



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

System Design Document (SDD)

Order Management Module for Full Based

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**REVISION HISTORY**

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1.0	16/5/2018	Sitinoor Megawati Saurani	Zainura Said	Document baseline for Order Management Full Based and follow PhIS version 1.7



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1. Introduction

Pharmaniaga Logistics Sdn. Bhd. executes software development, enhancement and maintenance projects for its clients. The term “project” is used to describe the full set of activities from the time the proposal is accepted and project initiation note or contract is signed to the time all the software and services are delivered according to the acceptance of the proposal/contract.

This process is to ensure both user requirements and software requirements of the projects developments are gathered appropriately from stakeholders and are documented in User Requirements Specification (URS) and System Design Documentation (SDD) specifically.

2. Purpose

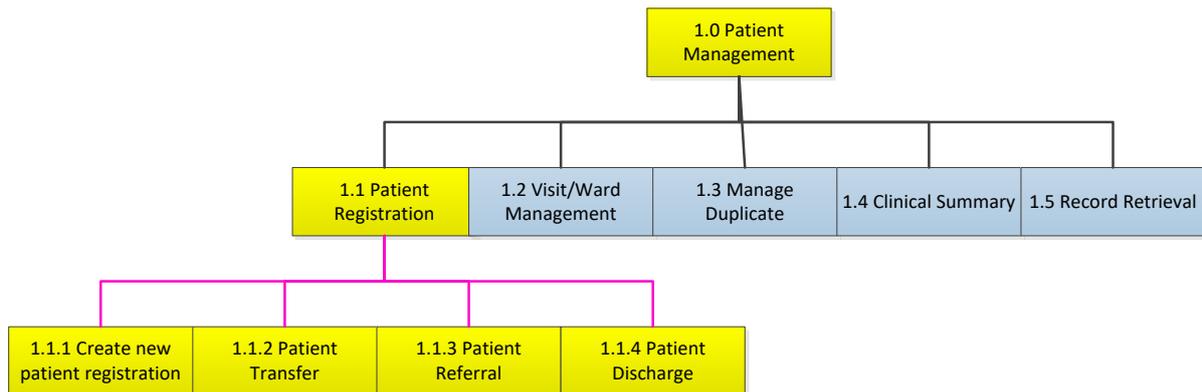
The purpose of the document is to describe the purpose and functionality of the software product requested by client. This document outlines the project's details, requirements, interface, design issues, and components to ensure that each requirement has been met.

3. Detailed System Design

3.1 Patient Management

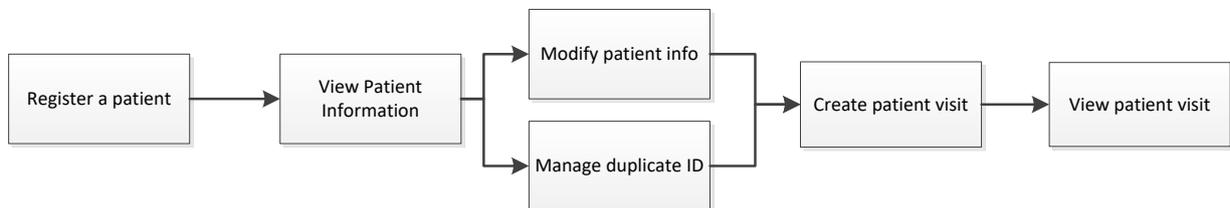
Patient Management in Full Based allows the authorized users of the system to create, view and manage the unique identification and related information of the patients visiting the hospital or clinic. This activity done at patient registration counter by clerk.

3.1.1 Patient Management Overview



PM.OV1: Patient Management Overview

3.1.2 Block Diagram



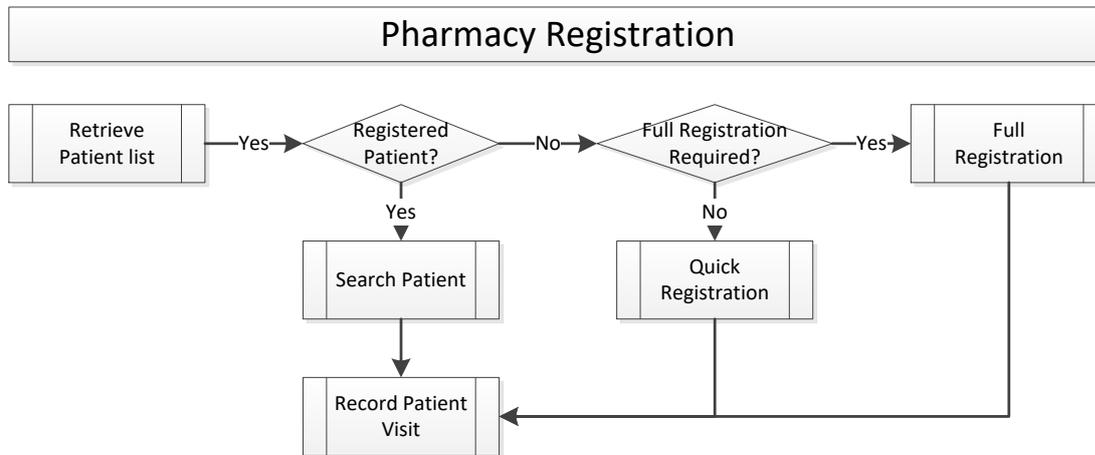
PM.BD1: Patient Management Block Diagram

3.1.3 Purpose

System will require patient to be registered before any transactions are allowed for a patient. Upon registration, every patient will get a unique identification number within the system. The patient registration screen will allow authorized user to create patient registration into the system. If Patient has registered into the system, then user will be allowed to modify the details as needed; given that the user is authorized personnel.

Process will start when patient come to pharmacy with their prescription paper.

3.1.4 Screen Navigation Diagram

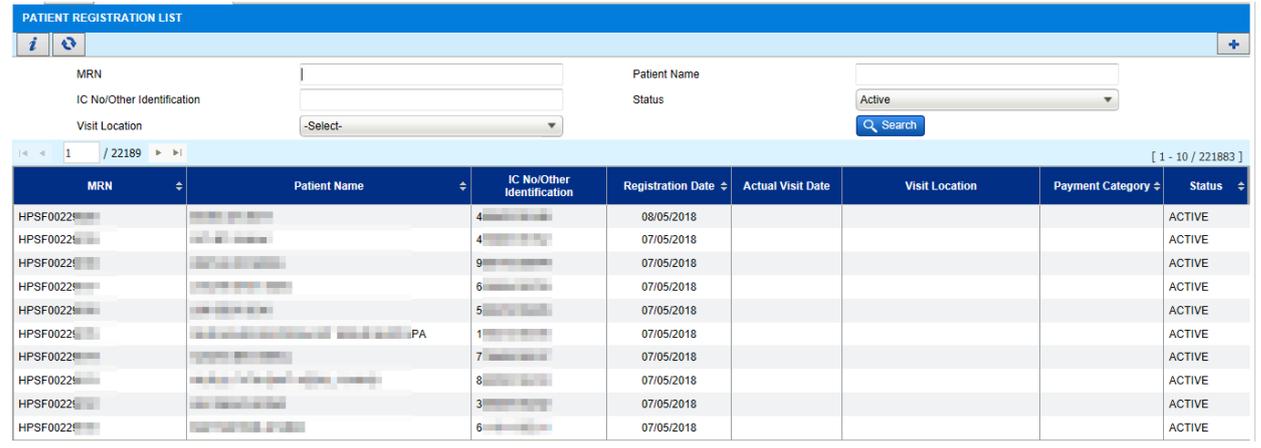


PM.SND1: Patient Registration

3.1.5 Detail Functionality and Screen

3.1.5.1 Patient Registration Listing

3.1.5.1.1 Screen Design

ID	PM.SD1
Description	Patient Registration Listing
Diagram	
<p>Patient Registration Listing</p> 	
Notes	<ul style="list-style-type: none"> Click on 'Add(+)' button to create new registration Click on 'Search' button to search on existing registered patient. Double click on existing patient record to open Admission/Visit screen.
Cross References	<p>PM.SD2 - Patient Registration screen PM.SD3 – Patient Admission/Visit screen</p>



3.1.5.1.2 Application Business Rules

Below are the application business rules for Patient Registration listing.

No.	Name	Description
1.	Default listing	<ul style="list-style-type: none">• Patient Registration listing will be defaulted to display all active patient. User shall be able to select the inactive patient (deceased patient) by using search criteria.• Patient name will be sorted by registered date with latest registered patient will be displayed on top.
2.	Search existing patient record	<p>Enter the search criteria and click on search button. By default, this screen will allow user to search by the following criteria:</p> <ol style="list-style-type: none">i. MRN - Patient listing shall be retrieved from the database for all registered patients based on matching MRN.ii. Patient Name – Patient listing shall be retrieved from the database for all registered patients based on matching Patient Name.iii. ID No. – Patient listing shall be retrieved from the database for all registered patients based on matching ID No.iv. Visit Location - Patient listing shall be retrieved from the database for all registered patients based on visit location.v. Status - Patient listing shall be retrieved from the database for all registered patients where status is Active or Inactive. <p>After required information is entered; user can click on the 'Search' button to search the information. If user enters multiple criteria; System will return the value based on the criteria.</p>
3.	Patient List	<p>Results of the search will listed below the search criteria section. The patient list will contain the following information:</p> <ol style="list-style-type: none">i. MRNii. Patient Nameiii. IC/Other Identification Numberiv. Registration Datev. Actual Visit Datevi. Visit Locationvii. Payment Categoryviii. Status
4.	Patient details	Click on patient record to open patient details screen.
5.	Refresh List	Click on Refresh button and listing will be defaulted back to default value.

3.1.5.1.1 *Input Validation Rules*

No.	Name	Description	Mandatory	Format
1.	MRN	Patient Registration listing shall be retrieved from the database for all registered patients with visit based on matching MRN.	No	Text field (searching field)
2.	Patient Name	Patient Registration listing shall be retrieved from the database for all registered patients with visit based on matching Patient Name.	No	Text field (searching field)
3.	IC/Other Identification Number	Patient Registration listing shall be retrieved from the database for all registered patients with visit on matching IC No/Other Identification number.	No	Text field (searching field)
4.	Visit Location	Patient Registration listing shall be retrieved from the databased for the specific visit location selected by user from drop down list. Visit Location dataset will be displayed based on the granted location by user.	No	Drop down (searching field)
5.	Status	Patient Registration listing shall be retrieved from the databased for the patient with Active status. By default, status value is 'Active'. User shall be able to search on 'Inactive' patient as well.	Yes	Drop down (searching field)

3.1.5.2 **Patient Registration Screen**3.1.5.2.1 *Screen Design*

ID	PM.SD2
Description	Patient Registration Screen
Diagram	Patient Registration Screen



PATIENT REGISTRATION	
<div style="text-align: right;"> Scan MyKad Print Patient Label Search Patient Label Create Visit </div>	
REGISTRATION INFORMATION	
MRN	<input type="text"/>
Title	<input type="text"/>
Gender	<input type="text" value="-SELECT-"/>
Patient Name	<input type="text"/>
Date of Birth	<input type="text"/>
Identification Card Number	<input type="text" value="MYKAD"/> <input type="text"/> <input type="button" value="Check Duplicate"/>
Age	<input type="text"/>
Other Identification Number	<input type="text" value="-SELECT-"/> <input type="text"/>
Approximate Age	<input type="text"/>
VIP	<input type="checkbox"/>
Race	<input type="text" value="-SELECT-"/>
Government	<input type="checkbox"/>
Religion	<input type="text"/>
Payment Category	<input type="text"/> <input type="button" value="eGL Verification"/>
Nationality	<input type="text" value="MALAYSIA"/>
Government Relationship	<input type="text"/>
Pensioner	<input type="checkbox"/>
Remarks	<input type="text"/>
PATIENT DETAILS	
Address 1	<input type="text"/>
Email	<input type="text"/>
Address 2	<input type="text"/>
Contact Number(Mobile)	<input type="text"/>
Address 3	<input type="text"/>
Contact Number(House)	<input type="text"/>
Postcode	<input type="text"/>
Contact Number(Office)	<input type="text"/>
State	<input type="text"/>
Marital Status	<input type="text"/>
City	<input type="text"/>
Organization Name	<input type="text"/>
Country	<input type="text" value="MALAYSIA"/>
Education Level	<input type="text"/>
Occupation	<input type="text"/>
NEXT OF KIN	
<input type="button" value="Copy Address from Patient Details"/>	
Name	<input type="text"/>
Occupation	<input type="text"/>
ID Number	<input type="text"/>
Organization Name	<input type="text"/>
Relationship	<input type="text"/>
Gender	<input type="text"/>
Date of Birth	<input type="text"/>
Age	<input type="text"/>
Address 1	<input type="text"/>
Email	<input type="text"/>
Address 2	<input type="text"/>
Contact Number(Mobile)	<input type="text"/>
Address 3	<input type="text"/>
Contact Number(House)	<input type="text"/>
Postcode	<input type="text"/>
Contact Number(Office)	<input type="text"/>
State	<input type="text"/>
City	<input type="text"/>
Country	<input type="text"/>
Notes	
	<ul style="list-style-type: none"> • Click on 'Save' button to save the new patient registration. • Click on 'Create Visit' button to create the visit after register the patient. • Click on 'Patient Label' button with printer logo to directly print the patient label. • Click on 'Patient Label' button with printer logo with search icon to view first the patient label before do the printing. • Click on 'Scan MyKad' button to use barcode reader to register a patient.
Cross References	
	PM.SD1 - Patient Registration Listing Screen PM.SD3 – Admission/Visit Screen PM.SD4 – View/Update Patient Demographic



3.1.5.2.2 Application Business Rules

Below are the application business rules for Patient Registration Screen

No.	Name	Description
1.	Patient Name	Name of a person as in NRIC / Passport or other identification documents. This field is free text with a capacity of 50 characters. This field is mandatory.
2.	Gender	Biological sex of the patient. Gender is to be selected from the drop down list. Dropdown will be populated from lookup table where domain = 'Gender'.
3.	Date of Birth	Date of birth to be selected from Calendar. This field is mandatory. If user enters MyKad or MyKid value, date of birth will be auto displayed. Refer to formula at id PR.SFM1 DOB .
4.	Identification Card No	Identification Card No – MyKad or MyKid number. Dropdown will be populated from lookup table where domain = 'ID_TYPE_MAIN'. This field is number only with a capacity of 12 characters. IC No Identification is a mandatory field but if user choose this as 'Others', it will not be a mandatory field.
5.	Other Identifications	Unique identification number for police, army and others holding special ID. Dropdown will be populated from lookup table where domain = 'ID_TYPE'. Other identifying types are as follows: <ul style="list-style-type: none">• Birth Certificate• Driving License• Father IC• Mother IC• Military Card Number• Old IC No• Passport• Pension Card• Police Card Number• Work Permit• Unknown Patient• UNHCR• Others
6.	Unknown Patient	If ID = "Unknown", user need to enter the following information only: <ul style="list-style-type: none">• Gender• Approximate age Name. System will auto generate the Patient Name if this field not entered by user. Refer to PR.SFM5 Patient name .



No.	Name	Description
7.	Race	Race of patient (for Malaysian only). This field will show ethnic type in a combo box based on the 'Ethnicity' values configured in the lookup table. If user choose Race=Others, the race need to be entered in the subsequent textbox. This field is free text with a capacity of 20 characters.
8.	Religion	Religion as per NRIC and relevant documents or as stated by the individual. This field will show type of religion in a combo box based on the 'Religion' values configured in the lookup table. If user choose Religion=Others, the religion need to be entered in the subsequent textbox. This field is free text with a capacity of 20 characters.
9.	Contact Number	This field is number only with a capacity of 20 characters.
10.	Email	This field is free text with a capacity of 50 characters.
11.	Address	<ul style="list-style-type: none"> i. Address 1 - To capture the patient address. This field is free text with a capacity of 50 characters. ii. Address 2 - To capture the remainder of the patient address if Address 1 does not suffice. This field is free text with a capacity of 50 characters. iii. Address 3 - To capture the remainder of the patient address if Address 1 and Address 2 do not suffice. This field is free text with a capacity of 50 characters. iv. Post code - This field is number only with a capacity of 5 characters. v. State - This field will show list of Malaysian state in a combo box based on the 'State' values configured in the lookup table. vi. City will - This field is free text with a capacity of 30 characters. vii. Country - This field is defaulted to 'Malaysia'. It will show list of country in a combo box based on the 'Country' values configured in the system parameter table.
12.	Status	By default patient status will be ACTIVE, user is allow to change the status to INACTIVE. Inactive patient information is viewable for history purpose but user is not allowed to create new transaction for this patient.
13.	Save patient information	Click on 'Save' button to save the registration information and MRN number will be generated. Refer to PR.SFM4 MRN .



No.	Name	Description
		Display the visit/admission section. Refer to screen in PM.SD3 View/Update Patient Details Screen .
14.	eGL Verification	eGL Verification is an integration with HRMIS system. It is used to check on the eligibility of the patient if user select as non-paying for the payment category.

