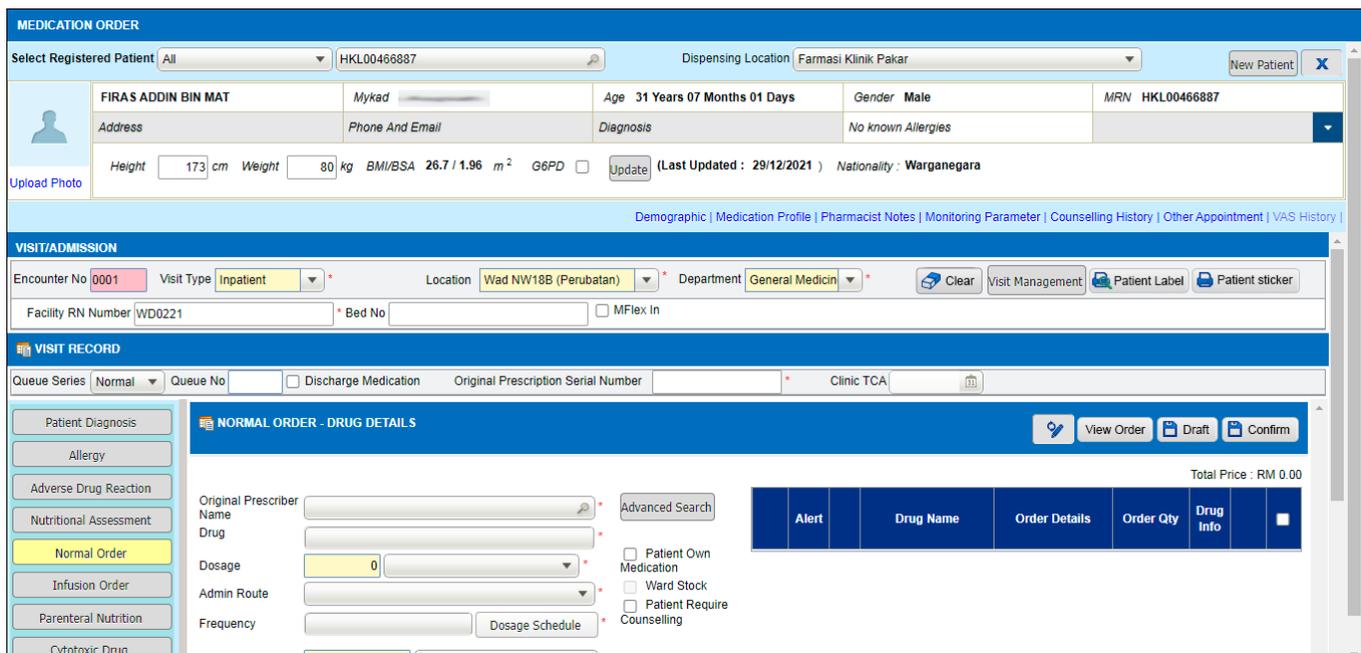Select **Location** from dropdown box

Note
Location will tie to the selected Department.

STEP 9
Click on the ![save] button to save the record

Note

- *After clicking the save button, system will automatically generate the **MRN** (Medical Record Number) and* ![plus] *, ![edit] and ![delete] buttons will be enabled.*

- *Click on the* `Visit Management` *button to assess 'Visit Management' Screen.*

