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

Pharmacy Based

User Manual
Inpatient Pharmacy

Version	**: 10th EDITION**
Document ID	**: PB_U. MANUAL_INPATIENT PHARMACY**

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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 Inpatient Pharmacy sub-module and its key features and functionalities. The primary objective is to help guide user through the process of completing PhIS application process. User will understand the following activities in details:

- Transcribing
- Patient Registration
- Screening & Verification
- Preparation
- Dispensing
- Fill List
- Released / Discard Batch
- Medication Return
- Re-Dispensing

1.3 Organised Sections

These are the sections within this document:

- Section 1 : Introduction
- Section 2 : Application Standard Features
- Section 3 : Inpatient Pharmacy
- 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		Show Help
Home	Display Home Tab	Search	Search Record
	Cancel		Dropdown Box
	Search Icon	*	Mandatory Field
	Edit Record		Empty Text Box
Cancel	Cancel Button		

Inpatient Module Legend					
Update	Update Patient's Height and Weight	Print Ingredient Label	Print Ingredient Label	Fill List	Fill List
Patient sticker	Patient Sticker	Dispense	Dispense	Label	Label
Prepare	Preparation	Print Original Prescription	Print Original Prescription	Worksheet	Worksheet
Edit Label	Edit Label	Verify	Verifiy	Manage Fill List	Manage Fill List
Generate Worksheet	Generate Worksheet	Confirm	Confirm	Balance Medication Sheet	Balance Medication Sheet
Invoice	Invoice	Release/Discard	Release/Discard	Collapse All	Collapse All Fill List
	Previous/Next record	Re-Dispense	Re-Dispense	Expand All	Expand All Fill List

Note

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

3.0 Inpatient Pharmacy

Overview

The Inpatient Pharmacy module include Implementing safe, organized, and efficient drug-dispensing system is essential for controlling costs and assuring that the medical prescription is safely followed as requested within the appropriate deadline. An appropriate dispensing system is an important ally for the prevention or reduction by medication errors by helping to minimize dispensing error opportunities in a pharmacy. At present there are various types of dispensing systems for medical prescription within a hospital.

User Group

This module is intended for pharmacist (subject to the user assigned by the facility)

Functional Diagram

Figure 3.0-1

Functional Description

Inpatient Pharmacy comprises of seven (8) main functions:

- **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, acknowledgement, verification, preparation and dispensing in single workflow.

- **Screening & Verification**

  Screening and verification is for the pharmacist to verify the prescriptions received from order management. This process is mandatory for all prescriptions receive before the user can proceed with dispensing preparation. There are also safety systems that warn against toxic doses, allergic and cross-reactions, drug interactions, duplication of therapeutic classes, contraindications, and adverse effects.

- **Preparation**

  The prescription and the drug preparation are made in the system that may integrated with inventory system. Professionals access system data directly with no need to send files or manual drug labeling.

- **Dispensing**

  The prescription and the dispensing report are made in the system that may integrated with inventory system

- **Fill List**

  User is allowed to make unit dose dispensing for a selected nursing unit's entire list of patients of medication orders as a batch process. The dispensing process like preparation and dispensing will be done from the same screen for an entire list of patient from a selected nursing unit.

- **Release / Discard Batch**

  Allow the user to release the drug reserved for the patient back into inventory. This list will a contain list of drugs with 'Uncollected', 'Prepared' or 'Hold' status. User need to release this drug in order for it to be available in the drug inventory list. The status of allocated (reserved quantity) will change to available quantity.

- **Medication Return**

  Allow the user to return any unused drugs back to inventory. This screen will allow the user to Create New Record and Confirm Online Request. 'Confirm Online Request' is used to manage medication return requests made by nurses for medication returned for all unused medication from inpatient upon the patient's discharge.

- **Re-Dispensing**

  Allow the user to re-issue medication to the patient due to spilled, broken or lost. Only Authorized users will be able to access this process.

- **FPP Medication Summary**

  Allow user to view Full Paying Patients details and update FPP supply for patient. User able to print Invoice for the finalized FPP Medication summary.

3.1 Search Registered Patient

To view an existing patient record, please perform the steps below.

Figure 3.1-1 PhIS Home Page

STEP 1

Click on 'Order Management' menu followed by 'Record Prescription' and screen will be displayed as per Figure 3.1-2

Figure 3.1-2 Medication Order

STEP 2

Select type of details of patient details.

STEP 3

Click on the button to search for a registered patient

Note

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

Figure 3.1-3 Search Patient

STEP 4

Double-click on the selected patient and the details will be displayed as per Figure 3.1-4

Figure 3.1-4 Medication Order Screen

Note

- *Click at the* Patient sticker *button to direct print patients sticker*
- *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. (Refer to Appendix 1).*

Figure 3.1-5 Visit / Admission Detail

STEP 5

Double-click on the selected visit and the details will be displayed as per Figure 3.1-6

Figure 3.1-6 Medication Order Detail

3.2 New Patient Registration

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

Figure 3.2-1 PhIS Home Page

STEP 1

Click on 'Order Management' menu followed by 'Record Prescription and screen will be displayed as per Figure 3.2-1

Figure 3.2-2 Transcribe Order Create New Patient

STEP 2

Click on the New Patient to register for new patient

Figure 3.2-3 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*
  - *OLD IC*
  - *PASSPORT*
  - *PENSION CARD*
  - *POLICE CARD NUMBER*
  - *UNKNOWN PATIENT*
  - *Work permit and enter the relevant number.*

STEP 5
Enter ***Contact Number (Mobile)***

Figure 3.2-4 Visit / Admission

STEP 6
Select the ***Visit Type*** from dropdown box:
- Daycare
- Emergency
- Inpatient
- Outpatient
- Outsource
- SPUB

- Walk-in

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

STEP 8
Select ***Location*** from dropdown box

Note
Location *will tie to the selected Department.*

STEP 9
Click on the button to save the record and medication order screen will display as per Figure 3.2.5

Note

- *After click the save button, system will automatically generate the **MRN** (Medical Record Number) and , and buttons will be enabled.*
- *Click on the Full Registration to assess 'Visit Management' Screen. (Refer to Appendix 2).*
- *Another option to register a new patient is to click on the New Patient Registration button located under Patient Quick Registration that will display the same screen as Figure 3.2-3.*

Figure 3.2-5 Medication Order

3.3 Inpatient Pharmacy (IP) Order

To perform these steps below to create new order

Figure 3.3-1 Normal Inpatient Order

STEP 1

Click on the button to search ***Original Prescriber Name***. Refer Figure 3.3-2

Figure 3.3-2 Prescriber List

STEP 2

Double click on the selected prescriber. Refer Figure 3.3-2

Figure 3.3-3 Original Order Transaction Number

STEP 3

Enter ***Original Order Transaction Number.*** Refer Figure 3.3-3

Figure 3.3-4 Prescription Screen

STEP 4

Search drug by enter keyword of the drug name and click on the selected drug from the displayed list. Refer Figure 3.3-4

Note

- *There is an option for user to search drugs by click on the* Advanced Search *button.*
- *The screen displays information as below:*
  - *a) DrugName*
  - *b) ATC*
  - *c) Active Ingredient*
  - *d) Favourite*

Note

a) Search by **DrugName** tab:
- Enter Drug name
- Select and enter Drug Category from drop down box
  - A
  - A*
  - A/KK
  - B
  - C
  - C+