3.1.5.2.3 *Input Validation Rules*

No.	Name	Description	Mandatory	Format
Registration Information				
1.	MRN	MRN number will be auto generated by system once user save the new patient information. MRN number will be auto generated start with facility code number and 8 running number at the back. This field is a free text but read only field.	Yes	Read only
2.	Title	Title of the patient is retrieve from a drop down menu. The value has been set in maintenance table. Title for patient consist from a dataset as below: <ul style="list-style-type: none"> • Cik • Encik • Haji • Hajjah • Tuan • Puan 	No	Drop down list
3.	Patient Name	User shall be able to enter the name of a person as in NRIC / Passport or other identification documents. This field is free text with a capacity of 50 characters.	Yes	Text field
4.	Identification Card Number	User shall be able to enter the identification Card No – MyKad or MyKid number. Once MyKad or MyKid is being entered, system will auto generate the Date of Birth, Gender and Age. This field is mandatory unless if use choose identification as ‘Others’, this field is not mandatory.	Yes	Text field
5.	Other Identification Number	Unique identification number for police, army and others holding special ID. Dropdown will be populated from lookup table where domain = ‘ID_TYPE’. Other identifying types are as follows: <ul style="list-style-type: none"> • Birth Certificate • Driving License • Father IC • Mother IC • Military Card Number • Old IC No • Passport • Pension Card 	No	Text field



No.	Name	Description	Mandatory	Format
		<ul style="list-style-type: none"> • Police Card Number • Work Permit • Unknown Patient • UNHCR • Others <p>If user choose dataset=Unknown Patient, system will auto populate 'Unknown Patient' into patient name. Date of birth and age will not be mandatory.</p>		
6.	VIP	Tick on this checkbox if patient is VIP patient.	No	Checkbox
7.	Government	Tick on this checkbox if patient is government servant	No	Checkbox
8.	Payment Category	User shall be able to select on the patent paying category, either paying or non-paying	No	Drop down list
9.	Government Relationship	<p>User shall be able to select the relationship for government servant. The relationship value as below:</p> <ul style="list-style-type: none"> • Self • Child • Father • Foster Child • Grandchild • Handicapped Dependent • Mother • Natural Child • Other • Parent • Self • Spouse • Stepchild 	Yes	Drop down list
10.	Date of Birth	User shall be able to enter date of birth selected from Calendar. This field is mandatory. If user enters MyKad or MyKid value, date of birth will be auto displayed.	Yes	Calendar format in dd/mm/yyyy
11.	Age	Age number will be auto calculated based on MyKad OR MyKid number or by date of birth entered by user. For Unknown patient, the age become null.	No	Read only
12.	Approximate Age	For unknown patient, used this field to enter the approximate age	No	Text field
13.	Gender	Biological sex of the patient. Gender is to be selected from the drop down list. Dropdown will be populated from lookup table where domain = 'Gender'.	No	Drop down
14.	Race	<p>Display race of patient (for Malaysian only in a drop down). This field will show ethnic type in a combo box based on the 'Ethnicity' values configured in the lookup table.</p> <p>If user choose Race=Others, the race need to be</p>	No	Drop down



No.	Name	Description	Mandatory	Format
		entered in the subsequent textbox. This field is free text with a capacity of 20 characters.		
15.	Religion	Religion as per NRIC and relevant documents or as stated by the individual. This field will show type of religion in a combo box based on the 'Religion' values configured in the lookup table. If user choose Religion=Others, the religion need to be entered in the subsequent textbox. This field is free text with a capacity of 20 characters.	No	Drop down
16.	Nationality	Display nationality based on country. If user choose other country than Malaysia, system will display as 'Bukan Warganegara' and highlight with yellow color in patient banner.	No	Drop down
17.	Remarks	It is a free text field where usr shall be able to enter any remarks related to the patient.	No	Text field
Patient Details				
18.	Address 1	User shall be able to enter the first line of patient address.	No	Text field
19.	Address 2	User shall be able to enter the second line of patient address.	No	Text field
20.	Address 3	User shall be able to enter the third line of patient address.	No	Text field
21.	Postcode	User shall be able to enter the postcode of patient address.	No	Text field
22.	State	User shall be able to select the state from drop down which consist states in within Malaysia.	No	Drop down
23.	City	User shall be able to enter the city. The drop down value consists a city in search field. Enter the Town Code or Town Description and search on the city name. Select the city name from the selected list.	No	Search field
24.	Country	User shall be able to select country from whole world from the drop down dataset.	No	Drop down
25.	Occupation	Search from the occupation list for the patient.	No	Search list
26.	Email	User shall be able to enter email of the patient. It is a free text field.	No	Text field
27.	Contact Number (Mobile)	User shall be able to enter the mobile contact number of the patient.	No	Number field
28.	Contact Number (House)	User shall be able to enter the house contact number of the patient.	No	Number field
29.	Contact Number (Office)	User shall be able to enter the office contact number of the patient.	No	Number field
30.	Marital Status	The marital status of the patient and user shall be able	No	Drop down list



No.	Name	Description	Mandatory	Format
		to select from the drop down list with dataset below: <ul style="list-style-type: none"> • Married • Divorced • Separated • Single • Widowed 		
31.	Organization Name	A free text field for user to enter the organization name that the patient works on.	No	Text field
32.	Education Level	A drop down list of education level. User shall be able to select from the list with data as below: <ul style="list-style-type: none"> • Nil • Primary • Secondary • Tertiary 	No	Drop down
Next of Kin				
33.	Name	User shall be able to enter the full name of next of kin of the patient.	No	Text field
34.	ID Number	Identification number for next of kin. Dropdown will be populated from lookup table where domain = 'ID_TYPE'. Other identifying types are as follows: <ul style="list-style-type: none"> • Driving License • Military Card Number • MyKad • Old IC • Passport • Pension Card • Police Card Number • UNHCR 	No	Drop down list
35.	Relationship	User shall be able to select the relationship for next of kin with the patient. The relationship data as below: <ul style="list-style-type: none"> • Child • Extended Family • Father • Foster Child • Friend • Grandparent • Guardian • Mother • Other • Patient • Sibling • Spouse 	No	Drop down list



No.	Name	Description	Mandatory	Format
		<ul style="list-style-type: none"> Stepchild Unknown 		
36.	Date of Birth	Date of birth of next of kin.	No	Text field
37.	Address 1	User shall be able to enter the first line of next of kin address.	No	Text field
38.	Address 2	User shall be able to enter the second line of next of kin address.	No	Text field
39.	Address 3	User shall be able to enter the third line of next of kin address.	No	Text field
40.	Postcode	User shall be able to enter the postcode of next of kin address.	No	Text field
41.	State	User shall be able to select the state from drop down which consist states in within Malaysia.	No	Drop down
42.	City	User shall be able to enter the city. The drop down value consists a city in search field. Enter the Town Code or Town Description and search on the city name. Select the city name from the selected list.	No	Search field
43.	Country	User shall be able to select country from whole world from the drop down dataset.	No	Drop down
44.	Occupation	Search from the occupation list for the next of kin.	No	Search list
45.	Organization Name	A free text field for user to enter the organization name that the next of kin works on.	No	Text field
46.	Gender	Biological sex of the next of kin. Gender is to be selected from the drop down list. Dropdown will be populated from lookup table where domain = 'Gender'.	No	Drop down
47.	Age	Age number will be auto calculated based on MyKad OR MyKid number or by date of birth entered by user. For Unknown next of kin, the age become null.	No	Read only
48.	Email	User shall be able to enter email of the next of kin. It is a free text field.	No	Text field
49.	Contact Number (Mobile)	User shall be able to enter the mobile contact number of the next of kin.	No	Number field
50.	Contact Number (House)	User shall be able to enter the house contact number of the next of kin.	No	Number field
51.	Contact Number (Office)	User shall be able to enter the office contact number of the next of kin.	No	Number field



Formula always corresponding to the field name on above screen.

ID	Name	Formula
PR.SFM1	DOB	Upon Identification Card Number is entered, auto displayed the DOB: First 6 character of MyKad or MyKid (YYMMDD). Convert this value to (DD/MM/YYYY) format. (E.g. 801204092212 → DOB: 04/12/1980)
PR.SFM2	Age	Age will be auto calculated based on DOB $Age = Current\ date - DOB$ Age format 999Y 99M 99D (E.g. 24Y 11M 25D, 02M 13D)
PR.SFM3	Gender	Upon Identification Card Number(MyKad or MyKid) is entered, auto displayed the gender as below: <ul style="list-style-type: none"> Female if the ID end with even number. Male if the ID end with odd number.
PR.SFM4	MRN	MRN is auto generated. It will contain facility prefix and then an 8 digit running sequence no. E.g. HPSFHPSF00000001, KKE08004500000001
PR.SFM5	Patient name	If ID = "Unknown Patient", upon save, system will auto generate the Patient Name if this field not entered by user. Format: UNKNOWN.<Gender>.<Approximate Age> (E.g.: UNKNOWN.MALE.25 Years)

3.1.5.3 Admission/Visit Screen

3.1.5.3.1 Screen Design

ID	PM.SD3
Description	Admission/Visit Screen
Diagram	
i. Admission/Visit Screen	



ADMISSION/VISIT

Patient Demographic Patient Label Patient Label Visit Label Visit Label Sample Label Sample Label Visit Activity

PATIENT TEST XYZ Mykad 980706132245 Age 19 Years 09 Months 12 Days Gender Male MRN HKLM00190531
Address Phone And Email Diagnosis No known Allergies
Height cm Weight kg BMI/BSA 0.0 m² Update (Last Updated :) Nationality : Warganegara

Visit Type Outpatient Referral Encounter Admitting Doctor
Encounter No 0001 Main Encounter Date/Time 18/04/2018 09:15:48 AM
Department/Discipline General Medicine
Location KP3 Klinik Pakar 3 (Medical & Derr
Room No
Specialist Attending Doctor
Referred By
Facility Encounter No Visit Case New Case Follow-Up

VISIT/ADMISSION

Encounter No	Visit/Admission Date	Visit Type	Visit Location	Discharge Date	Renew Visit
0001	18/04/2018	Outpatient	Klinik Pakar 3 (Medical & Dermatology & Paediatric)		Renew Visit

TRANSFER DETAILS LIST

+ New Patient Transfer

Transfer From	Bed No. From	Transfer To	Bed No. To	Transfer Date
No Records Found!				

DISCHARGE

Discharge Deceased/Death End Visit
Discharge Date Doctor
Discharge Type Decease Date Time
Discharge By
Billing Amount Receipt Number

ii. Create New Patient Visit

ADMISSION/VISIT

Patient Demographic Patient Label Patient Label Visit Label Visit Label Sample Label Sample Label Visit Activity

PATIENT TEST XYZ Mykad 980706132245 Age 19 Years 09 Months 12 Days Gender Male MRN HKLM00190531
Address Phone And Email Diagnosis No known Allergies
Height cm Weight kg BMI/BSA 0.0 m² Update (Last Updated :) Nationality : Warganegara

Visit Type Outpatient Referral Encounter Admitting Doctor
Encounter No Main Encounter Date/Time 18/04/2018 10:53:24 AM
Department/Discipline
Location
Room No
Specialist Attending Doctor
Referred By
Facility Encounter No Visit Case New Case Follow-Up

iii. Transfer Patient Visit

TRANSFER

Transfer From FMW WARD FEMALE MEDICAL Transfer To
Transfer Date 14/05/2018 12:38:20 PM Department
Bed No. From Bed No. To

iv. Discharge Patient Visit

DISCHARGE	
Discharge <input checked="" type="checkbox"/>	Deceased/Death <input type="checkbox"/>
Discharge Date: 14/05/2018 12:40:04 PM	End Visit <input type="checkbox"/>
Discharge Type: [Dropdown]	Doctor: [Text]
Discharge By: System Administrator	Decease Date Time: [Text]
Billing Amount: [Text]	Receipt Number: [Text]
Notes	<ul style="list-style-type: none"> Click on 'Patient Demographic' button to open patient demographic information. Click on 'Patient Label' button to print the patient label (direct or preview printing). Click on 'Visit Label' button to print the visit label (direct or preview printing). Click on 'Sample Label' button to print the sample label (direct or preview printing). Click on 'Visit Activity' button to view the visit activity list. Click on 'Add(+)' button to add new visit or create referred visit. Click on 'Save' button to save changes on patient visit information. Click on 'Edit' button to edit on current visit information, to end visit/discharge visit or to transfer the patient. Click on Renew Visit link to renew the same visit with current date.
Cross References	PM.SD1 - Patient Registration Listing PM.SD4 - View/Update Patient Details Screen

3.1.5.3.2 Application Business Rules

No.	Name	Description
1.	Encounter Number	Encounter number for the visit created which auto generated once save the visit.
2.	Save visit information	On click of save, after visit successfully created, alert message will be displayed "Proceed to medication order" with OK and Cancel button. On click of OK button, medication order screen will be displayed. On click of Cancel button, remain in visit screen.
3.	End visit	On click of Edit button user able to end the patient visit. Ticked on End Visit checkbox, the visit will be ended.
4.	Referral visit	If patient has existing inpatient visit and user add new visit also as inpatient, the referral visit checkbox will auto ticked and non-editable. However, if existing visit is inpatient and user create new visit as outpatient, the referral visit checkbox is auto ticked but still editable. User can choose to untick this checkbox if the outpatient visit is not a referral visit.
5.	Renew visit	On click of Renew Visit (previous visit) link at Visit/Admission section in Renew column, the new visit will be created similar with previous visit.

No.	Name	Description
6.	Discharge visit	On click of Edit button user able to end the patient visit. If ticked on Discharge checkbox, user shall be able to discharge the patient with discharge type. However, if user ticked on Discharge checkbox and then ticked on Deceased checkbox, the discharge type will be disable.
7.	Transfer patient	On click of Edit button user able to transfer patient visit. Once transfer, the listing of medication order will be brought to new location.

3.1.5.3.3 *Input Validation Rules*

Below are additional input validation rules when create new visit.

No.	Name	Description	Mandatory	Format
Create New Visit				
1.	Visit Type	Search record in Medication Profile by visit type (Outpatient, Inpatient, Emergency, Daycare, SPUB, Walk-In, and Outsource).	Yes	Drop down
2.	Referral Encounter	The checkbox is auto ticked if create new inpatient visit on existing inpatient visit. If new visit is outpatient, the checkbox is ticked but editable.	No	Check box
3.	Encounter Number	Encounter number shall be auto generated for the visit created.	Yes	Read only
4.	Main Encounter	The main encounter number will auto appear if user create new visit on existing patient visit. This number display from the main visit encounter number.	Yes	Read only
5.	Department/ Discipline	Display the department available in the facility. User shall be able to choose the department /discipline from the drop down list. The value display will depends on the selected location.	Yes	Drop down
6.	Location	Display the location available in the facility. User shall be able to choose the location from the drop down list. The value display will depends on the selected department/discipline. Once user choose the location, location code will auto display.	Yes	Drop down
7.	Room No	User shall be able to enter the room number of the patient.	No	Text field
8.	Specialist	User shall be able to select the specialist list from search result.	No	Search field
9.	Referred By	User shall be able to select the referred by value from this selection: Ambulance Call, Day Care Centre, Emergency Department, General Practitioner, Government Health Clinic, Government Specialist, Non-MOH Hospital, Other Government Hospital, Outpatient Department, Police, Preliminary Assessment Centre, Private Hospital, Others.	No	Drop down
10.	Payment Category	By default it will display the payment category type choose by user when register the patient.	No	Text field
11.	Visit Case	Consists of 2 check boxes value, New Case or Follow-Up case. User shall be able to select either one.	No	Checkbox
12.	Admitting Doctor	User shall be able to choose admitting doctor from the search result.	No	Search field



No.	Name	Description	Mandatory	Format
13.	Date/Time	Date and time will auto populate based on current date and time when the visit is created.	Yes	Read only
14.	Bed No	It is a free test field where user shall be able to enter the bed number of the patient if visit is inpatient.	No	Text field
15.	Attending Doctor	User shall be able to select the attending doctor from the search result.	No	Search field
Transfer Patient				
16.	Transfer From	By default it will display the original location code and location description of current active visit. It is non editable field.	Yes	Read only
17.	Transfer To	Dropdown value of the new location. User shall be able to select on the new location to transfer the patient.	Yes	Drop down list
18.	Transfer Date	By default it will take the current date and time. However user shall be able to select on other date if need to.	Yes	Calendar format in dd/mm/yyyy
19.	Department	User shall be able to select on ne department from the drop down list.	Yes	Drop down list
20.	Bed No. From	By default it will show the existing bed number of the patient, if any. It is non editable field.	No	Read only
21.	Bed No. To	User shall be able to enter the new bed number for transfer of the patient.	No	Text field
Discharge Patient				
22.	Discharge	User must ticked on Discharge checkbox to discharge the patient.	Yes	Checkbox
23.	Deceased/Death	User shall ticked on Deceased/Death checkbox if patient discharge was cause by death.	No	Checkbox
24.	Discharge Date	By default it will display the current date and time. User shall be able to choose on other date if needed to.	Yes	Calendar format in dd/mm/yyyy
25.	Discharge Type	A drop down list of discharge type. Is user choose discharge as a deceased, this drop down will disable. For normal discharge, the drop down value will enable and it consists of these data: <ul style="list-style-type: none"> • Absconded • Deceased/Death • Discharge Home • At own risk • Referral • Discharge to Ward 	Yes	Drop down list
26.	Discharge By	By default it will display the user login name. It is non editable field	Yes	Read only
27.	Billing Amount	User shall be able to enter the billing amount. Applicable for a patient that used paying category.	No	Number field
28.	End Visit	If user discharge the outpatient visit manually, ticked on this checkbox on the same day outpatient visit is created and the visit will be ended.	No	Check box
29.	Doctor	The name of doctor that allows for the discharge. User shall be able to search by prescriber's name or prescriber's type from the search list.	Yes	Search list
30.	Deceased Date Time	If user choose patient discharge as deceased, this field will auto populate with current date and time.	No	Calendar format in dd/mm/yyyy
31.	Receipt Number	User shall be able to enter the receipt number manually.	No	Text field



3.1.5.4 View/Update Patient Demographic Screen

3.1.5.4.1 Screen Design

ID	PM.SD4
Description	View/Update Patient Demographic

Diagram

View/Update Patient Demographic

The screenshot displays a web-based form for patient registration. It is divided into three main sections: **PATIENT REGISTRATION**, **PATIENT DETAILS**, and **NEXT OF KIN**. The **PATIENT REGISTRATION** section includes fields for MRN (HMIRI00252), Title, Gender (FEMALE), Patient Name, Date of Birth (26/02/2018), Identification Card Number, Age (02M 16D), Other Identification Number (MOTHER IC), Approximate Age, VIP status, Race, Government status, Religion (ISLAM), Payment Category (PAYING), Nationality (MALAYSIA), Government Relationship (OTHER), and Status (ACTIVE). The **PATIENT DETAILS** section includes Address 1-3, Postcode, State (SARAWAK), City, Country (MALAYSIA), Email, Contact Number (Mobile, House, Office), Marital Status, Organization Name, and Education Level. The **NEXT OF KIN** section includes a 'Copy Address from Patient Details' button and fields for Name, ID Number, Relationship, Date of Birth, Address 1-3, Postcode, State, City, Country, Occupation, Organization Name, Gender, and Age.