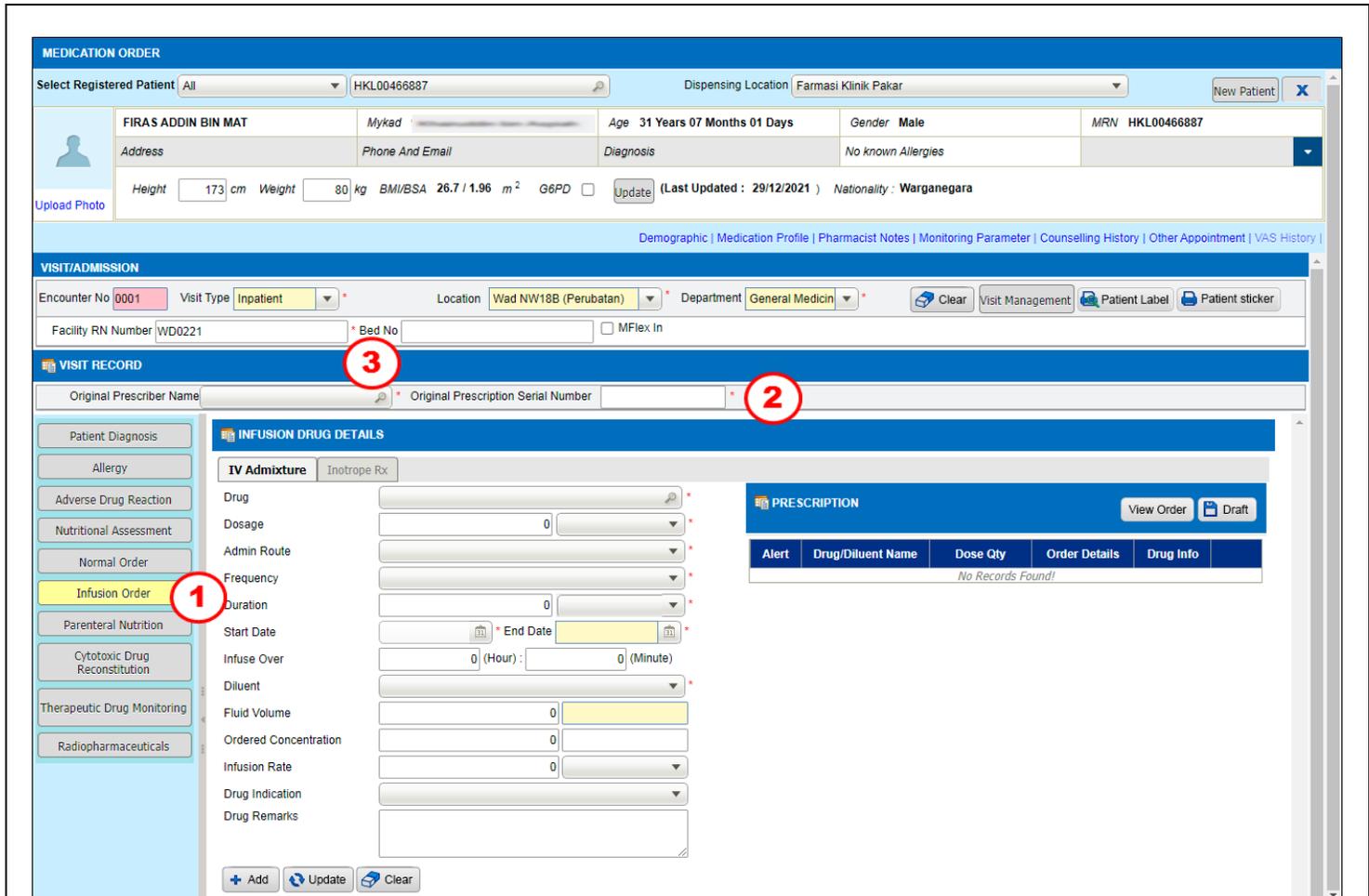- *Another option to register a new patient is to click on the* `New Patient Registration` *button located under Patient Quick Registration*

Figure 3.1.2-5 Medication Order

3.2 Infusion Transcribe Order, Verify, Prepare and Dispense

A function for a pharmacist to order injectable medication that required further dilution before administration. However, it only applicable for medication that are diluted by pharmacist department. If the dilution is prepared by nursing personnel, please use normal order function.

Figure 3.2-1 Medication Order

STEP 1
Click on the *Infusion Order* tab

STEP 2
Enter *Original Prescription Serial Number*

STEP 3

Click on the [search] button to search *Original Prescriber Name* as shown in Figure 3.2-2

Search

1 / 332 [1 - 10 / 3313]

Prescriber Name	Department/Discipline
	Nuclear Medicine
	General Medicine
	Radiology
	General Medicine
	General Medicine
	Orthopaedic
	Breast And Endocrine Surgery
	Histopathology (Anatomical Pathology)
	Ophthalmology
	Orthopaedic

Figure 3.2-2 List of Prescriber Name

STEP 4
Double click on the selected prescriber

MEDICATION ORDER

Select Registered Patient All HKL00466887 Dispensing Location Farmasi Klinik Pakar New Patient X

	FIRAS ADDIN BIN MAT	Mykad	Age 31 Years 07 Months 01 Days	Gender Male	MRN HKL00466887
	Address	Phone And Email	Diagnosis	No known Allergies	

Height 173 cm Weight 80 kg BMI/BSA 26.7 / 1.96 m² G6PD ☐ Update (Last Updated : 29/12/2021) Nationality : Warganegara

Upload Photo

Demographic | Medication Profile | Pharmacist Notes | Monitoring Parameter | Counselling History | Other Appointment | VAS History |

VISIT/ADMISSION

Encounter No 0001 Visit Type Inpatient ▼ * Location Wad NW18B (Perubatan) ▼ * Department General Medicin ▼ * Clear Visit Management Patient Label Patient sticker

Facility RN Number WD0221 * Bed No ☐ MFlex In

VISIT RECORD

Original Prescriber Name * Original Prescription Serial Number E44336 *

INFUSION DRUG DETAILS

| Patient Diagnosis |
| Allergy |
| Adverse Drug Reaction |
| Nutritional Assessment |
| Normal Order |
| Infusion Order |
| Parenteral Nutrition |
| Cytotoxic Drug Reconstitution |
| Therapeutic Drug Monitoring |
| Radiopharmaceuticals |

IV Admixture | Inotrope Rx

Drug 🔍 *
Dosage 0 ▼ *
Admin Route ▼ *
Frequency ▼ *
Duration 0 ▼ *
Start Date 📅 * End Date 📅 *
Infuse Over 0 (Hour) : 0 (Minute)
Diluent ▼ *
Fluid Volume 0
Ordered Concentration 0
Infusion Rate 0 ▼
Drug Indication ▼
Drug Remarks

➕ Add 🔄 Update Clear

PRESCRIPTION View Order Draft

Alert	Drug/Diluent Name	Dose Qty	Order Details	Drug Info
	No Records Found!			