Search results be displayed after clicking on Search the button. Click on the selected drug to continue prescribing. Refer Figure 3.3-5

Figure 3.3-5 Drug Name Search Detail Screen

Figure 3.3-6 ATC Search Detail Screen

Note

b) Search by ATC group

Select and enter the ATC group/subgroup from dropdown box from level from 1 to 5 Anatomical Main Group

- Therapeutic Subgroup
- Pharmacological Subgroup
- Chemical Subgroup
- Chemical Substance

Search results will be displayed after clicking on Search button. Click on the selected drug to continue prescribing. Refer Figure 3.3-6

Figure 3.3-7 Active Ingredient Search Detail Screen

Note

c) Search by Active Ingredient

Select and enter:

- Active Ingredient
- Dosage Form from dropdown box
- Admin Route from dropdown box

Search results will be displayed after clicking on the Search button. Double click on the selected drug to continue prescribing. Refer Figure 3.3-7

Figure 3.3-8 Favourite search Detail Screen

Note

d) Search by Favourite tab

- Search the favourite drug by entering the drug name.
- Search results will be displayed after clicking on the Search button. Click on the selected drug to continue prescribing.
- Select the check box and click Delete button to remove from the Favourite list.
- This favourite list is derived from the prescriber's own favourite list. Refer Figure 3.3-8

Figure 3.3-9 Medication Order

STEP 5
Enter ***Duration*** and select days/months or weeks from drop down menu. Refer Figure 3.3-9

Note

- *Order Quantity will be automatically displayed and editable.*
- ***Dosage, Admin Route*** *and Frequency will be retrieved from the master setup; however, prescriber may amend the value as required.*
- ***Start Date/Time*** *will be defaulted to current date.*
- ***End Date/Time*** *will be calculated based on the Duration.*
- ***Patient Require Counselling*** *indication check box can be ticked if prescriber wants pharmacist to counsel the patient on the medicine.*
- *Check the* ***Own Medication*** *checkbox if patient brought and used their own medication. Only applicable for*
- *Inpatient and where pharmacist do not supply medication to the wards.*
- *Enter Drug Remarks if applicable.*

Figure 3.3-10 Medication Order

STEP 6

Click on the Add button to add medicine in prescription list. Refer Figure 3.3-10

Note

To add another drug to prescription, repeat Step 4 to 6.

STEP 7

Click on the Draft button to save prescription as draft

STEP 8

Click on the Confirm button to proceed with screening and Verification

Note

- *Monthly Index of Medical Specialities (MIMS) will alert if there is any drug interaction.*
- *Click on the Drug Info hyperlink to view the drug details.*
- *Click on the button to print prescription.*

Figure 3.3-11 Medication Order

STEP 9

Click on the Yes button displayed. Refer Figure 3.3-11

Figure 3.3-12 Medication Order

Note

The drug Information alert window as per Figure 3.3.12 will display if there is any drug interaction.

Figure 3.3-13 Medication Order

STEP 10

Click on the OK button displayed. Refer Figure 3.3-13

3.4 Screening & Verification

This function is used to screen & verify prescription before preparation and dispensing stage

3.4.1 Verify Prescription

This function is used to verify patient's prescription

Figure 3.4.1-1 Screening & Verification Listing Page

Note

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

STEP 1

Click on 'Screening & Verification 'menu

STEP 2

Select ***Dispensing Location***

STEP 3

Click on the button to search the patient:

Basic Search			
No	**Field**	**Description**	**Remark**
a	Show All		Able to view all patient record
b	Dispensing Location	Dispensing location. (It will list down all active location)	Able to filter and search patient name by dispensing location
c	Patient Name	Patient Name	Allow to search by full or partial patient's name
d	Order Type	-All -Normal -SPUB -Discharge -Referred Patient	All -Type of search from range Normal, SPUB, Discharge and Referred Patient Normal – Prescription from normal order SPUB - Prescription from SPUB order Discharge - Prescription from Discharge order Referred Patient – Prescription from referred patient

e	MRN	Patient MRN	Allow to search by patient full or partial MRN No
f	Order Status	-All -New Order -Partial Supply -Pending Authorisation	All – Type of search from range New order, Partial Supply and Pending Authorisation New Order – Prescription of new order Partial Supply – Prescription from partially dispense Pending Authorisation – Prescription contain of drug to authorise
g	Prescription Status	-Hold -Expired	Allow to search by prescription status
h	Original Prescription Serial No		Allow to search by Prescription Serial No
Advance Search			
g	Order Location	Order location. (It will list down all active location)	
h	Order Location Type	- All - Clinic - Day Care - ER - Nursing Unit -Pharmacy	
i	Order Date From		Start point for range of order date
j	Order Date To		Order Date To can be NULL or must be greater than the value for Order Date From
k	Bed		Search patient by bed number

Table 3.4.1-1

Note

Advanced Search *can be used to narrow down the criteria. Consist of:*

a) Order Location
b) Order Location Type
c) Order Date From
d) Order Date To
e) Bed No

STEP 4

Click on existing patient record and screen as in Figure 3.4.1-2 will be displayed

Figure 3.4.1-2 Screening and Verification Prescription

Note

For PB and record created from Record Prescription, once confirm the order, Screening stage screen will appear as in Figure 3.4.1-3. User does not need to go to Screening and Verification link to open the record. However, user still able to open patient record from Screening and Verification link

Figure 3.4.1-3 Verify Prescription from Record Prescription Listing Page

STEP 5

Click on the

button to proceed verification process

Note

- *When selected patient name is clicked, the summary of patient information will be displayed in the patient banner. The patient banner will be displayed at the specific screen which is required patient information. Below is the list of patient information:*
  - *Patient Name*
  - *Patient Address*
  - *Patient IC Number*
  - *Patient Phone and Email*
  - *Patient Diagnosis*
  - *Patient Age*
  - *Patient Allergy*
  - *Patient Gender*
  - *Patient MRN*
- *Below options are provided for user to view the additional patient information. Click on the hyperlink as below:*

  a) Lab Parameter
  - *Patient's laboratory test results.*

  b) Counselling History
  - *Medication counselling history records.*

  c) Demographic
  - *Patient's demographic details.*

  d) Pharmacist Notes
  - *Pharmacy notes such as MTAC, Ward Pharmacy and etc.*

  e) Medication Profile
  - *This hyperlink will show the patient's current medication and previous medication history.*

  f) Other Appointments
  - *This screen provides information if there are any other appointments recorded for the patient.*
- *Current visit information will be displayed as below:*
  - *a) Admission Date*
  - *b) Attending practitioner*
  - *c) Visit location*
  - *d) Room No / Bed No*
  - *e) Rx No*
- *Prescription from order management will be displayed as below:*
  - *a) Alert*
  - *b) Drug Name*
  - *c) Order Detail*
  - *d) Order Qty - Quantity of drug ordered by the prescriber.*
  - *e) Reserve Qty*
  - *f) Balance Qty*
  - *g) Remarks*
  - *h) Drug Counselling*
  - *i) Prev Disp Qty*
  - *j) Freshly Prepare*
  - *k) Status*
  - *l) Drug Info*
- *To skip preparation screen, tick on the Proceed to Dispense ☑ checkbox.*
- *Select ENGLISH ☑ check box to print in English language.*

Note

- *Once the button* Verify *is clicked, system will automatically calculated the quantity in* ***Reserve Qty*** *field base on quantity in Supply Duration field.*
- *A notification icon* Remarks *in the Remarks column is display if there are past Remarks in all dispensing screens. User will be able to view past Remarks (with timestamp & NAME OF PERSON making remark), including the doctor's remark as per Figure 3.4.1-4*
- *MTAC History link in all dispensing screen (patient banner)*

Figure 3.4.1-4 Pharmacist Remark

- *User able to update patient POM medications in Screening and verification stage by clicking at the* POMs *checkbox and click at the* 0 vial *hyperlink and pop up* will appear as in Figure 3.4.1-5

Figure 3.4.1-5 POM Received Quantity and Label Printing

- Key in quantity received and click button and POMs Label button to print label.
- Label will appear as in Figure 3.4.1-6

HOSPITAL KUALA LUMPUR (Tel: 0326155555)

PATIENT'S OWN MEDICINES (POMs)

HKL00235253 Farmasi Pesakit Dalam

Chlorpheniramine Maleate 4mg Tablet

Ambil 1 biji Setiap malam

-

Boleh diambil SEBELUM ATAU SELEPAS makan. Menyebabkan mengantuk. Elak memandu /kendali mesin.