Notes

- Click on 'Save' button to save the new patient registration.
- Click on 'Create Visit' button to create the visit after register the patient.
- Click on 'Patient Label' button with printer logo to directly print the patient label.
- Click on 'Patient Label' button with printer logo with search icon to view first the patient label before do the printing.
- Click on 'Scan MyKad' button to use barcode reader to register a patient.



Cross References	PM.SD1 - Patient Registration Listing Screen PM.SD3 – Admission/Visit screen
-------------------------	---------------------------------------------------------------------------------

3.1.5.4.2 *Application Business Rules*

Below are the application business rules when edit on patient demographic which similar rules apply when create new registration.

No.	Name	Description
1.	Editable field	All fields are editable except MRN and Age.
2.	Create new visit	Click on 'Create Visit' button to create new visit. Patient is allowed to have multiple active visits at the same time.
3.	Patient Name	Name of a person as in NRIC / Passport or other identification documents. This field is free text with a capacity of 50 characters. This field is mandatory.
4.	Gender	Biological sex of the patient. Gender is to be selected from the drop down list. Dropdown will be populated from lookup table where domain = 'Gender'.
5.	Date of Birth	Date of birth to be selected from Calendar. This field is mandatory. If user enters MyKad or MyKid value, date of birth will be auto displayed. Refer to formula at id PR.SFM1 DOB .
6.	Identification Card No	Identification Card No – MyKad or MyKid number. Dropdown will be populated from lookup table where domain = 'ID_TYPE_MAIN'. This field is number only with a capacity of 12 characters. IC No Identification is a mandatory field but if user choose this as 'Others', it will not be a mandatory field.
7.	Other Identifications	Unique identification number for police, army and others holding special ID. Dropdown will be populated from lookup table where domain = 'ID_TYPE'. Other identifying types are as follows: <ul style="list-style-type: none"> • Birth Certificate • Driving License • Father IC • Mother IC • Military Card Number • Old IC No • Passport • Pension Card • Police Card Number • Work Permit • Unknown Patient • UNHCR Others
8.	Unknown Patient	If ID = "Unknown", user need to enter the following information only: <ul style="list-style-type: none"> • Gender • Approximate age



No.	Name	Description
		Name. System will auto generate the Patient Name if this field not entered by user. Refer to PR.SFM5 Patient name .
9.	Race	Race of patient (for Malaysian only). This field will show ethnic type in a combo box based on the 'Ethnicity' values configured in the lookup table. If user choose Race=Others, the race need to be entered in the subsequent textbox. This field is free text with a capacity of 20 characters.
10.	Religion	Religion as per NRIC and relevant documents or as stated by the individual. This field will show type of religion in a combo box based on the 'Religion' values configured in the lookup table. If user choose Religion=Others, the religion need to be entered in the subsequent textbox. This field is free text with a capacity of 20 characters.
11.	Contact Number	This field is number only with a capacity of 20 characters.
12.	Email	This field is free text with a capacity of 50 characters.
13.	Address	viii. Address 1 - To capture the patient address. This field is free text with a capacity of 50 characters. ix. Address 2 - To capture the remainder of the patient address if Address 1 does not suffice. This field is free text with a capacity of 50 characters. x. Address 3 - To capture the remainder of the patient address if Address 1 and Address 2 do not suffice. This field is free text with a capacity of 50 characters. xi. Post code - This field is number only with a capacity of 5 characters. xii. State - This field will show list of Malaysian state in a combo box based on the 'State' values configured in the lookup table. xiii. City will - This field is free text with a capacity of 30 characters. Country - This field is defaulted to 'Malaysia'. It will show list of country in a combo box based on the 'Country' values configured in the system parameter table.
14.	Status	By default patient status will be ACTIVE, user is allow to change the status to INACTIVE. Inactive patient information is viewable for history purpose but user is not allowed to create new transaction for this patient.
15.	Save patient information	Click on 'Save' button to save the registration information and MRN number will be generated. Refer to PR.SFM4 MRN . Display the visit/admission section. Refer to screen in PM.SD3 View/Update Patient Details Screen .
16.	eGL Verification	eGL Verification is an integration with HRMIS system. It is used to check on the eligibility of the patient if user select as non-paying for the payment category.

3.1.5.4.3 *Input Validation Rules*

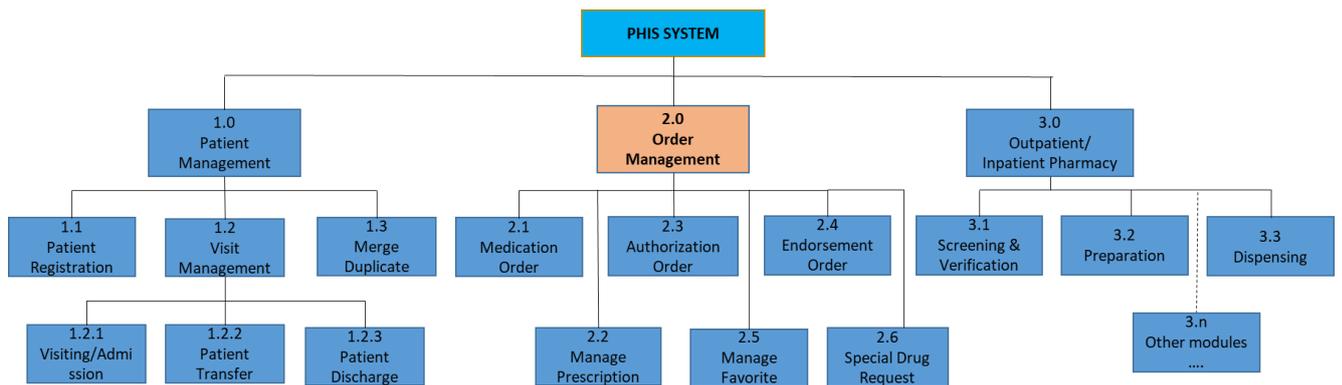
Refer to section 3.1.5.3.2. The input validation rules for edit are similar validation rules with new registration.

3.1.6 **Integration**

No.	Name	Description
1.	eGL	<ul style="list-style-type: none"> i. Integration with eGL on non- paying status of the patient. ii. PhIS will send the data to verify with GL system and if the patient eligible for non-paying patient.

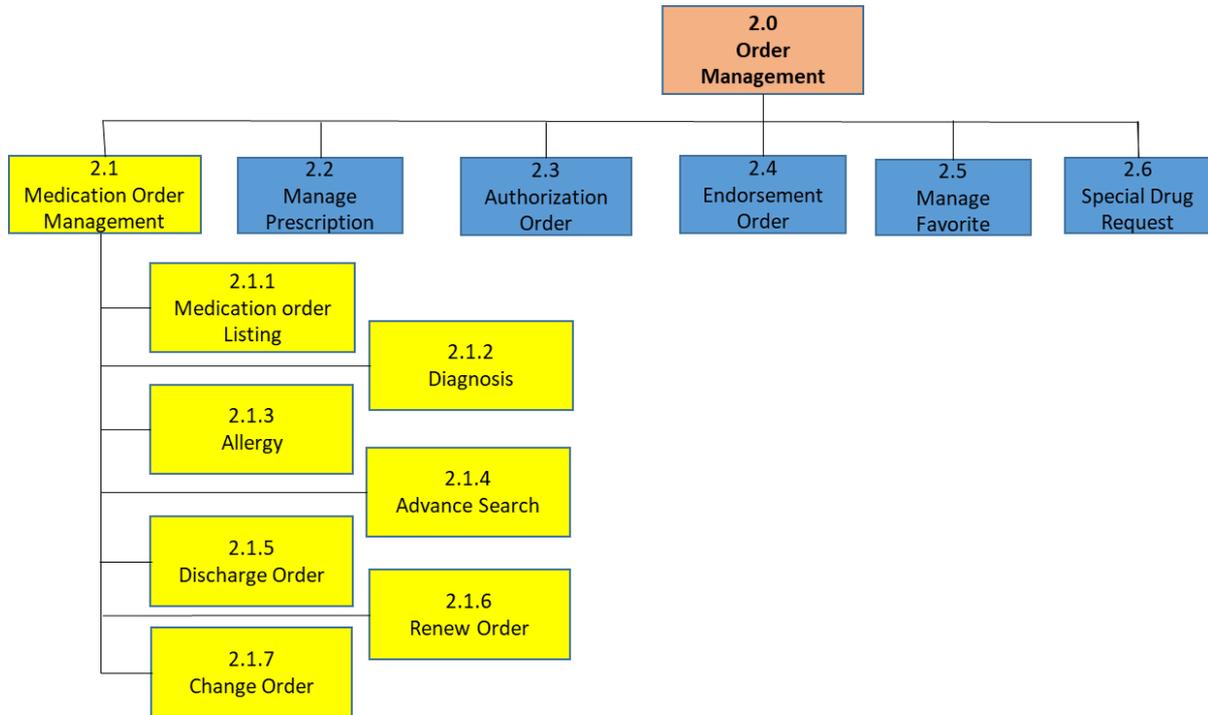
3.2 **Order Management**

3.2.1 **Order Management Overview**



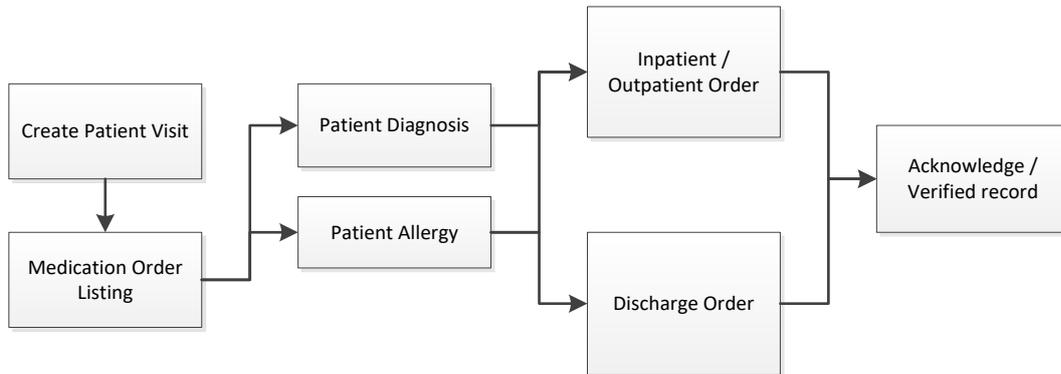
OM.OVW1: Order Management Overview

3.2.2 Medication Order Overview



OM.OVW2: Medication Order Management Overview

3.2.3 Block Diagram

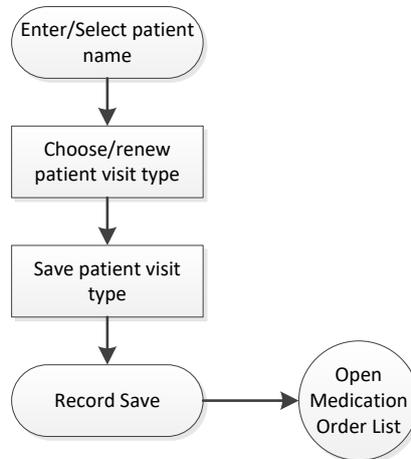


OM.BD1: Order Management block diagram

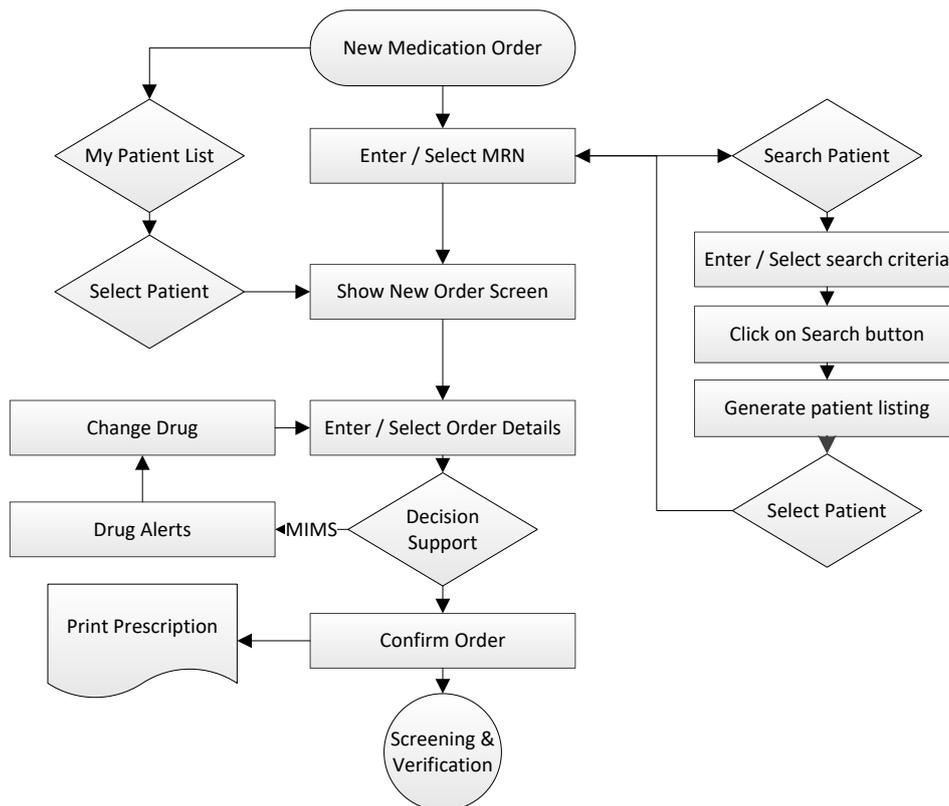
3.2.4 Purpose

Medication Order screen allows Doctors, Medical Officers and any authorized person to record and monitor Normal / Special medication orders for Inpatients and Outpatients.