Figure 3.2-3 Medication Order

STEP 5

Click on the [🔍] button new window will display as per Figure 3.2-4

Drug/Active Ingredient Search			[X]

Drug/Active Ingredient/Trade Name [＿＿＿＿＿＿＿＿＿＿] [🔍 Search]

« < 1 / 8 > » [1 - 20 / 145]

Dosage Form ⇕	Drug Name ⇕	Active Ingredient ⇕	Category ⇕
Parenteral Solution	Erythromycin Lactobionate 500 mg Injection	Erythromycin	A*
Parenteral Solution	Cefotaxime 500mg Injection	Cefotaxime	A
Parenteral Solution	Chloramphenicol 1g Injection	Chloramphenicol	B
Parenteral Solution	Calcitonin (Synthetic Salmon) 50 IU Injection	Calcitonin	A*
Powder for IV Soln	Desferrioxamine 500mg Injection	Deferoxamine (Desferrioxamine)	A
Parenteral Solution	Meropenem 500mg Injection	Meropenem	A*
Parenteral Solution	Meropenem 1000mg Injection (1g)	Meropenem	A*
Parenteral Solution	Ertapenem 1g Injection	Ertapenem	A*
Parenteral Solution	Cefotaxime 1g Injection	Cefotaxime	A
Powder for IV Soln	Alteplase 50mg/50ml Powder for Injection (rTPA)	Alteplase	A
Parenteral Solution	Ceftriaxone 1g Injection	Ceftriaxone	A
Parenteral Solution	Calcitonin (synthetic Salmon) 100 IU Injection	Calcitonin	A*
Parenteral Solution	Cefuroxime 750mg Injection	Cefuroxime	A
Parenteral Solution	Imipenem 500mg+Cilastatin Injection	Imipenem+ cilastatin	A*
Parenteral Solution	Doripenem 500mg/10ml Injection	Doripenem	A*
Parenteral Solution	Clarithromycin 500mg Injection	Clarithromycin	A*

Figure 3.2-4 Drug/Active Ingredient Search

<u>***Note***</u>
Double click on the selected drug.

Figure 3.2-5 Infusion Drug Details

Note
- _End Date is defaulted by the system according to duration._
- _Information on IV Admixture screen will be automatically displayed and calculated based on the master setup._
- _Infusion Rate = Fluid Volume/ Infuse Over_
- _Strength = Dosage / Fluid Volume._

STEP 6
Select diluents from drop down menu

STEP 7
Click on the [+ Add] button to add drug in prescription section as per Figure 3.2-6

Figure 3.2-6 Infusion Drug Details

STEP 8

Click on the ![Draft] button to save the prescription and screen will display one new button as per Figure 3.2-7

Figure 3.2-7 Infusion Drug Details

STEP 9

Click on the ![Confirm] button to confirm the prescription

Note
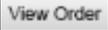
- *Click on the* [View Order] *button to view order details as per Figure 3.2-8.*

ORDER DETAILS

Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	Remarks	Status
Urokinase 6,000 IU Injection	6000 IU	1 ml	6000 IU/ml, STAT , 1 Days	1 vial		DRAFT
Sodium Chloride 0.9%, 50ml IV Solution		1 ml		1 EA		
Alteplase 50mg/50ml Powder for Injection (rTPA)	50 mg	50 ml	0.5 mg/ml, Single Dose , 1 Days	1 EA		DRAFT
Sodium Chloride 0.9% 100mL IV soln		100 ml		1 bott		

Figure 3.2-8 Order Details

- *Once click on confirm button, record will be display as shown in Figure 3.2-9*

MEDICATION ORDER

Select Registered Patient All HKL00466887 Dispensing Location Farmasi Klinik Pakar [New Patient] [X]

FIRAS ADDIN BIN MAT	Mykad		Age 31 Years 07 Months 01 Days	Gender Male	MRN HKL00466887
Address	Phone And Email		Diagnosis	No known Allergies	

Upload Photo

Height 173 cm Weight 80 kg BMI/BSA 26.7 / 1.96 m^2 G6PD ☐ [Update] (Last Updated : 29/12/2021) Nationality : Warganegara

Demographic | Medication Profile | Pharmacist Notes | Monitoring Parameter | Counselling History | Other Appointment | VAS History |

VISIT/ADMISSION

Encounter No 0001 Visit Type Inpatient ▼ * Location Wad NW18B (Perubatan) ▼ * Department General Medicin ▼ * [Clear] [Visit Management] [Patient Label] [Patient sticker]

Facility RN Number WD0221 * Bed No ☐ MFlex In

VISIT RECORD

Original Prescriber Name Original Prescription Serial Number E44336 *

PRESCRIPTION

☐ PROCEED TO DISPENSING [✔ Verify] [Preview Prescription]

	Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	Remarks	Status	Drug Info
▼	Drug Interaction	Alteplase 50mg/50ml Powder for Injection (rTPA)	50 mg	50 ml	0.5 mg/ml , 1 Days	1 EA	Remarks	ORDERED	i
		Sodium Chloride 0.9% 100mL IV soln		100 ml		1 bott			
▼	Drug Interaction	Urokinase 6,000 IU Injection	6000 IU	1 ml	6000 IU/ml , 1 Days	1 vial	Remarks	ORDERED	i
		Sodium Chloride 0.9%, 50ml IV Solution		1 ml		1 EA			