08/10/2019 Kuantiti 4 biji

UBAT TERKAWAL 08/10/2019 03:46 PM

Figure 3.4.1-6 POM Label

- *If user wants to update POMs drug to Normal drug, Untick the POM checkbox and drug will be changed from own medication to normal medication. Pop up as Figure 3.4.1-7 will appear to confirm*

Figure 3.4.1-7 Confirmation

- *Click* Yes *button to confirm POM changes*

- *System will change the POM to normal drug as in Figure 3.4.1-8*

Figure 3.4.1-8 Verify Prescription

- User able to update normal drugs to POMs or POMs to normal drugs only once. After these drugs changed, user cannot revert back the status. Update should be done in new order. Not applicable in partial supply record.

3.4.2 Intervention

This function allow user to modify drugs details frequency, duration and form. This function is available in screening verification screen and preparation screen however the suitable time to do intervention is during screening and verification screen

Figure 3.4.2-1 Screening & Verification - Intervention

Note

Repeat Step 1 to Step 5 as in verify prescription as per Figure 3.4.1-1 before perform Intervention steps.

STEP 1

Click on the ☐ checkbox as per Figure 3.4-2-1

STEP 2

Click on intervention button for Intervention as per Figure 3.4-2-1

Figure 3.4.2-2 Intervention

STEP 3

Choose the ***Intervention Reason*** by tick at the checkbox of the column ***Selection*** at the ***intervention by doctor*** or ***intervention by pharmacist*** column

STEP 4

Enter remarks of intervention reason.

STEP 5

Click on the

to save the intervention reason. Once do that, the drugs information will be change from grey to yellow.

Note

- *Intervention reason will be updated to all drugs listed in the screen.*
- *Background colour for the drugs change from grey to Yellow, means the records is being updated on the intervention reason but no modification been done.*

a) *There was also some colour indicator highlighted for a drug row, when user do the intervention:*
   i. *GREEN- Modify with Intervention Reason: - user able to save changes.*
   ii. *YELLOW- Add Reason only: - user able to save changes.*
   iii. *RED-Modify without Reason: - user are not able to save changes. User need to add in at least one reason to save changes*

Figure 3.4.2-3 Intervention

STEP 6

Modify the order detail and background color will change to green.

Note

- *User is allowed to change only Frequency, Duration and Dose*
- *Modify Order will be displayed:*

b) *Drug name.*
c) *Dose – dosage will be allowed to change.*
d) *Frequency - dosage will be a drop down and allowed to change - once changed the changed value of the dose will be stored and the order quantity will be recalculated.*
e) *Order Qty - dosage will be allowed to change - value of the Order Qty will be recalculated after change the frequency and duration.*

f) *Start Date Time.*
g) *Dosage form.*
h) *Admin Route.*
i) *Admin Route.*
i) *Duration - duration is allowed to change. The user will also have to select the UOM for duration, possible UOM will*

be days, month and hours.
j) Dispense Location.
k) End Date Time.
l) Remarks.

Figure 3.4.2-4 Intervention

STEP 7

Click on Confirm button to save the modification as refer to Figure 3.4.2-4.

Figure 3.4.2-5 Confirmation

STEP 8

Click on Yes to confirm drug intervention.

Figure 3.4.2-6 Information Alert Message

STEP 9

Click on the OK button to save record

Figure 3.4.2-7 Prescription

Note

It will then go back to Screening & Verification screen with changes being highlighted in blue text as per Figure 3.4.2-7

3.4.3 Alternate Drug

This function allow user to select different drug with the same active ingredient and same administration route. This function is available in screening verification screen and preparation screen, however the suitable time to do intervention is during screening and verification screen

Figure 3.4.3-1 Screening & Verification – Alternate Drug

Note

*Repeat **Step 1 to Step 4** as in verify prescription as per Figure 3.4-1-1 before perform Alternate Drug steps.*

STEP 1

Click on the Alternate link to do alternate as per Figure 3.4.3-1

Figure 3.4.3-2 Alternate Drug Details

STEP 2

Enter the ***Qty per dose*** and save record

Note

Dispense OUM is available to select as per Figure 3.4.3-2

Figure 3.4.3-3 Alternate Drug Details

STEP 3

Click on the button to save record

Figure 3.4.3-4 Information Alert Massage

STEP 4

Click on the OK button to save record and screen will automatically closed and back to prescription screen as Figure 3.4.3-5

Figure 3.4.3-5 Updated Prescription

3.4.4 Alternate / Combination Drug

This function allow user to replace existing ordered drug with the combination of drug within the same active ingredient and same administration route as ordered drug. This function is available in screening verification screen and preparation screen, however the suitable time to do intervention is during screening and verification screen.

Figure 3.4.4-1 Screening & Verification

Note

Repeat Step 1 to Step 4 as in verify prescription as per Figure 3.4.1-1 before perform ***Alternate / Combination Drug*** *steps.*

STEP 1

Click on the Alternate(C) hyperlink to perform alternate / combination drug as per Figure 3.4.4-1

Figure 3.4.4-2 Alternate Drug Detail

STEP 2

Enter the ***Qty per dose*** field for selected combination drug

Figure 3.4.4-3 Alternate Drug Details

STEP 3

Click on the button to save record

Figure 3.4.4-4 Information Alert Massage

STEP 4

Click on the OK button to save record and screen will be automatically closed and back to prescription screen as Figure 3.4-5

Figure 3.4.4-5 Updated Prescription

3.4.5 Hold / Resume

This function allows Pharmacist to hold medication from being prepare or dispense; may resume the medication order to continue dispensing. Hold/Resume process is available at Screening and Verification, Preparation and Dispensing

Figure 3.4.5-1 Screening & Verification – Hold

<u>Hold</u>

<u>Note</u>

*Repeat **Step 1 to Step 4** as verify prescription as per Figure 3.4.1-1 before perform Hold / Resume steps.*

STEP 1

Select one drug by clicking on the ☐ checkbox

STEP 2

Click on Hold button as per Figure 3.4.5-1

Figure 3.4.5-2 Hold Order – Pharmacist Remarks

<u>Note</u>

Select and enter from the ***Hold Reason*** drop down box:

- *Authenticity*
- *Contraindication*

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

STEP 3

Select the reason and enter the Remarks field with applicable information

STEP 4

Click on the Hold button

Figure 3.4.5-3 Hold Drug Alert Message

STEP 5

Click on the Yes button to Hold Drug and confirmation pop up message will automatically close