3.2.5 Screen Navigation Diagram



OM.SND1: Create Patient Visit

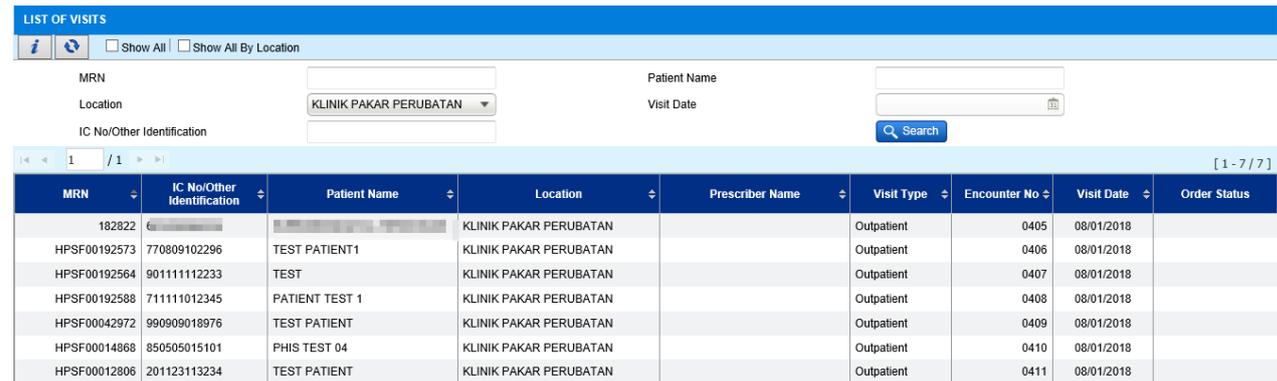


OM.SND2: Medication Order creation

3.2.6 Detail Functionality and Screen

3.2.6.1 Medication Order Listing

3.2.6.1.1 Screen Design

ID	OM.SD1																																																																								
Description	Medication Order Listing																																																																								
Diagram	 <p>The screenshot shows a web interface titled 'LIST OF VISITS'. It includes search filters for MRN, Patient Name, Location (set to 'KLINIK PAKAR PERUBATAN'), and Visit Date. A search button is present. Below the filters is a table with the following data:</p> <table border="1"> <thead> <tr> <th>MRN</th> <th>IC No/Other Identification</th> <th>Patient Name</th> <th>Location</th> <th>Prescriber Name</th> <th>Visit Type</th> <th>Encounter No</th> <th>Visit Date</th> <th>Order Status</th> </tr> </thead> <tbody> <tr> <td>182822</td> <td>6</td> <td></td> <td>KLINIK PAKAR PERUBATAN</td> <td></td> <td>Outpatient</td> <td>0405</td> <td>08/01/2018</td> <td></td> </tr> <tr> <td>HPSF00192573</td> <td>770809102296</td> <td>TEST PATIENT 1</td> <td>KLINIK PAKAR PERUBATAN</td> <td></td> <td>Outpatient</td> <td>0406</td> <td>08/01/2018</td> <td></td> </tr> <tr> <td>HPSF00192564</td> <td>901111112233</td> <td>TEST</td> <td>KLINIK PAKAR PERUBATAN</td> <td></td> <td>Outpatient</td> <td>0407</td> <td>08/01/2018</td> <td></td> </tr> <tr> <td>HPSF00192588</td> <td>711111012345</td> <td>PATIENT TEST 1</td> <td>KLINIK PAKAR PERUBATAN</td> <td></td> <td>Outpatient</td> <td>0408</td> <td>08/01/2018</td> <td></td> </tr> <tr> <td>HPSF00042972</td> <td>990909018976</td> <td>TEST PATIENT</td> <td>KLINIK PAKAR PERUBATAN</td> <td></td> <td>Outpatient</td> <td>0409</td> <td>08/01/2018</td> <td></td> </tr> <tr> <td>HPSF00014868</td> <td>850505015101</td> <td>PHIS TEST 04</td> <td>KLINIK PAKAR PERUBATAN</td> <td></td> <td>Outpatient</td> <td>0410</td> <td>08/01/2018</td> <td></td> </tr> <tr> <td>HPSF00012806</td> <td>201123113234</td> <td>TEST PATIENT</td> <td>KLINIK PAKAR PERUBATAN</td> <td></td> <td>Outpatient</td> <td>0411</td> <td>08/01/2018</td> <td></td> </tr> </tbody> </table>	MRN	IC No/Other Identification	Patient Name	Location	Prescriber Name	Visit Type	Encounter No	Visit Date	Order Status	182822	6		KLINIK PAKAR PERUBATAN		Outpatient	0405	08/01/2018		HPSF00192573	770809102296	TEST PATIENT 1	KLINIK PAKAR PERUBATAN		Outpatient	0406	08/01/2018		HPSF00192564	901111112233	TEST	KLINIK PAKAR PERUBATAN		Outpatient	0407	08/01/2018		HPSF00192588	711111012345	PATIENT TEST 1	KLINIK PAKAR PERUBATAN		Outpatient	0408	08/01/2018		HPSF00042972	990909018976	TEST PATIENT	KLINIK PAKAR PERUBATAN		Outpatient	0409	08/01/2018		HPSF00014868	850505015101	PHIS TEST 04	KLINIK PAKAR PERUBATAN		Outpatient	0410	08/01/2018		HPSF00012806	201123113234	TEST PATIENT	KLINIK PAKAR PERUBATAN		Outpatient	0411	08/01/2018	
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Notes	<ul style="list-style-type: none"> Click on search button to search for the patient. Double click on patient record to open the Medication Order screen. 																																																																								
Cross References	PM.SD3 – Admission/Visit screen																																																																								

3.2.6.1.2 Application Business Rules

Below is the application business rules for medication order listing screen.

No.	Name	Description												
1.	Patient list	<p>Prescriber able to view patient list based on Medication Order Configuration. There are 3 options can be configured at facility level based on visit type (Outpatient, Inpatient, Emergency, Daycare, SPUB, Walk-In)</p> <table border="1"> <thead> <tr> <th>Setting</th> <th>Rules Applied</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>All</td> <td> <ul style="list-style-type: none"> 1 patient → many prescribers within facility </td> <td>Other prescriber can still access the patient to create new medication order.</td> </tr> <tr> <td>Department</td> <td> <ul style="list-style-type: none"> 1 patient → many prescribers within department Patient visit department = prescriber department/discipline </td> <td>Prescriber from different department can't create medication order for this patient. Referral function is required.</td> </tr> <tr> <td>Prescriber</td> <td> <ul style="list-style-type: none"> 1 patient → 1 prescriber Patient visit department = prescriber department/discipline Once assigned to specific prescriber, another prescriber will not see this patient in their list Selected prescriber is by encounter </td> <td>Other prescriber from same department can't create medication order if selected prescriber is not around for that encounter.</td> </tr> </tbody> </table>	Setting	Rules Applied	Impact	All	<ul style="list-style-type: none"> 1 patient → many prescribers within facility 	Other prescriber can still access the patient to create new medication order.	Department	<ul style="list-style-type: none"> 1 patient → many prescribers within department Patient visit department = prescriber department/discipline 	Prescriber from different department can't create medication order for this patient. Referral function is required.	Prescriber	<ul style="list-style-type: none"> 1 patient → 1 prescriber Patient visit department = prescriber department/discipline Once assigned to specific prescriber, another prescriber will not see this patient in their list Selected prescriber is by encounter 	Other prescriber from same department can't create medication order if selected prescriber is not around for that encounter.
Setting	Rules Applied	Impact												
All	<ul style="list-style-type: none"> 1 patient → many prescribers within facility 	Other prescriber can still access the patient to create new medication order.												
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No.	Name	Description
2.	Search Patient	Medication Order listing screen is displayed for user to select patient based on user's granted location and patient's visit location. Listing is sorted in ascending order based on visit date. By default, patient's record is displayed based on the visit type as below: i. Inpatient: Patient record is displayed until the patient discharge. ii. Outpatient/SPUB/Outsource/Walk In: Patient record is displayed only for one day. iii. Daycare: Patient record is displayed until the patient discharge. iv. Emergency: Patient record is displayed until the patient discharge. System auto discharge after 24 hours.
3.	Refresh list	Click on the Refresh button to reset all searched records and searching criteria back to default value.

3.2.6.1.3 Input Validation Rules

No.	Name	Description	Mandatory	Format
1.	MRN	Medication order listing shall be retrieved from the database for all registered patients with visit based on matching MRN.	No	Text field (searching field)
2.	Location	By default, location is default to user's login location. The listed location values are based on the user's granted location as setup in User Profile screen.	Yes	Drop down list (searching field)
3.	IC No/Other Identification	Medication Order listing shall be retrieved from the database for all registered patients with visit on matching IC No/Other Identification number.	No	Text field (searching field)
4.	Patient Name	Medication order listing shall be retrieved from the database for all registered patients with visit based on matching Patient Name.	No	Text field (searching field)
5.	Visit Date	Medication order listing shall be retrieved from the database for all registered patients with visit based on matching visit date.	No	Calendar in format dd/mm/yyyy (searching field)

3.2.6.2 Medication Order

3.2.6.2.1 Screen Design

ID	OM.SD2
Description	Medication Order
Diagram	
i. Medication order Normal	



MEDICATION ORDER

Mykad: [REDACTED] Age: 69 Years 11 Months 01 Days Gender: Male MRN: HPSF00015025

Address: [REDACTED] Phone And Email: [REDACTED] Diagnosis: [REDACTED] No known Allergies

Height: 170 cm Weight: 60 kg BMI/BSA: 20.8 / 1.68 m² (Last Updated: 06/09/2017) Nationality: Warganegara

Encounter No: 0846 Admission Date: 16/04/2017 Attending Practitioner: Dr. [REDACTED] Visit Location: WAD 16 (HDW) Reference No: A&E K-3

Lab Parameter | Counseling History | Demographic | Pharmacist Notes | Medication Profile | Other Appointment

NORMAL ORDER

Drug: [REDACTED] Dosage: [REDACTED] Admin Route: [REDACTED] Frequency: [REDACTED] Duration: [REDACTED] Days

Start Date / Time: 08/01/2018 12:42 PM End Date / Time: 08/01/2018 12:42 PM

Order Quantity: [REDACTED] Drug Indication: [REDACTED] Drug Remarks: [REDACTED] Drug Category: [REDACTED] Dispense Location: [REDACTED]

Advanced Search | 1st Dose Now | Own Medication | Patient Require Counseling

Total Price: RM 0

+ Add | Modify | Clear

ii. Medication Order Discharge

DISCHARGE MEDICATION

Mykad: [REDACTED] Age: 72 Years 09 Days Gender: Female MRN: HPSF00009392

Address: [REDACTED] Phone And Email: [REDACTED] Diagnosis: [REDACTED] No known Allergies

Height: 165 cm Weight: 56 kg BMI/BSA: 20.6 / 1.6 m² (Last Updated: 06/09/2017) Nationality: Warganegara

Encounter No: 0405 Admission Date: 11/11/2016 Attending Practitioner: [REDACTED] Visit Location: WAD 16 (CCUCRW) Reference No: A/E-KELAS 3

Lab Parameter | Counseling History | Demographic | Pharmacist Notes | Medication Profile | Other Appointment

VISIT RECORD

Breast Feeding: [REDACTED] Pregnant: [REDACTED] Week: [REDACTED]

DRUG DETAILS

Drug: [REDACTED] Dosage: [REDACTED] Admin Route: [REDACTED] Frequency: [REDACTED] Duration: [REDACTED] Days

Start Date / Time: 11/01/2018 1:00 PM End Date / Time: 11/01/2018 1:00 PM

Order Quantity: [REDACTED] Drug Indication: [REDACTED] Drug Remarks: [REDACTED] Drug Category: [REDACTED] Dispense Location: [REDACTED]

Advanced Search | Own Medication | Patient Require Counseling

Total Price: RM 0

+ Add | Modify | Clear

iii. View Order

ORDER DETAILS

Alert	Drug Name	Order Details	Order Qty	Start Date/Time	End Date/Time	Ward Stock	Own Medication	Counseling	Indication	Remarks	Status	Drug Info
⚠	Prednisolone 5 mg Tablet	5 mg, OD (once daily), Oral Tablet, Oral, 08/01/2018 (45 Days)	45 tablet	08/01/2018 11:30:01 AM	22/02/2018 11:30:01 AM	No	No	No	Corticosteroids (Systemic) Plan		DRAFT	i
⚠	Deferiprone 500 mg Tablet	500 mg, TDS (3 times a day), Oral Tablet, Oral, 08/01/2018 (45 Days)	135 tablet	08/01/2018 11:30:17 AM	22/02/2018 11:30:17 AM	No	No	No	Iron Chelating Agents		DRAFT	i
⚠	Cloxacillin 500mg Capsule	500 mg, BD (twice daily), Oral Capsule, Oral, 08/01/2018 (45 Days)	90 capsule	08/01/2018 11:30:43 AM	22/02/2018 11:30:43 AM	No	No	No	Beta-Lactam Antibiotics, Penicillins		DRAFT	i

iv. Medication Profile



MEDICATION PROFILE

Administration Dispensing | Renew Rx with different duration | Renew Rx | Stop | Change | Save | X

TEST PATIENT1 | Mykad 770809102296 | Age 40 Years 04 Months 30 Days | Gender Female | MRN HPSF00192573

Address | Phone And Email | Diagnosis | Known Allergies

Height cm | Weight kg | BM/BSA 0/0 m² (Last Updated :) | Nationality : Warganegara

Drug Name | Visit Type | Prescription Date From | Prescription Date To | Prescription Status | Location | Order Type | Search

Current Medication

Rx No.	Discharge Medication	Drug Name	Dose	Route	Frequency	Duration	Start Date	End Date	Status	Reason	Prescri Qty
MOPC0000938191	No	Cloxacillin 500mg Capsule	500 mg	Oral	BD (twice daily)	45 Days	08/01/2018 11:30:43 AM	22/02/2018 11:30:43 AM	ORDERED		90 cap
MOPC0000938191	No	Deferiprone 500 mg Tablet	500 mg	Oral	TDS (3 times a day)	45 Days	08/01/2018 11:30:17 AM	22/02/2018 11:30:17 AM	ORDERED		135 ta
MOPC0000938191	No	Prednisolone 5 mg Tablet	5 mg	Oral	OD (once daily)	45 Days	08/01/2018 11:30:01 AM	22/02/2018 11:30:01 AM	ORDERED		45 ta

Previous Medication

Rx No.	Discharge Medication	Drug Name	Dose	Route	Frequency	Duration	Start Date	End Date	Status	Reason	Prescri Qty
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MEDICATION PROFILE

Administration Dispensing | Renew Rx with different duration | Renew Rx | Stop | Change | Save | X

TEST PATIENT1 | Mykad 770809102296 | Age 40 Years 04 Months 30 Days | Gender Female | MRN HPSF00192573

Address | Phone And Email | Diagnosis | Known Allergies

Height cm | Weight kg | BM/BSA 0/0 m² (Last Updated :) | Nationality : Warganegara

Drug Name | Visit Type | Prescription Date From | Prescription Date To | Prescription Status | Location | Order Type | Search

Current Medication

Duration	Start Date	End Date	Status	Reason	Prescribed Qty	End Date Of Supply	Dispensed Qty	Re-dispense Qty	Pending Qty	Administered	Additional Info	Order By	Visit Information
45 Days	08/01/2018 11:30:43 AM	22/02/2018 11:30:43 AM	ORDERED		90 capsule		0	0	90	Details	Additional Info	Dr. F. [REDACTED]	Outpatient / 08/01/2018
45 Days	08/01/2018 11:30:17 AM	22/02/2018 11:30:17 AM	ORDERED		135 tablet		0	0	135	Details	Additional Info	Dr. F. [REDACTED]	Outpatient / 08/01/2018
45 Days	08/01/2018 11:30:01 AM	22/02/2018 11:30:01 AM	ORDERED		45 tablet		0	0	45	Details	Additional Info	Dr. F. [REDACTED]	Outpatient / 08/01/2018

Previous Medication

Rx No.	Discharge Medication	Drug Name	Dose	Route	Frequency	Duration	Start Date	End Date	Status	Reason	Prescri Qty
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Notes

- Click on 'Add' button to add new drug order into draft list.
- Click on 'Clear' button to clear the selected drug from add list.
- Click on 'Modify' button to amend on the newly add drugs.
- Click on 'Confirm' button to save the drugs record.
- Click on 'View Order' button to view the confirm order.
- Click on 'Draft' button to save the order into draft mode.
- Click on 'Renew Rx with different duration' to renew the same order with different duration.
- Click on 'Renew Rx' to renew the order with start date=current date.
- Click on 'Change' button at Medication Profile to change the drug order into different dose/frequency.
- Click on 'Save' button to save the record.
- Click on 'Search' button to search the prescription record.

Cross References

Frequency – refer to Maintenance/Pharmacy/Frequency
 Admin Route – refer to Maintenance/Pharmacy/Administration Route
 Drug Category – refer to IWP/Drug Master



3.2.6.2.2 Application Business Rules

No.	Name	Description
1.	Normal Order	<p>Normal order – Create medication order for patient. Consist of the following function:</p> <ol style="list-style-type: none"> a. Normal Order (default value will follow drug master setup) <ol style="list-style-type: none"> i. Mandatory information during order are: <ul style="list-style-type: none"> • Drug Name - Drug name can be search by Active Ingredient, Drug Name and Trade Name. Trade Name is common brand name for this drug. Information defined in drug master. • Dosage – Dosage of the drug required (per administration) • Administration Route ¹ - Drug administration route • Frequency ² – Drug frequency • Duration – Duration of the order • Start and End Date – Start and end date of the order ii. Non-Mandatory Information <ul style="list-style-type: none"> • Drug Indication • Drug Remarks iii. Auto displayed information <ul style="list-style-type: none"> • Order Quantity – calculated based dose, frequency, duration and administration route. However, user is allowed to change this value. • Drug Category – Category of the drug'. Please refer to 'Order Authorisation' • Dispense Location – Order routing for dispensing. b. Drug Name, Administration Route, Frequency and Indication are define in master table and link to specific drug with default value.
2.	Discharge Order	<p>Allow doctor to create order for discharge medication (normal order only). Applicable for visit type inpatient, emergency and day care. For discharge medication, order rules will follow outpatient (duration can more than 7 days). For discharge medication, order will follow outpatient rules i.e: maximum order duration is 365 days.</p>
3.	Pediatrics dose	<p>Pediatrics age define in ref_codes If patient dose less than pediatrics age, default dose will be 0. It will not follow setting in drug master for safety reason.</p>

¹ A route of administration in pharmacology and toxicology is the path by which a drug, fluid, poison, or other substance is taken into the body. Routes of administration are generally classified by the location at which the substance is applied. Common examples include oral and intravenous administration.