Figure 3.2-9 Infusion Drug Detail

- *Click on the* [Preview Prescription] *button to view prescription detail as per Figure 3.2-10*

- *Preview prescription button enable after user save the order*

Figure 3.2-10 Preview Prescription

Figure 3.2-11 Infusion Drug Detail

STEP 10

Right click on the ▼ button and select *Intervention.*

Figure 3.2-12 Intervention

STEP 11
Select **Intervention Reason** from the table

STEP 12
Select **Intervention Status** as follow:
a) Accepted
b) Not Accepted

STEP 13

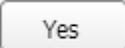Click on the [Confirm] button to confirm **Modify Order**

Figure 3.2-13 Confirmation Alert Message

STEP 14

Click on the [Yes] button to confirm the intervention

Figure 3.2-14 Infusion Drug Detail

STEP 15

Click on the [Verify] button and will displayed alert message as per Figure 3.2-15

Figure 3.2-15 Confirmation Alert Message

STEP 16

Click on the [Yes] button to proceed verification and IV Preparation screen will be displayed as per Figure 3.2-16

Figure 3.2-16 IV Preparation Screen

Note

Alternate Drug

- This function allow user to select different drug with the same active ingredient and same administration route.

  Click on the ▼ button to select **Alternate Drug/ Intervention/Hold Order**

Figure 3.2-17 IV Preparation Screen

Figure 3.2-18 Alternate Drug Details

Note

- Alternate drug screen consist of three (3) section which are:

a) Alternate Drug Details
- **_Location, Dosage Form, Route, Order Details, Ordered Drug Code, Ordered Drug Description, Alternate Drug Name and Alternate Drug Order Qty(Total Order Qty: 0.00)_** _will be retrive from medication order and drug master setup._
- _Select_ **_Alternate Drug Name_** _from dropdown box._

b) Batch Details
- Selected drug name will be listed based on drug master setup.

c) Diluent Batch Detail
- Selected drug name will be listed based on drug master setup.
- Select **Diluent** from dropdown box.
- Type **Qty to Dispense**

- *Click on the* 💾 *button to confirm alternate.*
- *After did alternate, selected drug will be change to green colour as figure 3.2-19.*

Figure 3.2-19 Alternate Drug Details

Figure 3.2-20 IV Preparation

Note

Intervention

- This function allow user to modify drugs details frequency, duration and form. This function is available in verification screen and preparation screen.

- Right click on the 🔽 button and select **Intervention**

INTERVENTION

History | Confirm | ⊘ | X

PHARMACY REMARKS

		Intervention Reason	Remarks	Intervention Accepted	Intervention Not Accepted
Intervention Reason	☐	Authenticity		○	○
	☐	Contraindication		○	○
	☐	Drug Interaction		○	○
	☐	Inappropriate Dose		○	○
	☐	Inappropriate Drug		○	○
	☐	Inappropriate Duration		○	○
	☐	Inappropriate Frequency		○	○
	☐	Incompatibility		○	○
	☐	Others		○	○
	☐	Polypharmacy		○	○
	☐	Suggest to Monitor Vital Signs/Lab Result		○	○
	☐	Wrong Patient		○	○

[1 - 12 / 12]

MODIFY ORDER

Drug Name	Adrenaline Acid Tartrate 1mg/ml Injection	Dosage Form	Parenteral Solution
Dosage	1 * mg	Admin Route	Intravenous Infusion
Drug Volume	1 * ml	Diluent	Sodium Chloride 0.9% with Dextrose 5% 500mL ▼ *
Ordered Concentration	0 mg/ml	Diluent Volume	500 * ml
Frequency	Single Dose ▼ *	Total Volume	501 * ml
Infuse Over	0 (Hour) 0 (Minute)	Infusion Rate	0 ml/Min ▼
Duration	1 * Days ▼		
Start Date	09/10/2019 📅 *	End Date	10/10/2019
Remarks		Update By	
		Updated Date	09/10/2019 📅

Figure 3.2-21 Intervention

Note

Select **Invervention Reason** *and enter remarks from the table*

- *Authenticity*
- *Contraindication*
- *Drug Interaction*
- *Inappropriate Dose*
- *Inappropriate Drug*
- *Inappropriate Duration*
- *Inappropriate Frequency*
- *Incompatibility*
- *Others*
- *Polypharmacy*
- *Suggest to Monitor Vital Signs/lab Result*
- *Wrong Patient*

Figure 3.2-22 Intervention

Note

- *Select on **Accepted** radio button*

- *Pharmacist will select the **Intervention Status** radio button after confirming the intervention status from prescriber.*