Resume

Figure 3.4.5-4 Screening & Verification – Resume

STEP 1

Click on the ☐ button as per Figure 3.4.5-4

STEP 2

Click on the Resume button and select Resume as per Figure 3.4.5-4

Figure 3.4.5-5 Hold Order – Pharmacist Remarks

STEP 3

Enter information in **Action Taken** field

STEP 4

Click on the Resume button

Figure 3.4.5-6 Confirmation Alert Message

STEP 5

Click on the Yes button to release drug from hold and the Hold Order screen will automatically close

3.5 Preparation

This function is used to prepare drug, allocate quantity, Perform Intervention, Prepare drug Label, Prepare Extemporaneous by Patient and Prepare Extemporaneous by Pharmacist before dispensing stage

3.5.1 Prepare

This function is used to prepare drug before dispensing stage

Figure 3.5.1-1 Preparation Listing Page

STEP 1

Click on 'Preparation' sub menu

STEP 2

Search existing patient record as follow:

a) Dispensing Location

b) Order Type

- All
- Normal
- SPUB
- Discharge

c) Mode of Services

- All
- Appointment Card
- Email and Take
- Fax and Take
- Normal Collection
- Others
- SMS and Take
- Telephone and Take
- UMP

d) Patient Name

e) MRN

f) Order Status

- All

- New Order
- Partial Supply

Note

Advanced Search *can be used to narrow down the criteria. It is consisting of:*

a) Order Location
b) Order Location Type
c) Order Date From
d) Order Date To
e) Next Supply From
f) Next Supply To
g) Bed No
h) Dispense At

STEP 3

Click on the Search button to search the patient

STEP 4

Double click on the selected patient's name

Note

On this listing page, various Search criteria as below:

Basic Search			
No	**Field**	**Description**	**Remark**
a	Show All		Able to view all patient record
b	Dispensing Location	Dispensing location. (It will list down all active location)	Able to filter and search patient name by dispensing location
c	Patient Name	Patient Name	Allow to search by entering fully or partially search criteria of patient's name
d	Order Type	-All -Normal -SPUB -Discharge -Referred Patient	All -Type of search from range Normal, SPUB, Discharge and Referred Patient Normal – Prescription from normal order SPUB - Prescription from SPUB order Discharge - Prescription from Discharge order Referred Patient – Prescription from referred patient
e	MRN	Patient MRN	Allow to search by entering fully or partially search criteria of MRN No
f	Order Status	-All -New Order -Partial Supply -Pending Authorization	All – Type of search from range New order, Partial Supply and Pending Authorization New Order – Prescription of new order Partial Supply – Prescription from partially dispense Pending Authorization – Prescription contain of drug to authorize

Advance Search			
g	Order Location	Order location. (It will list down all active location)	
h	Order Location Type	- All - Clinic - Day Care - ER - Nursing Unit -Pharmacy	
i	Order Date From		Start point for range of order date
j	Order Date To		Order Date To can be NULL or must be greater than the value for Order Date From
k	Bed		Search patient by bed number

Table 3.5.1-1

Figure 3.5.1-2 Preparation

Note

- *When selected patient name is clicked, the summary of patient information will be displayed in the patient banner. The patient banner will be displayed at the specific screen which is required patient information. Below is the list of patient information:*
  - *Patient Name*
  - *Patient Address*
  - *Patient IC Number*
  - *Patient Phone and Email*
  - *Patient Diagnosis*
  - *Patient Age*
  - *Patient Allergy*
  - *Patient Gender*
  - *Patient MRN*

- *Below options are provided to view the additional patient information. Click on the hyperlink as below:*
  - ***a) Lab Parameter***
    - *Patient's Laboratory Test Result*
  - ***b) Counselling History***
    - *Medication Counselling history records.*
  - ***c) Demographic***
    - *Patient's demographic details*
  - ***d) Pharmacist Notes***
    - *Pharmacy notes such as MTAC, Ward Pharmacy and etc.*
  - ***e) Medication Profile***
    - *This hyperlink will show the patient's current medication and previous medication history.*
  - ***f) Other Appointments***
    - *This screen provides information if there are any other appointments recorded for the patient*
  - ***g) Vas History***
    - *This screen provides information on patients previous dispensing Mode of Services*

- *<u>Current visit information</u> will be displayed as below:*

a) Admission Date
b) Attending practitioner
c) Visit location
d) Room No / Bed No
e) Rx No
f) Order By

- *<u>Prescription</u> from order management will be displayed as below:*

a) Drug Name
b) Order Detail
c) Order Qty - Quantity of drug ordered by the prescriber
d) Prev Disp Qty
e) Reserve Qty
f) POM Received
g) Dispense UOM Qty
h) Balance
i) Remarks
j) Drug Counseling
k) Extemporaneous
l) Prescriber Name
m) Status
n) Drug Info
o) Drug Interaction Alert

STEP 5

Click on the

button to proceed prepare process

Figure 3.5.1-3 Confirmation Alert Message

STEP 6

Click on the Yes button to confirm preparation

Note

These are the options to select and print reports as per Figure 3.5.1-2:

a) *Balance Medication Sheet – English*
b) *Balance Medication Sheet – Malay*
c) *Worksheet*
d) *Dispense Labels*

3.5.2 Allocate Quantity

This function is used to allocate quantity manually or change the quantity calculated by application

Figure 3.5.2-1 Preparation

Note

*Repeat **Step 1 – Step 4** as in prepare as per Figure 3.5.1-1 before performs Allocate Quantity steps.*

STEP 1

Click on ***Reserve Qty*** hyperlink to allocate quantity

Note

User is allowed to allocate 0 quantity in Reserve Qty field by clicking the ☐ checkbox.

Figure 3.5.2-2 Item Batch Details

STEP 2
Enter the ***UOM Qty*** field

Note

- *User is allowed to choose and Allocate Qty from Batch Detail.*
- ***Dispense UOM*** Dispense UOM tab *will be automatically generated from the drug master.*
- *Item Batch Details will be displayed:*
  - *a)* ***Drug Code*** *- The value will be defaulted to the drug code selected from the prescription list, auto display.*
  - *b)* ***Drug Name*** *- The value will be defaulted to the drug name selected from the prescription list, auto display.*
  - *c)* ***Order Detail*** *- The value will be defaulted to the duration selected from the prescription list. Will include duration, date and time for medication, auto display.*
  - *d)* ***Default SKU*** *- The value will be defaulted to the SKU selected from the prescription list, auto display.*
  - *e)* ***Supply Duration*** *- The value will be defaulted to the duration selected from the prescription list, auto display.*
  - *f)* ***Date*** *- The value will be defaulted to the supply duration selected from the prescription list, auto display.*
- *Batch Detail - will list down all item batches which are related to the selected drug where expiry date is less than 30 days from the current date.*
  - *a)* ***Batch No*** *– Available batch no*
  - *b)* ***Expiry Date*** *– Batch expiry date*
  - *c)* ***Available Qty*** *– Quantity available for the selected batch*

d) ***UOM Qty*** *– Quantity available by UOM*

e) ***Allocate Qty*** *– Reserved quantity from the selected batch. Allocated quantity cannot be more than the available quantity and order quantity.*

f) ***Total Available Qty*** *- will show the quantity of the drug available for the selected dispensing location only, auto display.*

g) ***Total Allocated Qty*** *- will show total of allocated quantity for the selected drug, it will auto calculate the total quantity when user allocates the quantity for the selected batch no, auto display.*

Figure 3.5.2-3 Item Batch Details

STEP 3

Click on the button to save record

STEP 4

Click on the OK button to save record and screen will automatically closed

Figure 3.5.2-4 Information Alert Message

3.5.3 Drug Label

This function is used to edit and print drug label.