² Frequency - The number of regular recurrences in a given time

No.	Name	Description
		If patient weight is empty, alert will appear and ask user to enter the patient weight before proceed with the order.
4.	Taper Drug	<p>Order same drug with increasing/decreasing the total dose. Order date between dose must be continuous and cannot overlap.</p> <ul style="list-style-type: none"> • Taper up – increase the dose. (e.g.): <ol style="list-style-type: none"> i. <i>Prednisolone 5mg tablet, 10 mg, BD, 1/1-7/1 = 10 mg * BD = 20 mg</i> ii. <i>Prednisolone 5mg tablet, 10 mg, TDS, 8/1-15/1 = 10 mg * TDS = 30 mg</i> iii. <i>Prednisolone 5mg tablet, 15 mg, TDS, 16/1-21/1 = 15 mg * TDS = 45 mg</i> • Taper down – decrease the dose <ol style="list-style-type: none"> i. <i>Prednisolone 5mg tablet, 10 mg, TDS, 1/1-7/1 = 10 mg * TDS = 30 mg</i> ii. <i>Prednisolone 5mg tablet, 10 mg, OD, 8/1-15/1 = 10 mg * OD = 10 mg</i> iii. <i>Prednisolone 5mg tablet, 5 mg, OD, 16/1-21/1 = 5 mg * OD = 5 mg</i>
5.	Dosage Schedule (Split dose)	<ol style="list-style-type: none"> a. The optimum therapeutic dose and optimum interval between doses e.g.: <i>Prednisolone 5mg tablet, 10 mg (8:00 am), 5 mg (8:00pm)</i> b. User also can change the time only without change the dose. (Some patient required specific time and not follow exactly time in frequency master) e.g.: for BD dose instead of 8:00 and 8:00 pm, user want to change to 6:00 am and 6:00am <i>Prednisolone 5mg tablet, 5 mg (6:00 am), 5 mg (6:00pm)</i>
6.	Maximum order duration	Maximum order duration for outpatient is 365 days. For inpatient is 7 days. For some drug, possible to have different order limit. This can be configured in drug master.
7.	1st Dose Now	Use for inpatient order where doctor wants to prescriber the order but the serving time has been passed or yet to come (more than 1 hour from schedule admin time). 1 st Dose Now checkbox used to order the drugs and given to the patient immediately. User can see the serving dose in MAR record immediately after doctor order the drug with 1 st dose now flag.

3.2.6.2.3 Input Validation Rules

No.	Name	Description	Mandatory	Format
1.	Drug Name	Drug name can be search by Active Ingredient, Drug Name and Trade Name. Trade Name is common brand name for this drug. Information defined in drug master.	Yes	Text field (Searching field)
2.	Dosage	Dosage of the drug required (per administration). Value will be defaulted to selected drug strength. If drug without strength, value will be defaulted to	Yes	Drop down list

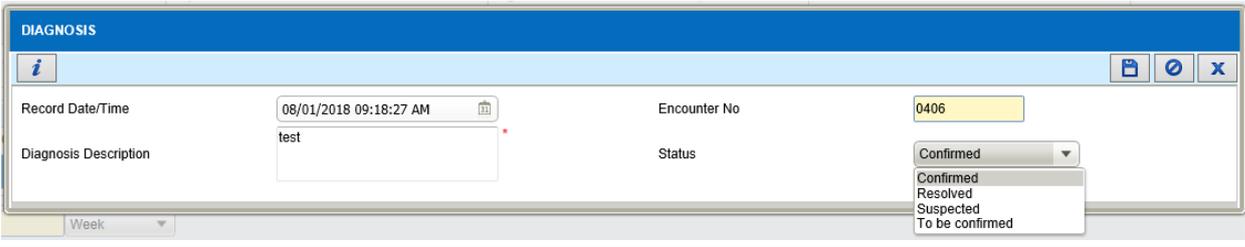


No.	Name	Description	Mandatory	Format
		quantity value from drug master.		
3.	Administration Route	Drug administration route which refer to Administration Route code table.	Yes	Drop down list
4.	Frequency	Drug frequency which refer to Frequency code table.	Yes	Drop down list
5.	Start Date	Order Start date.	Yes	Calendar in format dd/mm/yyyy
6.	End date	Order End date.	Yes	Calendar in format dd/mm/yyyy
7.	Duration	Duration of the order. Calculated in days. Formula: <i>Duration = End date - Start date.</i> On change of this value, order end date will be updated.	Yes	Text field
8.	Duration Unit	Value refer to reference code. Default to 'Day(s)' however user can select specific value: <ul style="list-style-type: none"> • Day(s) • Weeks • Year 	Yes	Drop down list
9.	Drug Indication	Indication of the drug on particular disease. Data will appear after user enter the drug name, if any.	No	Drop down list
10.	Remarks	Remarks entered by prescriber. Previous prescriber's remark can been seen once same drug being ordered for the same patient.	No	Text field
11.	Order Quantity	Calculated based dose, frequency, duration and administration route. However, user is allowed to change this value.	Yes	Text field
12.	Drug Category	Category of the drug which is from category A, A*, A/KK. B, C, C+, and Non FUKKM.	No	Read-Only
13.	Dispense Location	The location where the drug will be dispense.	No	Read-Only
14.	Prescription Date From	Search record in Medication profile by prescription start order from which date.	No	Calendar in format dd/mm/yyyy (Searching field)
15.	Prescription Date To	Search record in Medication profile by prescription start order to which date.	No	Calendar in format dd/mm/yyyy (Searching field)
16.	Prescription Status	Search record in Medication Profile by prescription status (Acknowledge, Dispense, Expired, Ordered, Verified, Prepared, In Progress, Order is on Hold, Order was Canceled, Order was Discontinue, Partially Dispense, Prepared Hold and Uncollected).	No	Drop down list
17.	Visit Type	Search record in Medication Profile by visit type (Outpatient, Inpatient, Emergency, Daycare, SPUB, Walk-In, and Outsource).	No	Drop down list

No.	Name	Description	Mandatory	Format
18.	Order Type	Search record in Medication Profile by order type (IV, CDR, Normal, PN, and Radiopharmaceutical).	No	Drop down list
19.	Location	Search record in Medication Profile by location granted for the user.	No	Drop down list

3.2.6.3 Diagnosis

3.2.6.3.1 Screen Design

ID	OM.SD3
Description	Diagnosis screen
Diagram	
	
Notes	<ul style="list-style-type: none"> • Diagnosis is mandatory per visit. Currently system only capture diagnosis as free text. No integration or reference with ICD10. • Click on 'Save' button to save the diagnosis record.
Cross References	OM.SD2 – Medication Order screen

3.2.6.3.2 Application Business Rules

No.	Name	Description
1.	Diagnosis Description	Diagnosis description is mandatory per visit for full based. If user did not enter any diagnosis, an alert will appear during confirmation of the drugs order.

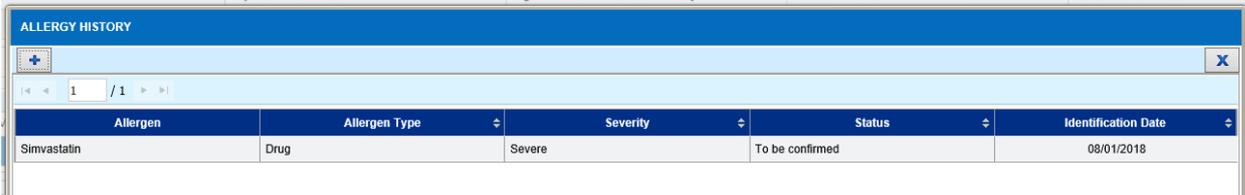
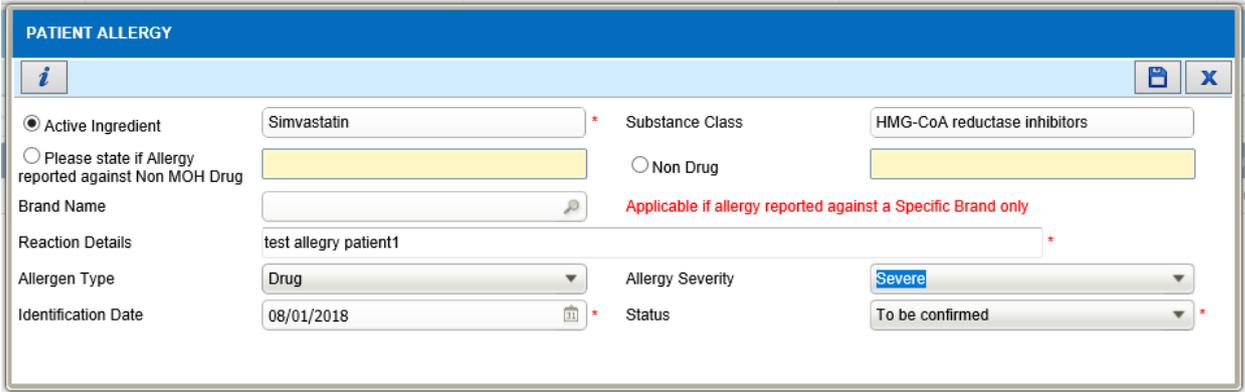
3.2.6.3.3 Input Validation Rules

No.	Name	Description	Mandatory	Format
1.	Record Date/Time	Date and time recorded once diagnosis record is created.	No	Calendar format in dd/mm/yyyy
2.	Diagnosis Description	Description of the diagnosis.	Yes	Text field
3.	Encounter No.	Number generated by system automatically and non-editable.	Yes	Text field (non-editable)
4.	Status	Status of the diagnosis must be selected from the drop down menu with value of "Confirmed",	No	Drop down list

No.	Name	Description	Mandatory	Format
		"Suspected", "Resolved", and "To be confirmed".		

3.2.6.4 Allergy

3.2.6.4.1 Screen Design

ID	OM.SD4
Description	Allergy screen
Diagram	
i. Allergy History Listing	
	
ii. Add Patient Allergy	
	
Notes	<ul style="list-style-type: none"> Click on 'Add(+)' button to add in allergy record. Choose allergy category by Active Ingredient (radio button), non MOH Drug (radio button) or Non Drug (radio button). Click on 'Save' button to save the allergy record.
Cross References	OM.SD2 – Medication Order screen

3.2.6.4.2 Application Business Rules

No.	Name	Description
1.	Mandatory	Patient will be screened for allergies. Once allergy is added, reaction details, identification date and status is mandatory to be filled.
2.	Allergy status	<p>Allergy with status='Confirmed', user will be alert with the allergy drug message but still able to proceed with the drug order. If allergy drug status other than 'Confirmed', no alert will display.</p> <ul style="list-style-type: none"> If allergy status = 'Confirmed', "Known Allergies" will be shown

No.	Name	Description
		<p>in red color box.</p> <ul style="list-style-type: none"> • If allergy status = 'Suspected'/'To be confirmed', "Known Allergies" will be shown in yellow color box. • If allergy status = 'Resolved', no color will be displayed however allergy alert icon still be shown at "Known Allergies". • If allergy drugs has a combination of status, e.g.: 'Confirmed' and 'To be confirmed', "Known Allergies" will show the highest rank of color status which it will be displayed in red color.

3.2.6.4.3 *Input Validation Rules*

No.	Name	Description	Mandatory	Format
1.	Active Ingredient	Search drug by active ingredient. It is a free text box.	No	Text field (searching field)
2.	Non MOH Drug	Non MOH drugs is a drug that was not registered under MOH. User able to add in allergy by drug name which is not under MOH into a free text field. Select this type of allergy by click on the radio button.	No	Text field
3.	Substance Class	Substance class value will appear based on the input value from Active Ingredient.	No	Drop down list
4.	Non Drug	Non drugs allergy is an allergy reaction to a specific foods or environment.	No	Text field
5.	Brand Name	Brand name is the brand name of the drug product. User can find the brand name using search screen.	No	Text field
6.	Reaction Details	It is to describe the specific reaction of the allergy with length 100 character.	Yes	Text field
7.	Allergen Type	Allergen type consist of allergy that cause from drugs, foods or miscellaneous.	No	Drop down list
8.	Allergen Severity	Allergen severity is categories of allergy based on the ranking either mild, moderate, severe or unknown.	No	Drop down list
9.	Identification Date	It is to indicate when allergy is being detected.	Yes	Calendar in format dd/mm/yyyy
10.	Status	It is to indicate the status of the allergy drugs either it is a Confirmed, Suspected, To be confirmed or Resolved status.	Yes	Drop down list



3.2.6.5 Advance Search

3.2.6.5.1 Screen Design

ID	OM.SD5
Description	Advance Search

Diagram

i. Favourite

The screenshot shows a search interface with tabs for Drug Name, ATC, Active Ingredient, and Favourite. The Favourite tab is selected. There are input fields for Drug Name and Tag, and a search button. Below the search bar, there are search result controls including a page indicator (1 / 2) and a search button. The search results are displayed in a table with columns: Dosage Form, Drug Name, Route, Dosage, Frequency, Duration, and Tag.

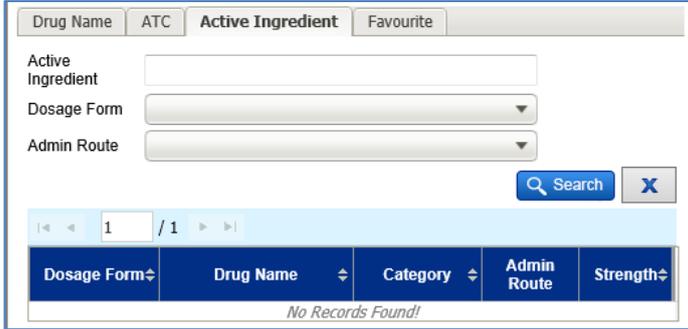
	Dosage Form	Drug Name	Route	Dosage	Frequency	Duration	Tag
<input type="checkbox"/>	Oral Tablet	Alprazolam 0.5 mg Tablet	Oral	2.3 mg	ON (every night)	7 Days	ACS
<input type="checkbox"/>	Oral Tablet	Alprazolam 0.5 mg Tablet	Oral	0.5 mg	ON (every night)	7 Days	
<input type="checkbox"/>	Parenteral Solution	Amikacin 500mg/2ml Injection	Intravenous	500 mg	STAT	1 Days	

ii. Drug Name

The screenshot shows a search interface with tabs for Drug Name, ATC, Active Ingredient, and Favourite. The Drug Name tab is selected. There are input fields for Drug Name and Drug Category, and a search button. Below the search bar, there are search result controls including a page indicator (1 / 1) and a search button. The search results area is empty and displays the message "No Records Found!".

iii. ATC

The screenshot shows a search interface with tabs for Drug Name, ATC, Active Ingredient, and Favourite. The ATC tab is selected. There are dropdown menus for Anatomical Main Group, Therapeutic Subgroup, and Pharmacological Subgroup, and a search button. Below the search bar, there are search result controls including a page indicator (1 / 1) and a search button. The search results area is empty and displays the message "No Records Found!".

<p>iv. Active Ingredient</p> 	
<p>Notes</p>	<ul style="list-style-type: none"> • Click on 'Search' button to search the drug name. • Click on 'Add to Order' to add the selected drug into draft list. • Click on 'X' to close the Advance Search screen. • Click on 'Delete' button to delete the selected drug from Favourite list. • Tick on checkbox to choose the drug from Favourite tab. • Double click on the drug name to choose the drug from other tab.
<p>Cross References</p>	<p>Favourite List – refer to favourite list drug by prescriber name. ATC tab – refer to Maintenance/Pharmacy/ATC Code Details Admin Route tab – refer to Maintenance/Pharmacy/Administration Route for Admin Route data and Maintenance/Pharmacy/Dosage Form for dosage form data. OM.SD2 – Medication Order screen</p>

3.2.6.5.2 Application Business Rules

No.	Name	Description
1.	Default tab	Once user click on Advance Search button, it will default the tab at Favourite. List of drugs from Favourite will be listed if any. User able to move from one tab to another tab to search other or new drugs name.
2.	Favourite drug	Favourite list tab will display any drug details that has been added by the prescriber from previous order. If no drugs appear in this tab, user still able to find the drug from Drug Name tab, ATC tab or Active Ingredient tab.
3.	Advance Search	Advance search used to find any drug name using a specific filter rules. Using this function, user able to find by drug category and specific drug name, by active ingredient or by ATC.