Figure 3.2-23 Alert Confirmation Message

- *Click on the* [History] *button to view intervention history listing.*

Figure 3.2-24 Intervention Reason History Listing
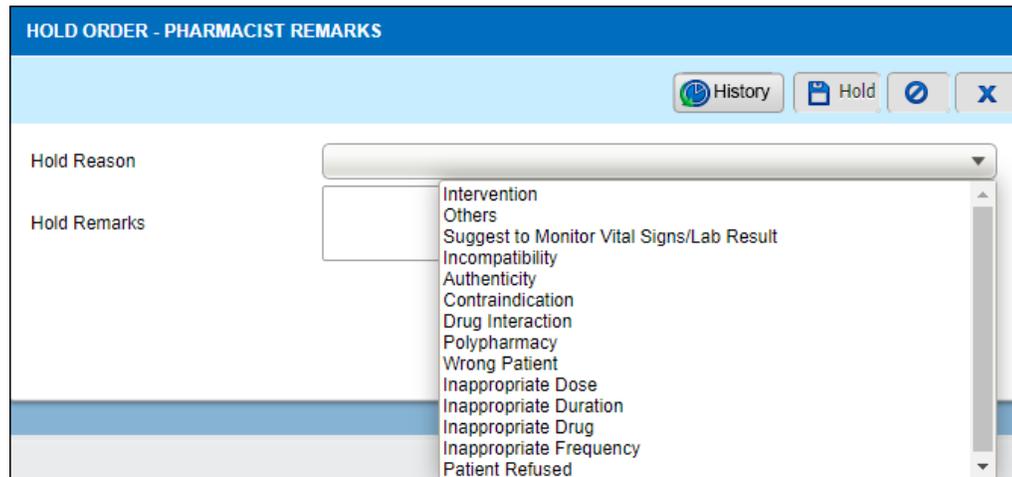

Figure 3.2-25 IV Preparation

Note

Hold Order

- *These functions allow Pharmacist to hold medication from being prepared or dispense; may resume the medication order to continue dispensing.*

- *Right click on the ▼ button and select **Hold Order** and new screen will be displayed as per Figure 3.2-27.*

Figure 3.2-26 Hold Order-Pharmacist Remarks

HOLD ORDER - PHARMACIST REMARKS

History | Hold | Ø | X

Hold Reason [▼]

Hold Remarks

Intervention
Others
Suggest to Monitor Vital Signs/Lab Result
Incompatibility
Authenticity
Contraindication
Drug Interaction
Polypharmacy
Wrong Patient
Inappropriate Dose
Inappropriate Duration
Inappropriate Drug
Inappropriate Frequency
Patient Refused

Figure 3.2-27 Hold Order-Pharmacist Remarks

Note

Select **Hold Reason** from dr op down box:

- _Intervention_
- _Others_
- _Suggest to Monitor Vital Signs/Lab Result_
- _Incompatibility_
- _Authenticity_
- _Contraindication_
- _Drug Interaction_
- _Polypharmacy_
- _Wrong Patient_
- _Inappropriate Dose_
- _Inappropriate Duration_
- _Inappropriate Drug_
- _Inappropriate Frequency_
- _Patient Refused_

HOLD ORDER - PHARMACIST REMARKS

History | Hold | Ø | X
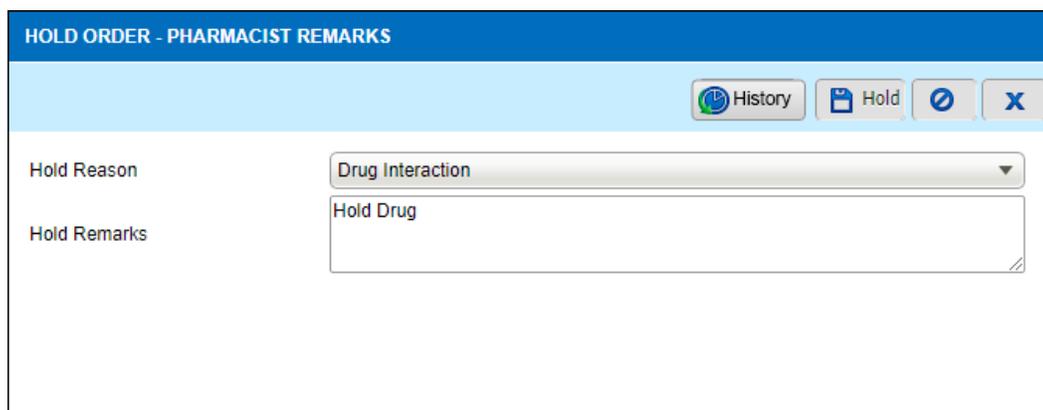
Hold Reason [Drug Interaction ▼]

Hold Remarks [Hold Drug]

Figure 3.2-28 Hold Order-Pharmacist Remarks

Note

Click on the [Hold] button to proceed hold transaction

CONFIRMATION

CONF0085: Are you sure to hold this drug ?

Cancel   Yes   No
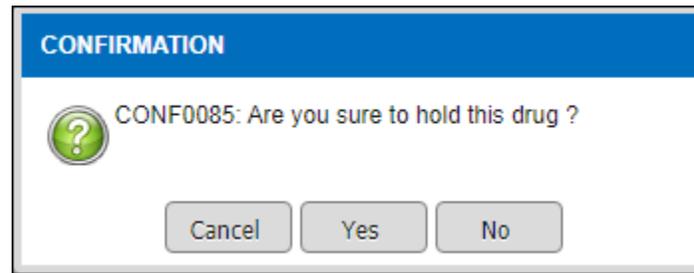
Figure 3.2-29 Alert Confirmation Message

- *Click on the* Yes *button to confirm the hold order.*

IV PREPARATION

LXXX XXXX XXX	Mykad	Age 44 Years 01 Months 05 Days	Gender Female	MRN HKL000009
Address	Phone And Email	Diagnosis	No known Allergies	