Figure 3.5.3-1 Preparation – Drug Label

Note

- *Repeat **Step 1 to Step 4** as in prepare as per Figure 3.5.2-1 before performs Drug Label steps. There are to option to print label*
  - a) Label *Preview then print*
  - b) IP Label *Print Inpatient format label without preview (Direct printing)*
  - c) OP Label *Print Outpatient format label without preview (Direct printing)*
- *Pre-Requisite to print label is **Reserve Quantity** field must have value >0 (Drug Allocated)*

STEP 1

Click on the Label button to print drug label

Note

- *User able to Select All drug label, or click on the check box to select drug label to print.*
- *Click on Print in Local Language check box to print label in Malay.*
- *Enter No of Label to Print.*
- *Able to edit Administration Instruction, Indication, Cautionary, Special Instruction, Expiry Date and Price*

STEP 2

Click on the Preview button to preview ***Drug Label***

Figure 3.5.3-2 Preparation – Drug Label

Note

- *User able to Select All drug label, or click on the check box to select drug label to print.*
- *Click on Print in Local Language check box to print label in Malay.*
- *Enter No of Label to Print.*
- *Able to edit Administration Instruction, Indication, Cautionary, Special Instruction, Expiry Date and Price*

Figure 3.5.3-3 Preview IP Drug Label

- *Drug dosage has been modified to 1 decimal point*

STEP 3

Click on the button to print ***Drug Label***

Figure 3.5.3-4 Preview OP Drug Label

Note

- *Enhancement on drug label*
  - *To put 'dose' and 'frequency' in one line.*
  - *'Route' to move in 2nd line.*
  - *Line to reduce (make it more thin/grey color)*
  - *Apply both to IP and OP Label - remove the split boxes in dose and frequency and increase font for dose and frequency.*
  - *Remain background color as white for all information for all labels.*
  - *Combine Special Instruction and Cautionary into 1 column*

HOSPITAL KUALA LUMPUR (Tel: 0326155555)

HKL00235267 Wad NW18B (Perubatan)

Acetylsalicylic Acid 300mg Soluble Tab

Ambil 1/4 biji Setiap pagi
-

Sila ambil ubat SELEPAS makan.

24/10	25/10	26/10	27/10	28/10	29/10	30/10

24/10/19 [1 hari] 1 biji RM1.00

UBAT TERKAWAL 24/10/2019 11:12 AM

Figure 3.5.3-5 Preview IP Drug Label

HOSPITAL KUALA LUMPUR (Tel: 0326155555)

HKL00235267 Wad NW18B (Perubatan)

Acetylsalicylic Acid 300mg Soluble Tab

Take 1/4 tablet In the morning

-

Take AFTER food
avoid working with sharp items.

Blood thinners

24/10/19-25/10/19 [1 day(s)] **1 tablet RM1.00**

UBAT TERKAWAL JAUHI DARIPADA KANAK-KANAK 24/10/2019 11:52 AM

Figure 3.5.3-6 Preview OP Drug Label

HOSPITAL KUALA LUMPUR (Tel: 0326155555)

[redacted]

HKL00235267 Wad NW18B (Perubatan) [redacted]

Acetylsalicylic Acid 300mg Soluble Tab

Take 1/4 tablet In the morning
-

Take AFTER food.
avoid working with sharp items.

24/10	25/10	26/10	27/10	28/10	29/10	30/10

24/10/19 [1 day 1 tablet RM1.00

UBAT TERKAWAL 24/10/2019 11:54 AM

Figure 3.5.3-7 Preview IP Drug Label

3.5.4 Extemporaneous – By Patient

This function is used to generate and print the Ingredient label prepared for patient, based on drugs setup. Extemporaneous preparation prepared by patient at home.

Figure 3.5.4-1 Preparation – Extemporaneous

Note

*Repeat **Step 1 to Step 2** as in prepare as per Figure 3.5.1-1 before performs Extemporaneous by Patient steps.*

STEP 1

Click on the ***Extemporaneous*** ☑ checkbox and system will display extemporaneous screen as Figure 3.5.4-1

Figure 3.5.4-2 Preparation – Extemporaneous

STEP 2
Click on 'Patient' radio button

STEP 3
Select ***Preparation Name*** from the drop down box

Note

- *Concentration, dosage, Quantity, Storage Condition, Vehicle Expiry Date, Formulation Remarks and Procedures/Preparation by Patient and Reference will be retrieve from Master Setup.*
- *Allow to select Storage Condition and Procedures in Local Language.*
- *Allow to change **Vehicle** UOM if applicable.*
- *Allow to change **Expiry** duration.*
- ***Procedures/Preparation** by Pharmacist is editable.*

STEP 4

Click on the button to save record

STEP 5

Click on the Print Ingredient Label button to print ingredient label

STEP 6

Click on the button to print the label

Amlodipine 10 mg Tablet	
1 tablet	
Batch No: BG09605	Exp Date: 31/08/2019
HOVASC	
Ubat Terkawal	

Figure 3.5.4-3 Sample Of Extemporaneous Ingredient Label

Note

Refer Figure 3.5.4-3 for the Ingredient Label Prepared by Patient sample.

3.5.5 Extemporaneous – By Pharmacist

This function is used to generate and print the Ingredient label prepared for patient, based on drugs setup. Extemporaneous preparation prepared by patient at home.

Figure 3.5.5-1 Preparation – Extemporaneous

Note

Repeat Step 1 to Step 2 as in prepare as per Figure 3.5.1-1 before performs Extemporaneous by Patient steps.

STEP 1

Click on the *Extemporaneous* ☑ checkbox and system will be displayed extemporaneous screen as Figure 3.5.5-1

STEP 2

Click on 'Pharmacist' radio button

Figure 3.5.5-2 Preparation – Extemporaneous

STEP 3

Select *Preparation Name* from drop down box

Note

- *Concentration, dosage, Quantity, Storage Condition, Vehicle, Expiry Date, Formulation Remarks and Procedures/Preparation by Patient and Reference will be retrieve from Master Setup.*
- *Allow to select Storage Condition and Procedures in Local Language.*
- *Allow to change Vehicle UOM if applicable.*
- *Allow to change Expiry duration.*

STEP 4

Click on the button to save record

STEP 5

Click on the Generate Worksheet button to print Ingredient Worksheet

Note

- *Refer Figure 3.5.5-3 for the Extemporaneous Worksheet by Pharmacist sample.*
- *Able to print Worksheet for prepare drug for patient.*

STEP 6

Click on the button to print the worksheet

STEP 7

Click on the button and close record

6

EXTEMPORANEOUS WORKSHEET (PARTIAL)

MINISTRY OF HEALTH

Date of preparation : 28/03/2018 **Worksheet Id:** 18-03-0111

MRN **Name**
ID No 850606085046
Order Location Jabatan Kecemasan dan Trauma **Rx. No.** U.A&E0000371599
Order Date 28/03/2018 **Ordered By**

No	ROA	Preparation Name	Dose	Total Dose	Material Used				Storage
					Item Name	Volume/Qty Required	Batch No	Expiry Date	
1.	Oral	Amlodipine 1mg/1ml Oral Liquid(Syrup) Expiry Date : 11/04/2018	10mg (10ML)	10mg (10 ml)	Amlodipine 10 mg Tablet	1 tablet	BG09605	31/08/2019	Refrigerate
					Syrup BP	10 ml			

Remarks:

Instruction:
1. Crush tablets in a mortar to a fine powder.
2. Levigate the powder with distilled water until a smooth paste is formed.
3. Add more distilled water to the paste until a liquid is formed and transfer the liquid into the container.
4. Use additional vehicle to rinse the remaining drug from the mortar and pour into the container.
5. Make up to final volume with vehicle.
6. Shake well and label.