3.2.6.5.3 Input Validation Rules

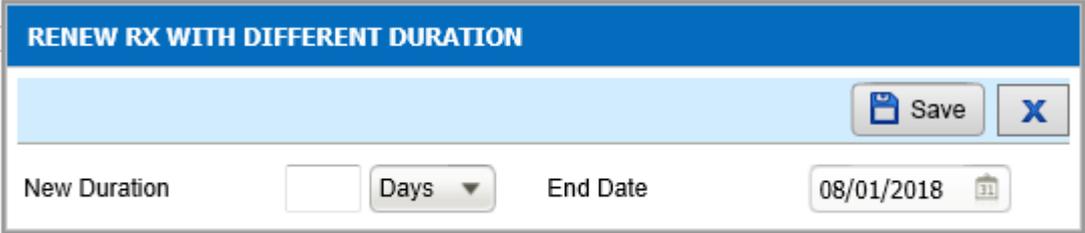
No.	Name	Description	Mandatory	Format
1.	Drug Name	Drug name can be search by Active Ingredient, Drug Name and Trade Name. Trade Name is common brand name for this drug. Information defined in drug master.	Yes	Searching field



No.	Name	Description	Mandatory	Format
2.	Tag	A preferred word use to tag to few drugs to indicate the same group of drug should be order for one type of disease. Usually use the same tagged name for few drugs such as drug A for fever, drug B for fever.	No	Text field
3.	Drug Category	Category of the drug (A, A*, A/KK, B, C, C+, Non-FKKUM)	No	Drop down
4.	Anatomical Main Group	Search drug by Anatomical main group. Refer to Maintenance-Pharmacy-ATC Code Details. User can choose data from a drop down menu.	No	Drop down
5.	Therapeutic Subgroup	Search drug by Therapeutic Sub Group. Refer to Maintenance-Pharmacy-ATC Code Details. User can choose data from a drop down menu. To display this data, user must select value at Anatomical Main Group first.	No	Drop down
6.	Pharmacological Subgroup	Search drug by Pharmacological Sub Group. Refer to Maintenance-Pharmacy-ATC Code Details. User can choose data from a drop down menu. To display this data, user must select value at Therapeutic Subgroup first.	No	Drop down
7.	Chemical Subgroup	Search drug by Pharmacological Sub Group. Refer to Maintenance-Pharmacy-ATC Code Details. User can choose data from a drop down menu. To display this data, user must select value at Pharmacological Subgroup first.	No	Drop down
8.	Chemical Substance	Search drug by Chemical Substance Group. Refer to Maintenance-Pharmacy-ATC Code Details. User can choose data from a drop down menu. To display this data, user must select value at Chemical Subgroup first.	No	Drop down
9.	Active Ingredient	Search drug by active ingredient. It is a free Text field.	No	Text field
10.	Dosage Form	Search drug by dosage form. Data in a drop down menu taken from table Maintenance/Pharmacy/Dosage Form.	No	Drop down
11.	Admin Group	Search drug by admin group. Data in a drop down menu taken from table Maintenance/Pharmacy/Administration Route.	No	Drop down

3.2.6.6 Renew Order

3.2.6.6.1 Screen Design

ID	OM.SD6
Description	Renew Order
Diagram	
<p>i. Renew Rx for different duration</p> 	
Notes	<ul style="list-style-type: none"> • Click on 'Save' button to save the renew order • Click on 'Close(X)' to close the renew screen.
Cross References	OM.SD2 – Medication Profile

3.2.6.6.2 Application Business Rules

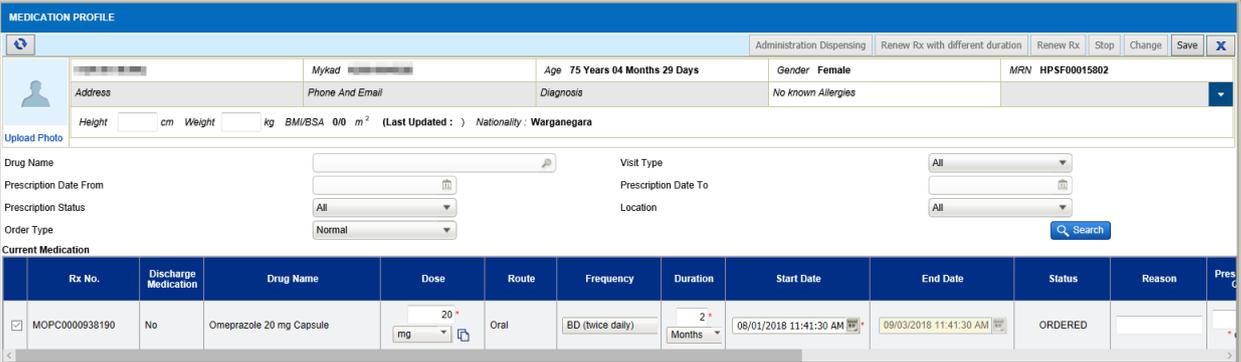
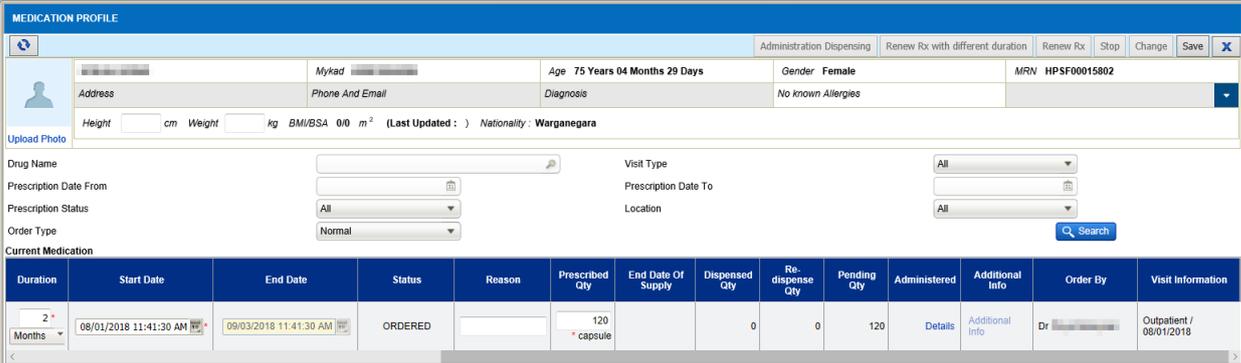
No.	Name	Description
1.	New duration	New duration is mandatory to be filled in before clicked on Save button. To renew existing order for inpatient, maximum of 7 days can be entered. To renew order for discharge or outpatient, maximum 365 days can be entered.

3.2.6.6.3 Input Validation Rules

No.	Name	Description	Mandatory	Format
1.	New Duration	New duration of the order. Calculated in days. Formula: <i>Duration = End date - Start date.</i> On change of this value, order end date will be updated. Value refer to reference code.Default to 'Day(s)' however user can select specific value: <ul style="list-style-type: none"> • Day(s) • Weeks • Year 	Yes	Text field (number)
2.	End Date	End date will be auto calculated based on the value of the duration and start date.	Yes	Calendar format in dd/mm/yyyy.

3.2.6.7 Change Rx

3.2.6.7.1 Screen Design

ID	OM.SD7
Description	Change Rx (Prescription)
Diagram	<p>i. Change Rx (Prescription) part 1</p> 
	<p>ii. Change Rx (Prescription) part 2</p> 
Notes	<ul style="list-style-type: none"> • Enter changes value for existing order details on editable fields (Dose, Frequency, Start Date, Reason, and Prescribe Qty). • Click on 'Save' button to save the changes on the existing drug order. • Click on 'Search' to search prescribe order.
Cross References	OM.SD2 – Medication Order

3.2.6.7.2 Application Business Rules

No.	Name	Description
1.	Change order	Once user save on the changes, previous order will be stopped and new order details will be added into Current Medication List. User able to update changes on few fields only such as Dose, Frequency, Duration, Start Date, Reason and Prescribe Qty.



3.2.6.7.3 Input Validation Rules

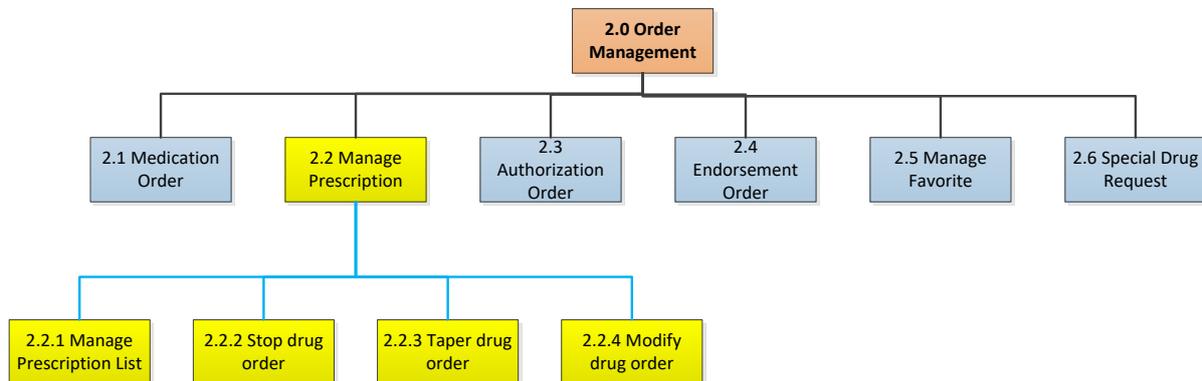
No.	Name	Description	Mandatory	Format
1.	Drug Name	Search record in Medication Profile by drug name.	No	Text field
2.	Prescription Date From	Search record in Medication profile by prescription start order from which date.	No	Calendar in format dd/mm/yyyy
3.	Prescription Date To	Search record in Medication profile by prescription start order from which date.	No	Calendar in format dd/mm/yyyy
4.	Prescription Status	Search record in Medication Profile by prescription status (Acknowledge, Dispense, Expired, Ordered, Verified, Prepared, In Progress, Order is on Hold, Order was Canceled, Order was Discontinued, Partially Dispense, Prepared Hold and Uncollected).	No	Drop down list
5.	Visit Type	Search record in Medication Profile by visit type (Outpatient, Inpatient, Emergency, Daycare, SPUB, Walk-In, and Outsource).	No	Drop down list
6.	Order Type	Search record in Medication Profile by order type (IV, CDR, Normal, PN, and Radiopharmaceutical).	No	Drop down list
7.	Location	Search record in Medication Profile by location granted for the user.	No	Drop down list
8.	Dose	Change on Dosage of the drug required (per administration). Value will be defaulted to selected drug strength. If drug without strength, value will be defaulted to quantity value from drug master.	Yes	Text field
9.	Dose Unit	Value refer to reference code of dose unit.	Yes	Drop down list
10.	Frequency	Value refer to reference code of Frequency.	Yes	Drop down list
11.	Duration	Duration of the order. Calculated in days. Formula: <i>Duration = End date - Start date.</i> On change of this value, order end date will be updated.	Yes	Text field
12.	Duration Unit	Value refer to reference code. Default to 'Day(s)' however user can select specific value: <ul style="list-style-type: none"> Day(s) Weeks Year 	Yes	Drop down list
13.	Start Date	The order start date.	Yes	Calendar in format dd/mm/yyyy
14.	Reason	The order end date.	Yes	Calendar in format
15.	Prescribe Qty	Prescribe quantity amount.	Yes	Text field

3.2.7 Integration

No.	Name	Description
1.	MIMS	<p>1. To display popup for Doctor or Pharmacist attention on:</p> <ul style="list-style-type: none"> i. Drug Interaction by checking Severity = "Severe". ii. Drug Allergy Interaction by checking Count of Allergy Alerts > "0". iii. Duplicate Therapy Interaction by checking Level = "1" and "2" iv. Lactation interaction by checking Severity = "Contraindicated". v. Drug Pregnancy & Women of Childbearing Age Interaction by checking FDA Category = "D" or "X" vi. Dosage Interaction by checking ID = <u>IDS DOSE MAX <value></u> <p>Normal interaction message, by clicking on icon to display the MIMS reply message (inclusive all interaction message that meet MIMS criteria.)</p>

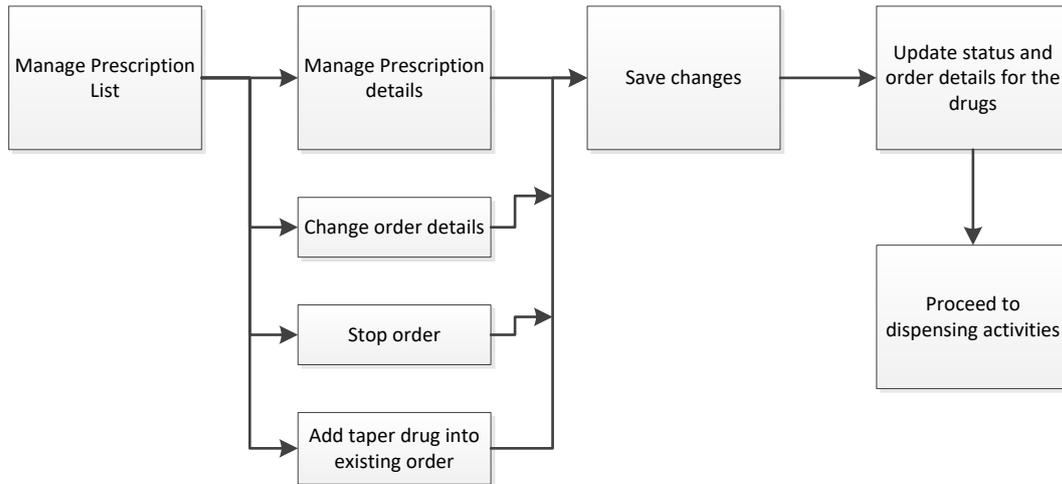
3.3 Manage Prescription

3.3.1 Overview



MP.OVW1: Manage Prescription

3.3.2 Block Diagram

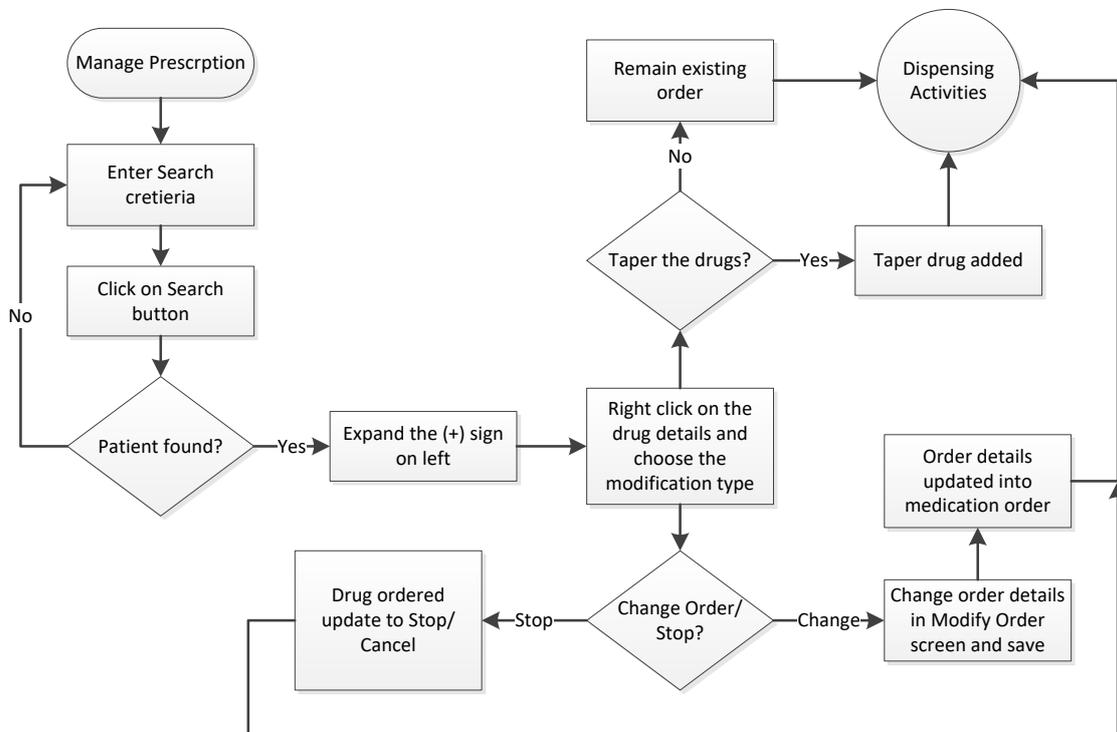


MP.BD1: Manage Prescription flow

3.3.3 Purpose

Manage Prescription screen will allow authorized users to modify order. Authorized user will be able to change the order details, stop the order and add taper drug for the existing drug order.