Height 155 cm Weight 55 kg BMI/BSA 22.9 / 1.54 m² Update (Last Updated : 09/10/2019) Nationality : Warganegara

Medication Profile | Counselling History | Pharmacist Notes | Demographic | Monitoring Parameter | Other Appointment |

Encounter No: 0002   Actual Visit Date: 09/10/2019   Visit Location: Farmasi Klinik Pakar   Order By: Transcribed By:

PHARMACY ORDER

Supervised By

PRESCRIPTION   Prepare | Worksheet | Label

	Alert	Drug/Diluent Name	Dose	Dose Qty	Order Details	Total Order Qty	No. of Dose	Prepare Qty	Bal Qty	Prepare Admixture	Prev Disp Qty	Remarks	Status	Drug Info
▼	Drug Interactio	Adrenaline Acid Tartrate 1mg/ml Injection Sodium Chloride 0.9% with Dextrose 5% 500mL IV soln	3 mg	3 ml 500 ml	0.01 mg/ml, Single Dose , 1 Days	3 amp 1 bott	0	0 amp 0 bott	3 amp 1 bott	☐ Details	0 amp 0 bott	Remarks	VERIFIED HOLD	Drug Info

Figure 3.2-30 IV Preparation

<u>**Note**</u>
- *Status will be diaplayed as* **VERIFIED HOLD**.

Figure 3.2-31 IV Preparation

Note

Resume Order

*Click on the ▼ button and select **Resume Order***

Figure 3.2-32 Hold Order-Pharmacist Remarks

Note

- *Click on the* ▶ Resume *button to resume hold order.*

- *Enter **Resume Remarks** if required.*
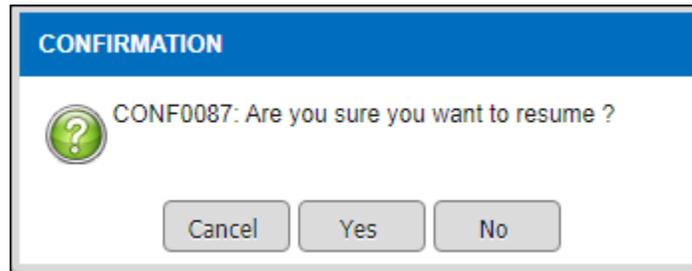
- *Click on the* Yes *button to release drug from hold.*

Figure 3.2-33 Alert Confirmation Message

Figure 3.2-34 IV Preparation

STEP 17

Click on **Prepare Qty** "0" hyperlink to do allocation from displayed window as per figure 3.2-35

Figure 3.2-35 Item Batch Details

STEP 18

Click on selected Batch and enter **Allocate Qty**

Figure 3.2-36 Item Batch Details

STEP 19

Click on the 🖫 button to proceed allocation

Figure 3.2-37 Alert Confirmation Message

STEP 20

Click on the Yes button

Figure 3.2-38 IV Preparation

STEP 21

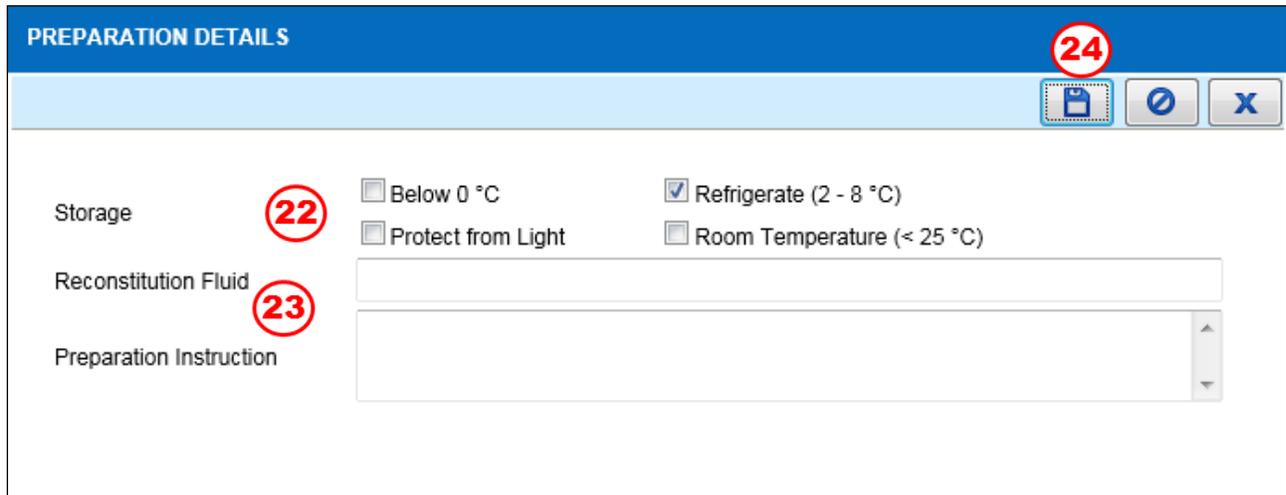Select on the ☑ **Details** checkbox on Prepare Admixture column

Figure 3.2-39 Preparation Details

STEP 22
Select **Storage** checkbox as *Below/ Refrigerate/ Protected from Light or Room Temperature*