Reference:

Worksheet generated by	Worksheet & label checked by	Prepared by	Final Product Checked by
Date: 28/03/2018	Date:	Date:	Date: 28/03/2018

Figure 3.5.5-3 Preparation – Extemporaneous

3.6 Dispensing

This function allow user to record dispensing, to hold, resume and edit label.

Figure 3.6-1 Dispensing Landing Screen *Note*

Note

Various search criteria for Patient is provided as below:

Basic Search			
No	**Field**	**Description**	**Remark**
a	Show All		Able to view all patient record
B	Dispensing Location	Dispensing location. (It will list down all active location)	Able to filter and search patient name by dispensing location
C	Patient Name	Patient Name	Allow to search by entering fully or partially search criteria of patient's name
D	Order Type	-All -Normal -SPUB -Discharge -Referred Patient	All -Type of search from range Normal, SPUB, Discharge and Referred Patient Normal – Prescription from normal order SPUB - Prescription from SPUB order Discharge - Prescription from Discharge order Referred Patient – Prescription from referred patient
E	MRN	Patient MRN	Allow to search by entering fully or partially search criteria of MRN No
F	Order Status	-All -New Order -Partial Supply -Pending Authorisation	All – Type of search from range New order, Partial Supply and Pending Authorisation New Order – Prescription of new order Partial Supply – Prescription from partially dispense - Pending Authorisation – Prescription contain of drug to authorize

Advance Search			
G	Order Location	Order location. (It will list down all active location)	
H	Order Location Type	- All - Clinic - Day Care - ER - Nursing Unit -Pharmacy	
I	Order Date From		Start point for range of order date
J	Order Date To		Order Date To can be NULL or must be greater than the value for Order Date From
K	Bed		Search patient by bed number

Table 3.6-1

STEP 1
Click on 'Dispensing' sub menu

STEP 2
Search existing patient record as follow:

a) Dispensing Location
b) Order Location Type
c) Mode of Services
- All
- Appointment Card
- Email and Take
- Fax and Take
- Normal Collection
- Others
- SMS and Take
- Telephone and Take
- UMP

d) Patient Name
e) MRN
f) Order Status
- All
- New Order
- Partial Supply

g) Order Location
h) IC No/Other Identification
i) Order Type
- All
- Normal
- SPUB
- Discharge

j) Acknowledged without patient arrival
k) Next Dispense At
- *Drive Through Counter*
- *Pharmacy Counter*
- *Bedside*
- *Locker for You*

- PPUSS

STEP 3

Click on the Search button to search the patient

STEP 4

Double click on the selected patient's name

Figure 3.6-2 Dispensing

STEP 5

Click on the Dispense button

Figure 3.6-3 Confirmation Alert Message

STEP 6

Click on the Yes button to confirm dispensing proceed and dispensing screen will automatically closed

Note

- *To close/complete medication, select the* Complete *checkbox then click on the* Dispense *button. The selected drug will be treat as fully supply.*
- Medication Counselling *button added at Dispensing screen and Single Stage screen as per Figure 3.6-2. Once click on the button, Medication Counselling Order screen will appear.*

3.7 Partial Supply Normal Dispensing

This function is used for inpatient pharmacy to prepare and dispense the balance medication. Unlike Outpatient, Inpatient Partial Supply Dispensing starts directly from Preparation Screen.

Figure 3.7-1 Preparation Listing Page

STEP 1

Click on 'Preparation' sub menu

STEP 2

Search existing patient record as follow:

g) Dispensing Location

h) Order Type

- All
- Normal
- SPUB
- Discharge

i) Mode of Services

- All
- Appointment Card
- Email and Take
- Fax and Take
- Normal Collection
- Others
- SMS and Take
- Telephone and Take
- UMP

j) Patient Name

k) MRN

l) Order Status

- All
- New Order
- Partial Supply

Note

Advanced Search *can be used to narrow down the criteria. It is consist of :*

a) Order Location
b) Order Location Type
c) Order Date From
d) Order Date To
e) Next Supply From
f) Next Supply To
g) Bed No
h) Next Dispense At

STEP 3

Click on the Search button to search the patient

STEP 4

Double click on the selected patient's name

Note

On this listing page, various Search criteria as below:

Basic Search			
No	**Field**	**Description**	**Remark**
A	Show All		Able to view all patient record
B	Dispensing Location	Dispensing location. (It will list down all active location)	Able to filter and search patient name by dispensing location
C	Patient Name	Patient Name	Allow to search by entering fully or partially search criteria of patient's name
D	Order Type	-All -Normal -SPUB -Discharge -Referred Patient	All -Type of search from range Normal, SPUB, Discharge and Referred Patient Normal – Prescription from normal order SPUB - Prescription from SPUB order Discharge - Prescription from Discharge order Referred Patient – Prescription from referred patient
E	MRN	Patient MRN	Allow to search by entering fully or partially search criteria of MRN No
F	Order Status	-All -New Order -Partial Supply -Pending Authorization	All – Type of search from range New order, Partial Supply and Pending Authorization New Order – Prescription of new order Partial Supply – Prescription from partially dispense Pending Authorization – Prescription contain of drug to authorize
Advance Search			

G	Order Location	Order location. (It will list down all active location)	
H	Order Location Type	-All -Clinic -Day Care -ER -Nursing Unit -Pharmacy	
I	Order Date From		Start point for range of order date
J	Order Date To		Order Date To can be NULL or must be greater than the value for Order Date From
K	Bed		Search patient by bed number

Table 3.7-1

Figure 3.7-2 Preparation Screen

STEP 5

Allocate by clicking the Allocate button or allocate manually at the Reserve Quantity hyperlink. Refer step in Allocate Quantity.