3.3.4 Screen Navigation Diagram

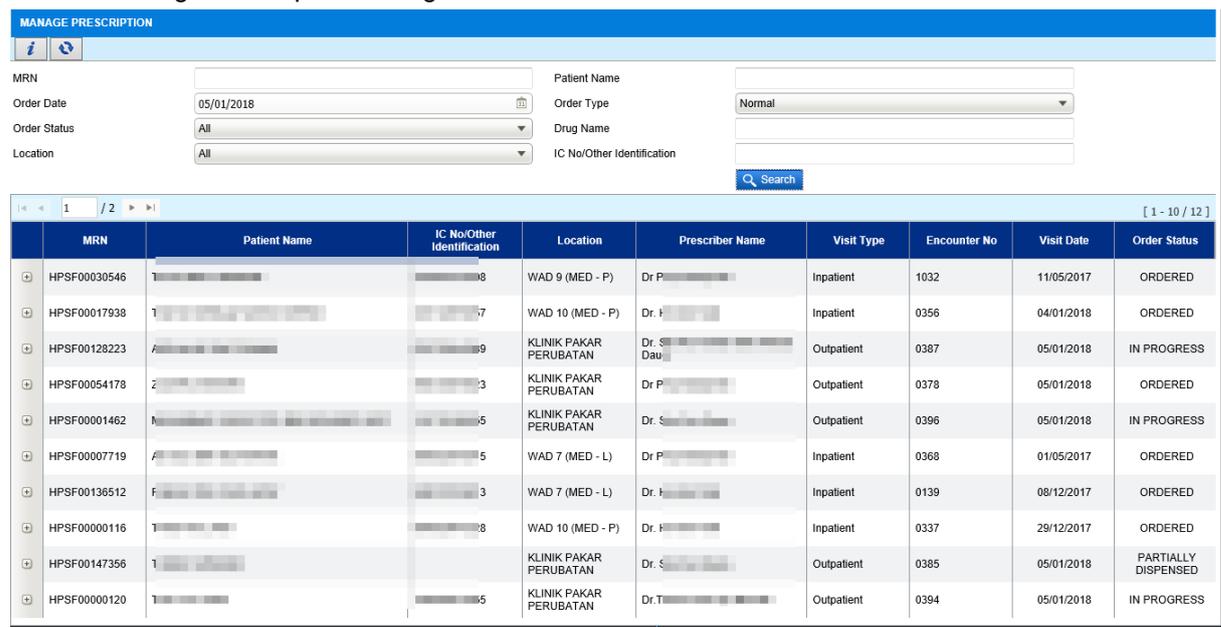


MP.SND1: Manage Prescription

3.3.5 Detail Functionality and Screen

3.3.5.1 Manage Prescription Listing

3.3.5.1.1 Screen Design

ID	MP.SD1
Description	Manage Prescription Listing
<p>Diagram</p> <p>i. Manage Prescription Listing</p> 	
Notes	<ul style="list-style-type: none"> • Click on Search to search patient name based on filter criteria. • Click on '(+)' button to expand the record and to see drug details. • Click on '(-)' button to minimise back the record of drug details.
Cross References	<p>OM.SD1 – Medication Order Listing</p> <p>OM.SD2 – Medication Order.</p>

3.3.5.1.2 *Application Business Rules*

No.	Name	Description															
1.	Manage order list	<p>Prescriber or pharmacist able to manage their order if the order is still active.</p> <p>Prescriber able to view patient list based on Manage Order Configuration. There are 4 options can be configured at facility level based on prescriber category.</p> <table border="1"> <thead> <tr> <th>Setting</th> <th>Rules Applied</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>All</td> <td> <ul style="list-style-type: none"> Manage order created by other prescriber (all level) from same department and different department </td> <td>All prescriber can manage other prescriber order including specialist order from other department</td> </tr> <tr> <td>Department</td> <td> <ul style="list-style-type: none"> Manage order created by other prescriber (all level) from same department only </td> <td>All prescriber can manage other prescriber order including specialist order within department</td> </tr> <tr> <td>Other MO</td> <td> <ul style="list-style-type: none"> Manage order created by other prescriber (all level) from same department Manage order created by other MO/HO from different department </td> <td> <ul style="list-style-type: none"> i. All prescriber can manage other prescriber order including specialist order within department ii. Prescriber can manage other department's MO/HO order iii. Prescriber not able to manage other department's specialist order </td> </tr> <tr> <td>Prescriber (Own Order)</td> <td> <ul style="list-style-type: none"> Manage own order only </td> <td>Other prescriber cannot manage the order if original prescriber is not around.</td> </tr> </tbody> </table>	Setting	Rules Applied	Impact	All	<ul style="list-style-type: none"> Manage order created by other prescriber (all level) from same department and different department 	All prescriber can manage other prescriber order including specialist order from other department	Department	<ul style="list-style-type: none"> Manage order created by other prescriber (all level) from same department only 	All prescriber can manage other prescriber order including specialist order within department	Other MO	<ul style="list-style-type: none"> Manage order created by other prescriber (all level) from same department Manage order created by other MO/HO from different department 	<ul style="list-style-type: none"> i. All prescriber can manage other prescriber order including specialist order within department ii. Prescriber can manage other department's MO/HO order iii. Prescriber not able to manage other department's specialist order 	Prescriber (Own Order)	<ul style="list-style-type: none"> Manage own order only 	Other prescriber cannot manage the order if original prescriber is not around.
Setting	Rules Applied	Impact															
All	<ul style="list-style-type: none"> Manage order created by other prescriber (all level) from same department and different department 	All prescriber can manage other prescriber order including specialist order from other department															
Department	<ul style="list-style-type: none"> Manage order created by other prescriber (all level) from same department only 	All prescriber can manage other prescriber order including specialist order within department															
Other MO	<ul style="list-style-type: none"> Manage order created by other prescriber (all level) from same department Manage order created by other MO/HO from different department 	<ul style="list-style-type: none"> i. All prescriber can manage other prescriber order including specialist order within department ii. Prescriber can manage other department's MO/HO order iii. Prescriber not able to manage other department's specialist order 															
Prescriber (Own Order)	<ul style="list-style-type: none"> Manage own order only 	Other prescriber cannot manage the order if original prescriber is not around.															
2.	Refresh Listing	Click on the Refresh button to reset all searched records and searching criteria to default value.															

3.3.5.1.3 *Input Validation Rules*

No.	Name	Description	Mandatory	Format
1.	MRN	Manage Prescription listing shall be retrieved from the database for all registered patients with visit based on matching MRN and related to original prescriber/pharmacist name that create the order.	No	Text field
2.	Order Date	This field will be used to search the record based on order start date.	No	Date
3.	Order Status	By default, Order Status set to All. This field will be used to search the record based on order status (Acknowledge, Dispense, Expired, In Progress, Order is on Hold, Order was Cancelled, Order was Discontinue, Ordered, Partially Dispense, Prepared Hold, Prepared, Uncollected, Verified).	No	Drop down
4.	Order Location	By default, Order Location is set to All. List of Location appear based on granted location of the user.	No	Drop down

No.	Name	Description	Mandatory	Format
5.	Patient Name	Medication order listing shall be retrieved from the database for all registered patients with visit based on matching Patient Name.	No	Text field
6.	Order Type	By default, Order Type set to Normal. List of order type in drop down value (IV, CDR, Normal, PN, and Radiopharmaceutical).	No	Drop down
7.	Drug Name	User able to search patient record based on drug name. Result will display for any order contains the drug name in search value.	No	Text field
8.	IC Number/ Other Identification Number	Manage Prescription listing shall be retrieved from the database for all registered patients with visit based on matching IC number or other identification number and related to original prescriber/pharmacist name that create the order.	No	Text field

3.3.5.2 Manage Prescription

3.3.5.2.1 Screen Design

ID	MP.SD2
Description	Manage Prescription

Diagram

i. Manage Prescription actions function

MRN	Patient Name	IC No/Other Identification	Location	Prescriber Name	Visit Type	Encounter No	Visit Date	Order Status
HPSF00192564	TEST	90111112233	KLINIK PAKAR PERUBATAN	D [REDACTED]	Outpatient	0426	09/01/2018	ORDERED

Drug Name	Dose	Frequency	Duration	Order Qty	Start Date / Time	End Date / Time	Order Status
Diclofenac 450 mg and Hesperidin 50 mg Tablet	2 tablet	OD (once daily)	22 Days	44 tablet	09/01/2018	31/01/2018	ORDERED
[REDACTED] m 250mg Capsule	500 mg	QID (4 times a day)	5 Days	40 capsule	09/01/2018	14/01/2018	ORDERED
[REDACTED] mg Tablet	5 mg	OD (once daily)	5 Days	5 tablet	09/01/2018	14/01/2018	ORDERED

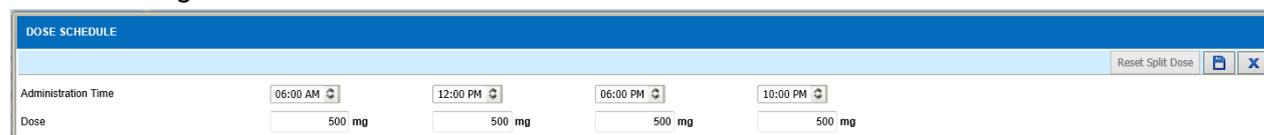
ii. Change

MODIFY ORDER

DRUG DETAILS

Drug	Mometasone Furoate 50 mcg Aqueous Nasal Spray	Drug Category	A*
Dosage	2 spray	Dosage Form	Nasal Spray
Admin Route	Intranasal	Drug Indication	Corticosteroids, Potent (Group III)
Frequency	EOD	Counselling Indication	<input type="checkbox"/>
Duration	3 Months	Own Medication	<input type="checkbox"/>
Order Quantity	2 canister	Dispense Location	UNIT FARMASI KLINIK PAKAR
Start Date / Time	08/01/2018 2:23 PM	End Date / Time	08/04/2018 2:23 PM
Drug Remarks			

iii. Dosage Schedule



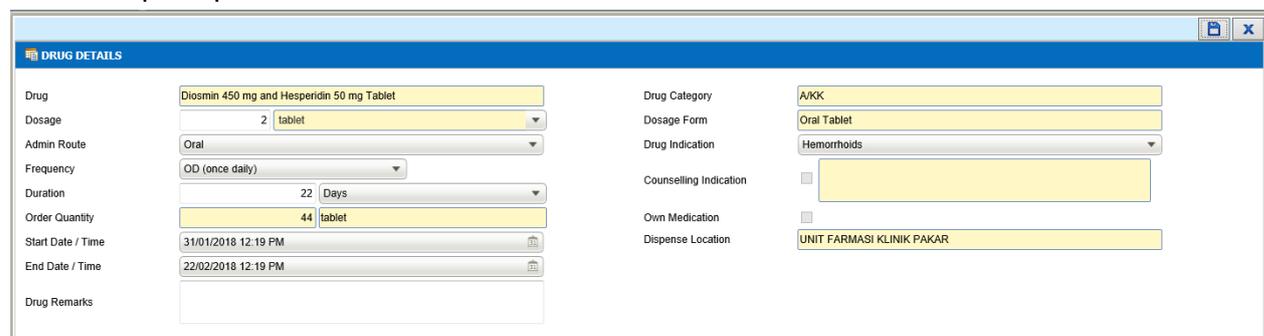
DOSE SCHEDULE

Administration Time: 06:00 AM, 12:00 PM, 06:00 PM, 10:00 PM

Dose: 500 mg, 500 mg, 500 mg, 500 mg

Buttons: Reset Split Dose, [Save], [Close]

iv. Taper Up/Down



DRUG DETAILS

Drug: Diosmin 450 mg and Hesperidin 50 mg Tablet

Dosage: 2 tablet

Admin Route: Oral

Frequency: OD (once daily)

Duration: 22 Days

Order Quantity: 44 tablet

Start Date / Time: 31/01/2018 12:19 PM

End Date / Time: 22/02/2018 12:19 PM

Drug Remarks:

Drug Category: A/KK

Dosage Form: Oral Tablet

Drug Indication: Hemorrhoids

Counselling Indication:

Own Medication:

Dispense Location: UNIT FARMASI KLINIK PAKAR

<p>Notes</p>	<ul style="list-style-type: none"> • Click on (+) to expand the order details. • Click on 'Change' action to modify the order. • Click on 'Stop' action to stop the order. • Click on 'Taper Up' or 'Taper Down' to add taper drug into existing order. • Click on 'Save' to save the records. • Click on 'Reset Split Dose' to reset the split dose value.
<p>Cross References</p>	<p>Admin Route – refer to Maintenance/Pharmacy/Administration Route. Dosage Form – refer to Maintenance/Pharmacy/Dosage Form. Frequency and Administration Time – refer to Maintenance/Pharmacy/Frequency. Drug Category – refer to Maintenance/Pharmacy/Drug Master. Drug Indication – refer to Maintenance/Pharmacy/Indication. Dispense Location – refer to Maintenance/Pharmacy/Location Setup. OM.SD2 – Medication Order</p>

3.3.5.2.2 Application Business Rules

No.	Name	Description
1.	Change Order details	i. Order details can be modified by the original prescriber or pharmacist that create the order. Other prescriber can stop the drug only. Changes on drug details are allowed for a drug with status 'Ordered' only. ii. Changes involved changing on dosage, frequency, admin route, duration, and start date.
2.	Change on Dosage Schedule (Split dose)	i. The optimum therapeutic dose and optimum interval between doses e.g.: <i>Prednisolone 5mg tablet, 10 mg (8:00 am), 5 mg (8:00pm)</i> ii. User also can change the time only without change the

No.	Name	Description
		dose. (Some patient required specific time and not follow exactly time in frequency master) e.g.: for BD dose instead of 8:00 and 8:00 pm, user want to change to 6:00 am and 6:00am <i>Prednisolone 5mg tablet, 5 mg (6:00 am), 5 mg (6:00pm)</i>
3.	Taper Drug	Order same drug with increasing/decreasing the total dose. Order date between dose must be continuous and cannot overlap. <ul style="list-style-type: none"> Taper up – increase the dose. (e.g. :) <ol style="list-style-type: none"> <i>Prednisolone 5mg tablet, 10 mg, BD, 1/1-7/1 = 10 mg * BD = 20 mg</i> <i>Prednisolone 5mg tablet, 10 mg, TDS, 8/1-15/1 = 10 mg * TDS = 30 mg</i> <i>Prednisolone 5mg tablet, 15 mg, TDS, 16/1-21/1 = 15 mg * TDS = 45 mg</i> Taper down – decrease the dose <ol style="list-style-type: none"> <i>Prednisolone 5mg tablet, 10 mg, TDS, 1/1-7/1 = 10 mg * TDS = 30 mg</i> <i>Prednisolone 5mg tablet, 10 mg, OD, 8/1-15/1 = 10 mg * OD = 10 mg</i> <i>Prednisolone 5mg tablet, 5 mg, OD, 16/1-21/1 = 5 mg * OD = 5 mg</i>
4.	Stop Drug	If order status is in 'In Progress' or 'Partially Dispense', original prescriber can stop the drugs only. No modification can be done. Once drug is being stopped by original prescriber, drug name will be remove from the list. If drugs is being hold by pharmacist, original prescriber able to stop the drugs but not to resume it.
5.	Dosage Schedule	Button will appear if user choose Change function. For Taper Up/Taper Down, this button will be hide.

3.3.5.2.3 Input Validation Rules

No.	Name	Description	Mandatory	Format
1.	Drug	Display the drug name which selected by user from the listing. Non editable field.	Yes	Text field (non-editable)
2.	Dosage	Display the dosage value of the existing selected drug. User able to change the dosage value.	Yes	Text field
3.	Admin Route	Display the admin route of the selected drug. Drop don value is enable for change.	Yes	Drop down
4.	Frequency	Display the frequency of the selected drug. User able to change frequency value.	Yes	Drop down
5.	Duration	Display the duration of the selected drug. User able to change the duration value.	Yes	Text field
6.	Order Quantity	Display the order quantity based on duration of	Yes	Text field



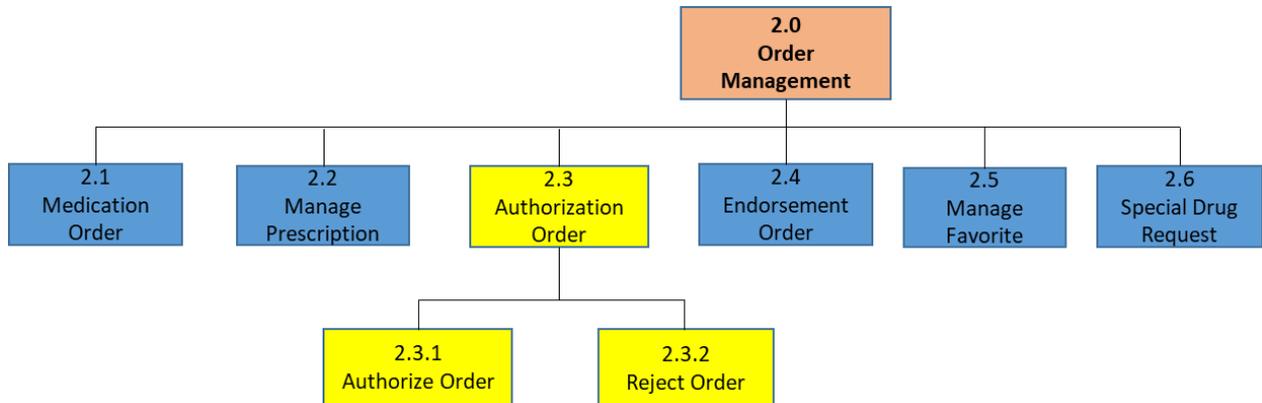
No.	Name	Description	Mandatory	Format
		the selected drug.		
7.	Start Date / Time	To be selected from calendar control. Default value is the start date of the current order.	Yes	Calendar in dd/mm/yyyy format.
8.	End Date / Time	To be selected from calendar control. Default value is the start date of the current order. Date will be change based on changes of current start date.	Yes	Calendar in dd/mm/yyyy format.
9.	Drug Remarks	Value will be displayed by default if any. This field used by prescriber to enter drug remarks.	No	Text field
10.	Drug Category	Default value show the drug category of the selected drug. Display only.	No	Text field (non-editable)
11.	Dosage Form	Default value show the dosage form of the selected drug. Display only.	No	Text field (non-editable)
12.	Drug Indication	Default value show the drug indication of the selected drug.	No	Drop down
13.	Counselling Indication	Default will be blank. Ticked on the checkbox, Counselling Indication Text field will be enable. Once unticked, information will disappear.	No	Text field
14.	Own Medication	Default value show the drug flag either own medication or not. If selected drug is own medication, checkbox is ticked and non-editable. For display value only.	No	Checkbox (non-editable)
15.	Dispense Location	Default value show the default dispensing location of the selected drug. Non editable.	No	Text field (non-editable)
16.	Administration Time	In Dosage Schedule: show the default serving time based on maintenance table. User able to change the admin time when do split dose.	Yes	Time (format: 00:00AM / 00:00PM)
17.	Dose	In Dosage Schedule: display the default dose for the selected drug. User able to change the dose accordingly for split dose order. It will be disable for frequency type = STAT, PRN, Interval frequency)	Yes	Text field

3.3.6 Integration

None.