STEP 23
Enter *Reconstitution Fluid* & *Preparation Instruction* if applicable

STEP 24
Click on the [💾] button to save record

Note

- *Storage condition and reconstitution fluid will default value as setup in Drug Master (if any).*
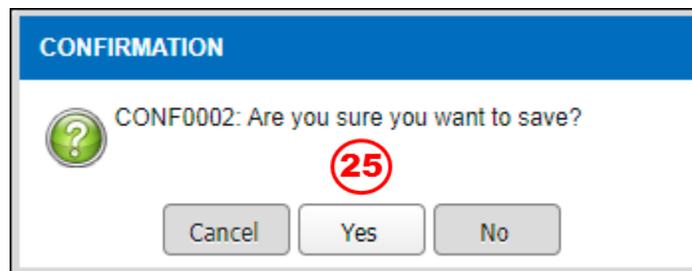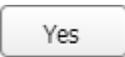- *Preparation Instruction also can default in Drug Master.*

Figure 3.2-40 Alert Confirmation Details

STEP 25
Click on [Yes] button to proceed worksheet

Figure 3.2-41 IV Preparation

STEP 26

Click on the [Worksheet] button to view and print

IV WORKSHEET

MINISTRY OF HEALTH

Hospital Pakar Sultanah Fatimah, Muar

Date of preparation :	27/10/2014		Worksheet Id:	14-10-0001	

MRN	HPSF00032191	Name	
ID No		Rx. No.	FBW0000017697
Order Location	WAD 9 (MED - P)	Ordered By	
Order Date	27/10/2014		

No	ROA	Preparation Name	Material Used								Storage
			Ingredient Name	Dose	Dose Volume	No of Dose	Total Qty	Preparation Qty	Batch No	Expiry Date	
1	INF	Gentamicin 0.8 mg/ml	Gentamicin 80mg/2ml Inj	80 mg	2 ml	1	2 ml	1 amp	130180T	01/01/2016	Refrigerate (2 - 8 °C)
			-								
			Sodium Chloride 0.9% 100mL IV soln		100 ml		100 ml	1 bott	DMHPSF 14	31/03/2015	

Instruction: Please Refer to SOP

Reference:

Worksheet generated by	Worksheet & label checked	Prepared by	Final Product Checked by	Supervised by
Date: 27/10/2014	Date:	Date:	Date:	Date: 27/10/2014

Figure 3.2-42 Sample of IV Worksheet

Figure 3.2-43 IV Preparation

STEP 27

Click on [🖨 Label] button and window will displayed as per Figure 3.2.44

Figure 3.2-44 Drug Label

STEP 28

Click on the [🖨] button to print drug label

Note

- *Select all ☑ checkbox will allow to print all drug label in the selected prescription.*

- ***Expiry date** can be default based on diluents in Drug Master.*
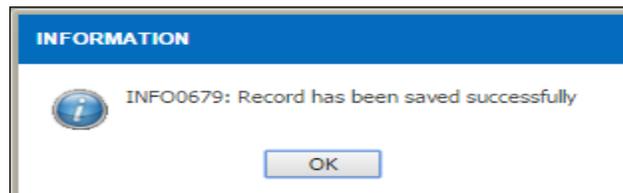
- *Click on the [OK] button to save record.*

Figure 3.2-45 Alert Information Message

Figure 3.2-46 Sample of Drug Label

Note
Sample of IV Admixture Label as per Figure 3.2-47

Figure 3.2-47 IV Preparation

STEP 30

Click on the [Prepare] button to proceed preparation

Note
*After allocate quantity **Prepare Qty** coloumn will be retrive reserved quantity from item batch.*

Figure 3.2-48 Alert Confirmation Message

STEP 31

Click on the [Yes] button to proceed dispensing and new screen will be displayed as per Figure 3.2-49

Figure 3.2-49 IV Dispensing

Figure 3.2-50 IV Dispensing

STEP 32

Click on the [Dispense] button and alert message will be displayed as per Figure 3.2-51
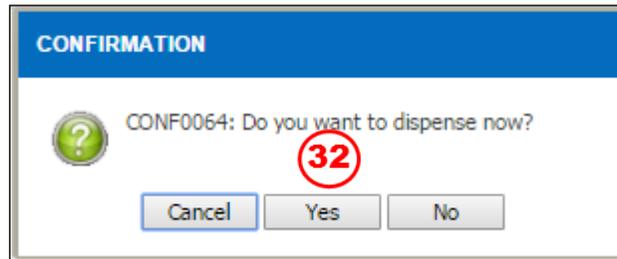
Figure 3.2-51 Alert Confirmation Message

STEP 33
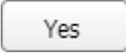
Click on the Yes button to dispense