STEP 6

Click on the Label button to reprint drug label. Refer steps in Label

Note

Click at PCI *button to directly link to PCI screen*

STEP 7

Click on the Prepare button

Figure 3.7-3 Dispensing Screen

Note

Various search criteria for Patient is provided as below:

Basic Search			
No	**Field**	**Description**	**Remark**
a	Show All		Able to view all patient record
b	Dispensing Location	Dispensing location. (It will list down all active location)	Able to filter and search patient name by dispensing location
c	Patient Name	Patient Name	Allow to search by entering fully or partially search criteria of patient's name
d	Order Type	-All -Normal -SPUB -Discharge -Referred Patient	All -Type of search from range Normal, SPUB, Discharge and Referred Patient Normal – Prescription from normal order SPUB - Prescription from SPUB order Discharge - Prescription from Discharge order Referred Patient – Prescription from referred patient
e	MRN	Patient MRN	Allow to search by entering fully or partially search criteria of MRN No
f	Order Status	-All -New Order -Partial Supply -Pending Authorisation	All – Type of search from range New order, Partial Supply and Pending Authorisation New Order – Prescription of new order Partial Supply – Prescription from partially dispense - Pending Authorisation – Prescription contain of drug to authorize
Advance Search			

g	Order Location	Order location. (It will list down all active location)	
h	Order Location Type	- All - Clinic - Day Care - ER - Nursing Unit -Pharmacy	
i	Order Date From		Start point for range of order date
j	Order Date To		Order Date To can be NULL or must be greater than the value for Order Date From
k	Bed		Search patient by bed number

Table 3.7-2

STEP 8
Click on 'Dispensing' sub menu

STEP 9
Search existing patient record as follow:

a) Dispensing Location
b) Order Location Type
c) Mode of Services
- All
- Appointment Card
- Email and Take
- Fax and Take
- Normal Collection
- Others
- SMS and Take
- Telephone and Take
- UMP

d) Patient Name
e) MRN
f) Order Status
- All
- New Order
- Partial Supply

g) Order Location
h) IC No/Other Identification
i) Order Type
- All
- Normal
- SPUB
- Discharge

j) Acknowledged without patient arrival

STEP 10
Click on the

button to search the patient

STEP 11

Click on the selected patient's name and Figure 3.7-4 will display

Figure 3.7-4 Dispensing Screen

STEP 12

Click on the

button

Figure 3.7-5 Confirmation Alert Message

STEP 13

Click on the

button to confirm dispensing proceed and dispensing screen will automatically closed

Note

- *To close/complete medication, select the*

checkbox then click on the

button. The selected drug will be treat as fully supply.
-

button added at Dispensing screen and Single Stage screen. Once click on the button, Medication Counselling Order screen will appear.
- *A notification icon*

in the Remarks column is display if there are past Remarks in all dispensing screens. User will be able to view past Remarks (with timestamp & NAME OF PERSON making remark), including the

doctor's remark as per Figure 3.7-6

- *There is a new column to view previous dispensed quantity as per Figure 3.7-5*
- *Once there is a remarks entered in normal supply, the remarks will appear in the next partial supply remarks column as per Figure 3.7-5*

Figure 3.7-6 Pharmacist Remark Screen

3.8 Partial Supply Fill List

This function is used for inpatient pharmacy to prepare and dispense medication by ward. The user has to generate and manage the fill list in order to complete the dispensing process.

3.8.1 Generate Fill List

Generate Fill List screen allow user to retrieve patient by ward, view prescription, allocate Qty, edit label, print original prescription and generate fill list.

Figure 3.8.1-1 Fill List Listing Page

STEP 1

Click 'Fill List' in sub menu 'Inpatient'

STEP 2

Search existing patient record as follow:

- ***a) Dispensing Location***
- ***b) Nursing Unit***
- ***c) Supply Date From***
- ***d) Supply Date To***

Note

*User Able to select **Dangerous Drug or Normal Drug** and generate Fill List.*

STEP 3

Tick on the

button to view patient by ward.

Figure 3.8.1-2 Select / Deselect Patient Prescription

STEP 4

Select the checkbox to include the patient prescription for generated fill list else deselect the checkbox to exclude the patient prescription patient from the fill list

Figure 3.8.1-3 Select / Deselect Drug

STEP 5

Click on the ⊞ button to expand the patient prescription, select the checkbox to exclude the drug from the fill list or else remain selected if the drug included in the fill list

Note

By default, all patient will selected.

Figure 3.8.1-4 Generate Fill List

STEP 6

Click on the button to save record

Figure 3.8.1-5 Confirmation Alert Message

STEP 7

Click Yes button to confirm save record and fill list screen will automatically closed

Figure 3.8.1-6 Information Alert Massage

STEP 8

Click on the OK button to save record

3.8.2 Manage Fill List

This function is used to dispense drugs base on the generated fill list by nursing unit, also able to print label and prescription fill list.

Figure 3.8.2-1 Manage Fill List

STEP 1

Click on the button to proceed Manage Fill List process

Figure 3.8.2-2 Manage Fill List

STEP 2

Click on the button to search the fill list

Note

Allow and able to search fill list based:-

a) Fill No
b) Nursing Unit
c) Supply Date From
d) Supply Date To

STEP 3

Double click on the selected fill list

Figure 3.8.2-3 Manage Fill List

STEP 4

Select on the checkbox to print the drug label

STEP 5

Click on the to view or edit drug label

Figure 3.8.2-4 Print Drug Label

Figure 3.8.2-5 Drug Label

STEP 6

Click on the Preview button to preview the drug label

Note

- *Details as below will be auto generated in Drug Label:*
  a) Drug Name
  b) Dose
  c) Dosage Form
  d) Frequency
  e) Duration
  f) Administration Instruction
  g) Indication
  h) Cautionary
  i) Special Instruction,
  j) Expiry Date
  k) Batch No

- *It is allowed to edit Administration, Indication, Special Instruction, Expiry Date, Batch No, Price, No of Label to Print and select Print in Local Language.*
- *Allowed to select to print label in IP format or OP format*

Figure 3.8.2-6(a) Print Drug Label(IP)

Figure 3.8.2-6(b) Print Drug Label(OP)

STEP 7

Click on the button to print the drug label

Figure 3.8.2-7 Print Fill List

STEP 8

Click on the

button to print the fill list

KEMENTERIAN KESIHATAN MALAYSIA

Hospital Pakar Sultanah Fatimah, Muar

Nursing Unit From : WAD 10 (MED - P)
Fill Process ID : WRD871/20191003/17682
Fill Process Executed Date/Time : 03/10/2019 03:26 PM
Date From : 03/10/2019 03:06 PM
Date To : 06/10/2019 03:06 PM
Supply Duration : 3 days

Fill Date	Rx Date	Rx No	Drug	Dose	Route	Freq Code	Qty Reqd	Fill UOM	Batch ID	Expiry Date
Patient Name / ID / MRN :						**Room/Bed No :**	/			
03/10/2019	01/10/2019	WRD8710001817771	Simvastatin 10 mg Tablet	10 mg	ORAL	ON	3	tablet	2905042	31/08/2020
Patient Name / ID / MRN :						**Room/Bed No :**	/			
04/10/2019	03/10/2019	WRD8710001817772	Prednisolone 5 mg Tablet	10 mg	ORAL	OD	6	tablet	1807093	31/07/2021
03/10/2019	03/10/2019	WRD8710001817772	Metronidazole 200 mg Tablet	200 mg	ORAL	Q8H	9	tablet	17E191	31/03/2020

Collected By:
Prepared By:
Dispensed By:
Checked By:

Figure 3.8.2-8 Fill List

STEP 9

Click on the button to print the fill list

3.9 Released / Discard Batch

Released / Discard Batch screen is allowing user to release any reserved / prepared drugs back into inventory. Released batch is only applicable for drug which is not in liquid form

Figure 3.9-1 Release / Discard

STEP 1

Click on 'Release Discharge Batch' sub menu

STEP 2

Search patient record based on:

a) ***MRN***

- ***Patient Name***

c) ***Drug Name***

d) ***Dispense Location***

STEP 3

Click on the button to search the drug

STEP 4

Select check box to select patient drug for release batch

STEP 5

Select ***Reason for Release / Discard***

- Change of Regimen
- Faulty Product
- Intervention
- Patient Refused
- Uncollected
- Wrong Allocation

STEP 6

Click on the Release/Discard button to proceed release or discard process

3.10 Medication Return

Medication Return screen will allow user to return any drugs back into inventory

Figure 3.10-1 Medication Return Listing Page

STEP 1

Click on 'Medication Return' sub menu

STEP 2

Click on the button to add new patient record

Figure 3.10-2 Medication Return

STEP 3

Click on the button to search the patient

STEP 4

Double Click on the selected patient's name

STEP 5

Click on the button to add drug to medication return list

Figure 3.10-3 Medication Return

STEP 6

Select drug to be returned by criteria as below:

a) Dispense No
b) Reason
c) Drug Name
d) Request Return Qty

Note

Receive Return Quantity will be used to record:

a) Return Qty
b) Discard Qty
c) Batch No

STEP 7

Click on the button to save record

Figure 3.10-4 Confirmation Alert Message

STEP 8

Click on the Yes button to confirm save record

Figure 3.10-5 Medication Return

STEP 9

Click on the Confirm button to confirm medication return process

Figure 3.10-6 Confirmation Alert Message

Figure 3.10-7 Information Alert Message

STEP 10

Click on the Yes button

STEP 11

Click on the OK button and screen will be automatically closed

3.11 Re-Dispensing

Re-Dispensing screen allows user to view medication detail by Dispense No and re-dispense medication to the patient.

Figure 3.11-1 Re-Dispensing

STEP 1

Click on 'Re-Dispensing' sub menu

STEP 2

Click on the button to search patient

Note

- *Search MRN screen will be displayed as per Figure 3.11-2.*
- *On this screen, user will be able to search existing patient record by:*
  - *a)* ***Patient MRN***
  - *b)* ***ID No***
  - c) ***Patient Name***
- *Allow to view the list of re-dispense at the listing page as per Figure 3.11-1.*
- *If need to re-dispense the drug again, click on the selected patient name and continue to proceed dispensing process.*

Figure 3.11-2 Search Patient

STEP 3

Click on the selected patient's name

Figure 3.11-3 Re- Dispensing

STEP 4

Click on the button to add new re-dispensing record as Figure 3.11-3

Figure 3.11-4 Re-Dispensing

STEP 5

Click on the ***Dispense No*** button to search dispense record

STEP 6

Select drug to be re-dispense by criteria as below:

a) ***Dispense No***
b) ***Visit Date From***
c) ***Dispense Date From***
d) ***Patient Type***
e) ***Prescription No***
f) ***Visit Date To***
g) ***Visit Date To***
h) ***Dispense Date To***

STEP 7

Double click on the selected *Dispense No*

Figure 3.11-5 Re- Dispensing

STEP 8

Click at the Selection ☑ checkbox for selected drug

STEP 9

Enter the *Re-Disp Qty*

STEP 10

Enter the *Reason*

Note

Reason consist of:

a) *Spilled*
b) *Broken*
c) *Lost*
d) *Others*

STEP 11

Click on the Edit Label if necessary (to reprint the drug label)

STEP 12

Click on the Re-Dispense button

Figure 3.11-6 Confirmation Alert Message

STEP 13

Click on the

button

3.12 FPP Medication Summary

Function is to view Full Paying Patients details and update FPP supply for patient. User able to print Invoice for the finalized FPP Medication summary.

Figure 3.12-1 FPP Listing Page

STEP 1

Click on 'FPP Medication Summary' sub menu

STEP 2

Click on the button to search patient

STEP 3

Select the patient to view FPP Medication Summary as shown in Figure 3.12-2

Figure 3.12-2 FPP Drug Details

STEP 4

Edit Administered Quantity based on supplied quantity

STEP 5

Click button to save record and pop up will display as per figure 3.12.3

Figure 3.12-3 Information

STEP 6

Click OK button to save record and Total price will display as per figure 3.12.4

FPP DRUG DETAILS

MRN: HSM00211660 | Patient Name: [redacted]

Visit Date: 10/10/2019

Drug Name	Order Details	Supplied Quantity (SKU)	Administered Date From - To	Administered Quantity (SKU)	Cost (RM)
Atorvastatin 20 mg Tablet	20 mg, ON, ORAL, 10/10/2019 07:04 PM - 15/10/2019 07:04 PM	5 tablet		5 tablet	17.50
Atorvastatin 40 mg Tablet	40 mg, ON, ORAL, 10/10/2019 07:26 PM - 17/10/2019 07:26 PM	7 tablet		5 tablet	35.00
Ferrous Fumarate 200 mg Tablet	200 mg, OD, ORAL, 10/10/2019 07:23 PM - 17/10/2019 07:23 PM	Ward Stock		0 tablet	0.00
Folic Acid 5 mg Tablet	5 mg, OD, ORAL, 10/10/2019 07:03 PM - 15/10/2019 07:03 PM	Ward Stock		0 tablet	0.00
Paracetamol 500 mg Tablet	1000 mg, PRN3, ORAL, 10/10/2019 07:01 PM - 15/10/2019 07:01 PM	Ward Stock		0 tablet	0.00
Paracetamol 500 mg Tablet	1000 mg, PRN3, ORAL, 10/10/2019 07:22 PM - 17/10/2019 07:22 PM	Ward Stock		0 tablet	0.00
Warfarin Sodium 5 mg Tablet	5 mg, OV, ORAL, 10/10/2019 07:25 PM - 17/10/2019 07:25 PM	7 mg		0 mg	0.00
Warfarin Sodium 5 mg Tablet	5 mg, OV, ORAL, 10/10/2019 07:03 PM - 15/10/2019 07:03 PM	5 mg		5 mg	4.50
Total					57.00

Figure 3.12-4 FPP Drug Details

STEP 6

Click button to print FPP invoice

(FULL PAYING PATIENT)

KEMENTERIAN KESIHATAN MALAYSIA
Hospital Seri Manjung
Invoice

Patient Name	: [redacted]	Date	: 24/10/2019 04:54 PM
Age	: 73 Years 04 Months	Patient ID	: [redacted]
Gender	: Lelaki	MRN	: HSM00211660
Room No/Bed No	: ____/____	Location	: WAD 3

No	Drug Name	Cost	Quantity	Amount
1	Atorvastatin 20 mg Tablet	3.50	5	17.50
2	Atorvastatin 40 mg Tablet	7.00	5	35.00
3	Ferrous Fumarate 200 mg Tablet	0.10	0	0.00
4	Folic Acid 5 mg Tablet	0.10	0	0.00
5	Paracetamol 500 mg Tablet	0.10	0	0.00
6	Paracetamol 500 mg Tablet	0.10	0	0.00
7	Warfarin Sodium 5 mg Tablet	0.90	0	0.00
8	Warfarin Sodium 5 mg Tablet	0.90	0	0.00
			Total : RM	57.00

Figure 3.12-5 FPP Invoice

4.0 Acronyms

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

5.0 Links to Clinical Modules

No	*Module*	*PDF Links*	*No*	*Module*	*PDF Links*
1	*Inpatient*	*Click Here*	*12*	*CDR Dispensing*	*Click Here*
2	*CDR Order*	*Click Here*	*13*	*Methadone Dispensing*	*Click Here*
3	*TDM Order*	*Click Here*	*14*	*PN Dispensing*	*Click Here*
4	*PN Order*	*Click Here*	*15*	*Order Management*	*Click Here*
5	*IV Order*	*Click Here*	*16*	*Patient Management*	*Click Here*
6	*Prepacking*	*Click Here*	*17*	*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*		