3.3 Release / Discard Batch

A function for pharmacist to release/discard the IV admixture that has been prepared back to Preparation stage. When release batch, drug and diluents quantity will be returned back to inventory. When discard batch, drug and diluents quantity will be deducted from inventory.
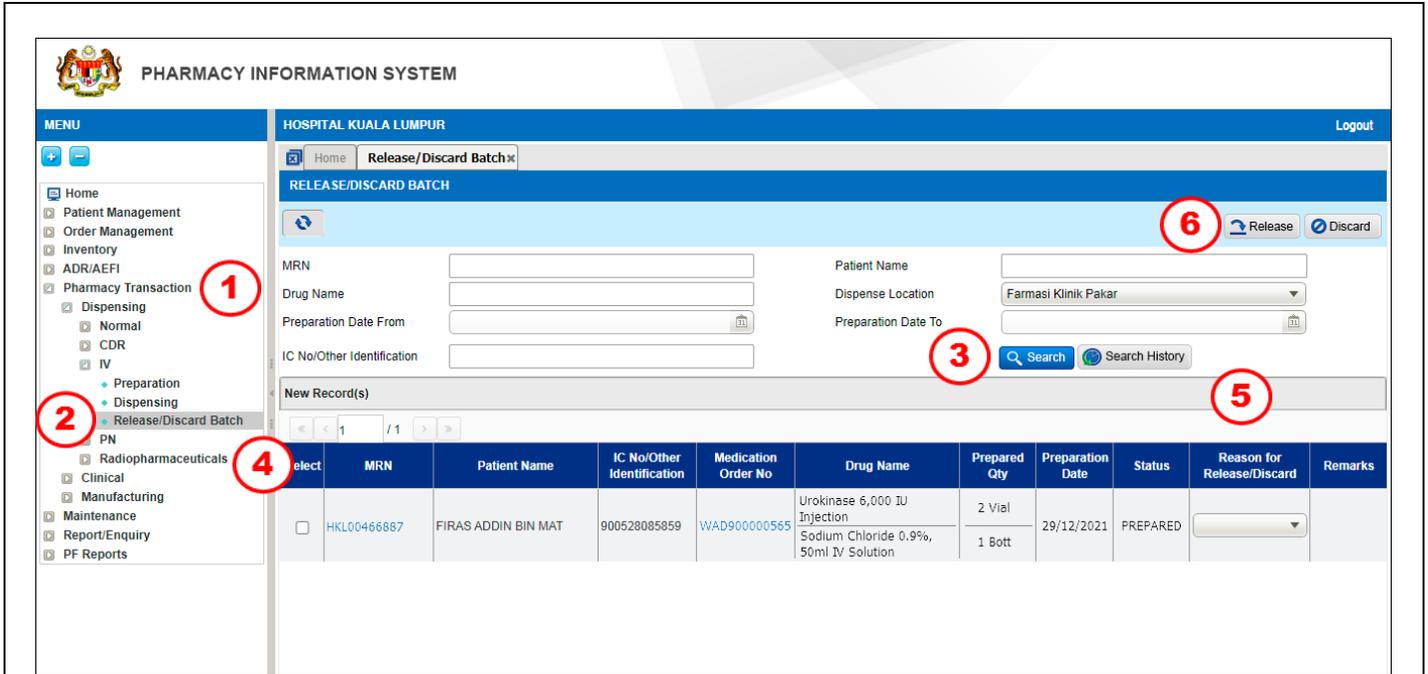
Figure 3.3-1 IV Dispensing: Release/Discard

STEP 1
Click on '*Pharmacy Transaction*' menu follow *by ' Dispensing'* and select *'IV'* sub-menu

Note
- *Various search criteria as provided as below:*

No	Field	Description	Remark
a)	MRN	Patient Medical Record Number	Search option: • Type the MRN either full or partial: *Example : HPSF00001234 or "1234"*
b)	Patient Name	Patient Name	Allow to search by patient full name or partial
c)	Drug Name	Drug Name	Allow to search by active ingredient
d)	Dispense Location	Patient visit location	Able to filter and search patient by visit location and prescriber's location.
e)	Prepare Date From	Prepare Date From	Able to filter and search prepare date from
f)	Prepare Date To	Prepare Date To	Able to filter and search prepare date to
g)	IC No/Other Identification	IC Number/Other Identification	Able to filter by IC number or other identification

Table 3.3.1

___

Search result of patient record list will be displayed:

- *Select*
- *MRN*
- *Patient Name*
- *Drug Name*
- *Medication Order No*
- *Prescription Date*
- *Prepared Qty*
- *Status*
- *Reason For Release / Discard*

STEP 2
Click on **'Release/Discard Batch'** sub-menu

Note
Various search criteria is provided as below :
  a) **MRN**
  b) **Patient Name**
  c) **Drug Name**
  d) **Dispense Location**
  e) **Prepare Date From**
  f) **Prepare Date To**
  g) **IC No/Other Identification**

STEP 3
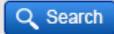
Click on the [Q Search] button

STEP 4

Select ☑ checkbox to discard from the listed drug

STEP 5
Select Reason for Discard from dropdown box. Select either one of these from discard reason drop down menu: -
- Uncollected
- Wrong Allocation
- Change of Regimen
- Patient Refused
- Intervention
- Faulty Product

STEP 6
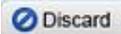
Click on the [Release] or [Discard] button to proceed.

Note

- [Release] *: System will reset back the allocation quantity but no stock will deduct*

- [Discard] *: Allocation will discard and stock will be deducted*

- *Once drug already released or discarded, drug will be displayed back in Preparation screen for re-allocation of new batch qty.*

4.0   Acronyms

Abbreviation	Definition
MOH	Ministry Of Health
PhIS	Pharmacy Information System
CPS	Clinical Pharmacy System
MRN	Medical Record Number
IV	Intravenous
HQ	Headquarters
INJ	Injection
QTY	Quantity
LAB	Laboratory

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		