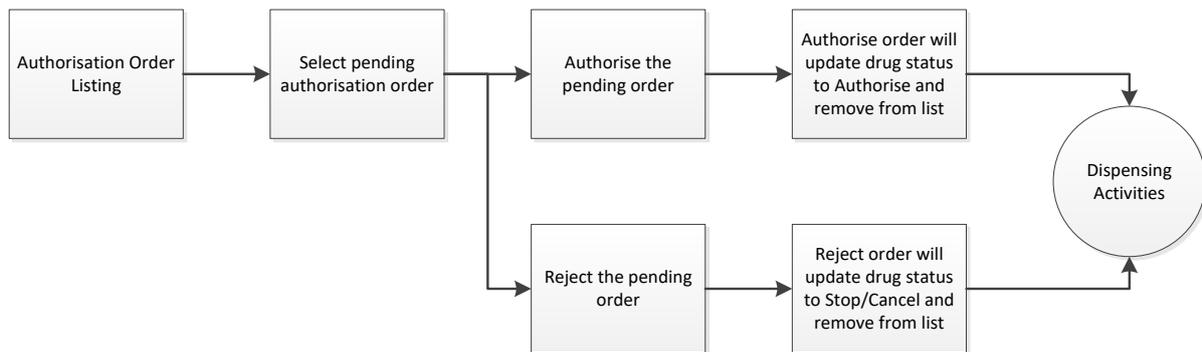
3.4 Order Authorization

3.4.1 Overview



OA.OVW1: Order Authorization

3.4.2 Block Diagram



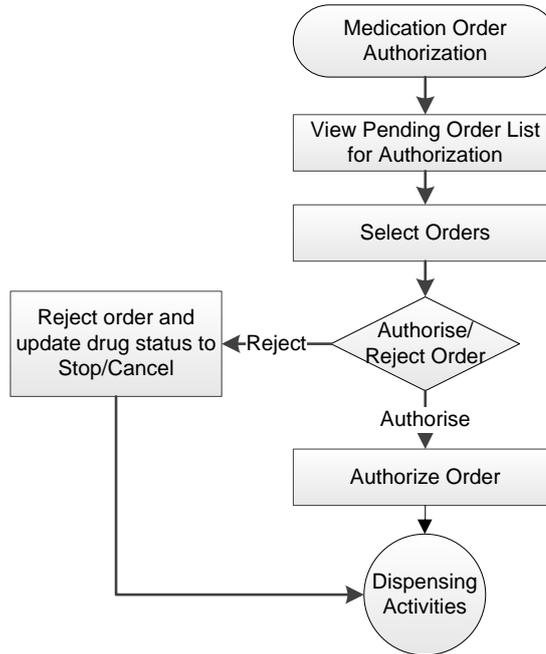
OA.BD1: Order Authorization

3.4.3 Purpose

Authorization Order screen used by specialist to authorize all pending's drug which ordered by medical officer. Specialist able to authorize the order or reject the order. If drugs has been authorized in an existing visit of the patient, once order same drug for other visit, no authorization is needed. However, it valid for 1 year. After 1 year, same drugs need to be authorize again. Specialist also able to reject the pending authorize drug. If it is being rejected, drug status will be updated to Stop/Cancel.



3.4.4 Screen Navigation Diagram



OA.SND1: Order Authorization

3.4.5 Detail Functionality and Screen

3.4.5.1 Order Authorization Listing

3.4.5.1.1 Screen Design

ID	OA.SD1
Description	Order Authorization Listing
Diagram	

Order ID	MRN	Patient Name	Location	Drug Name	Dose	Frequency	Duration	Ordered Date	Order By	Order Type	Diagnosis	Authorise
100000932641	HPSF00184646	Y. [REDACTED]	WAD 10 (MED - P)	Cefuroxime 750mg Injection	1500 mg	STAT	1 Days	16/05/2017	[REDACTED]	Normal	Diagnosis	<input type="checkbox"/>
70000932698	HPSF00024643	Y. [REDACTED]	WAD 7 (MED - L)	Metronidazole 500mg/100ml Injection	500 mg	STAT	1 Days	16/05/2017	[REDACTED]	Normal	Diagnosis	<input type="checkbox"/>
CRW0000932665	HPSF00016264	C. [REDACTED]	WAD 16 (CCU/CRW)	Bromhexine 4mg/2ml Inj	8 mg	Q8H	7 Days	16/05/2017	[REDACTED]	Normal	Diagnosis	<input type="checkbox"/>
180000932695	HPSF00031112	S. [REDACTED]	WAD 18 (KELAS 1)	Ceftriaxone 1g Injection	2000 mg	OD	7 Days	16/05/2017	[REDACTED]	Normal	Diagnosis	<input type="checkbox"/>
180000932708	HPSF00184871	N. [REDACTED]	WAD 18 (KELAS 1)	Tramadol HCl 50 mg Capsule	50 mg	BID	7 Days	16/05/2017	[REDACTED]	Normal	Diagnosis	<input type="checkbox"/>
70000932765	HPSF00191247	H. [REDACTED]	WAD 7 (MED - L)	Clobetasone Butyrate 0.05% Ointment	1 app	BID	7 Days	16/05/2017	[REDACTED]	Normal	Diagnosis	<input type="checkbox"/>
70000932765	HPSF00191247	H. [REDACTED]	WAD 7 (MED - L)	Mupirocin 2% Ointment	1 app	BID	1 Weeks	16/05/2017	[REDACTED]	Normal	Diagnosis	<input type="checkbox"/>
100000932772	HPSF00192332	[REDACTED]	WAD 10 (MED - P)	Amoxicillin 1g + Clavulanate 200mg Injection	1200 mg	Q8H	7 Days	16/05/2017	[REDACTED]	Normal	Diagnosis	<input type="checkbox"/>
140000032806	HPSF00032680	[REDACTED]	WAD 14	Alprazolam 0.5 mg	0.25 mg	QD	1 Weeks	16/05/2017	[REDACTED]	Normal	Diagnosis	<input type="checkbox"/>



Notes	<ul style="list-style-type: none"> • Tick on Authorise checkbox to select all pending authorisation record or tick one by one for a selected pending records. • Click on 'Reject' button to reject the pending authorisation order. • Click on 'Authorise' button to authorise the pending authorisation record. • Click on 'Search' button to search the pending authorisation order.
Cross References	OM.SD2 – Medication Order.

3.4.5.1.2 Application Business Rules

No.	Name	Description
1.	Authorise Order	<ul style="list-style-type: none"> • Once a medication order is placed and the 'order involves drugs which the user is not authorized to Prescribe' then the Order has to be authorized. Authorization of order will be done on this screen. It will involve: <ul style="list-style-type: none"> i. <i>Criteria 1</i> <ul style="list-style-type: none"> ○ Order of all category A/KK, A and A* ○ Order of all category B drugs (prescriber category C) ii. <i>Criteria 2</i> <ul style="list-style-type: none"> ○ This only applies for first order of the drug with same active ingredient. No authorization required for subsequent orders of the same active ingredient. ○ No limit on duration to allow repeating orders of the same active ingredient except for Antibiotic. Exception for Antibiotics as below: <ul style="list-style-type: none"> a. Authorization given for a particular admission/visit expired once the patient is discharged/checkout. (<u>Drug Authorization Category = A#</u>) b. If patient is admitted/visit again and the same antibiotic is used, a new authorization is required for that same antibiotic iii. <i>Criteria 3</i> <ul style="list-style-type: none"> ○ Not SPUB order (pharmacist transcribe SPUB order or drug come from SPUB online, no authorizations required for any type of drugs) • Specialist also able to modify the order if not dispense by pharmacist yet. Specialist able to view authorisation list in their task list too. • Pharmacist can continue dispense the order with manual authorisation. System will not block pharmacist to dispense the drug without authorisation from specialist.
2.	Reject Order	Once order is rejected, drug status will change status to Stop/Cancel. Record will be remove from the pending list and no more status PA (Pending Authorisation) appear at dispensing screen.
3.	Authorisation Listing	Listing for pending authorisation record appear based on prescriber granted role.



No.	Name	Description
4.	Refresh list	Click on the Refresh button to reset all searched records and searching criteria's to default value.

3.4.5.1.3 Input Validation Rules

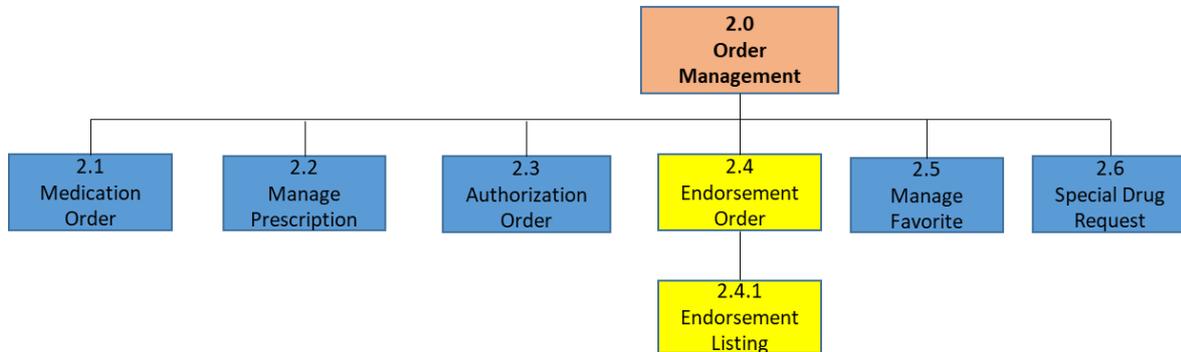
No.	Name	Description	Mandatory	Format
1.	Order By	Order By can be search through user ID by name. It can filter any username based on input value as minimum as 1 character.	No	Text field
2.	Location	Default value was set to All. Location will be listed in a drop down format and display based on user granted location.	No	Drop down
3.	Patient Name	Medication order listing shall be retrieved from the database for all registered patients with visit based on matching Patient Name.	No	Text field
4.	Drug Name	Drug name can be search by Active Ingredient, Drug Name and Trade Name. Trade Name is common brand name for this drug. Information defined in drug master.	Yes	Text field
5.	Order Date From	To be selected from calendar control. It will be in dd/mm/yyyy format. Search criteria for start order from which date.	No	Calendar format in dd/mm/yyyy
6.	Order Date To	To be selected from calendar control. It will be in dd/mm/yyyy format. Search criteria for start order to what date.	No	Calendar format in dd/mm/yyyy

3.4.6 Integration

None.

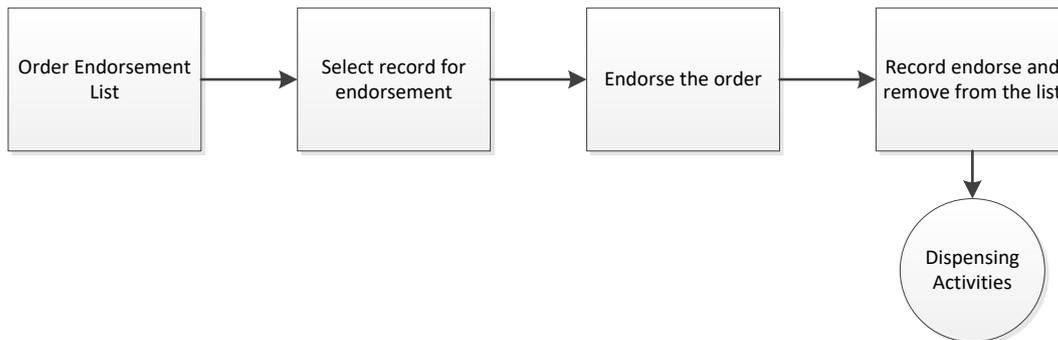
3.5 Order Endorsement

3.5.1 Overview



OE.OVW1: Order Endorsement

3.5.2 Block Diagram

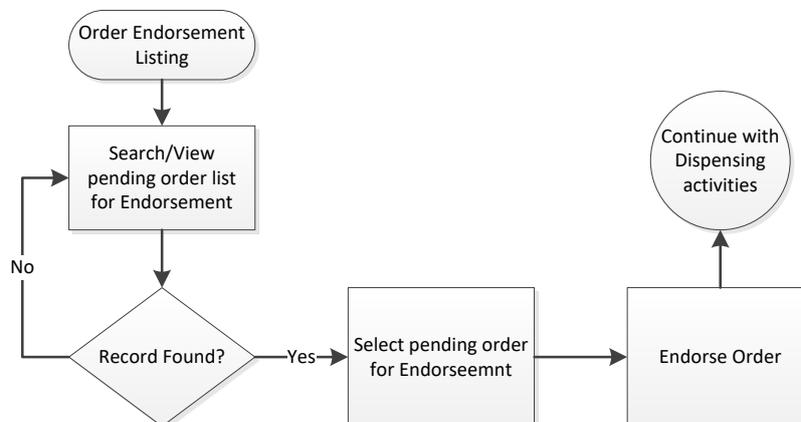


OE.BD1: Order Endorsement

3.5.3 Purpose

Modification of prescription done by pharmacist has to be endorsed except for SPUB order as a validation for prescriber. It also will involve medication order done by pharmacist during MTAC. Only authorized user will be allowed to endorse the medication order.

3.5.4 Screen Navigation Diagram

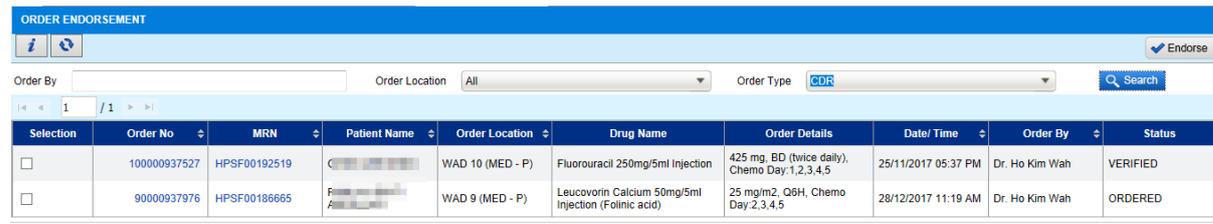


OE.SND1: Order Endorsement

3.5.5 Detail Functionality and Screen

3.5.5.1 Order Endorsement Listing

3.5.5.1.1 Screen Design

ID	OE.SD1
Description	Order Endorsement Listing
Diagram	
Notes	<ul style="list-style-type: none"> Click on 'Search' button to search the endorse record. Click on 'Endorse' button to endorse the record. Tick on checkbox to select record for endorsement.
Cross Reference	None

3.5.5.1.2 Application Business Rules

No.	Name	Description
1.	Endorsement Order	<ul style="list-style-type: none"> All <u>orders modified by Pharmacists</u> or Pharmacy Assistants after consulting, the prescriber must be endorsed by the prescriber. Endorsement of order will be done on this screen. It will involve: <ul style="list-style-type: none"> <i>i. Criteria 1</i> <ul style="list-style-type: none"> Modification of prescription done by pharmacist <i>ii. Criteria 2</i> <ul style="list-style-type: none"> Medication order done by pharmacist during MTAC. <i>iii. Criteria 2</i> <ul style="list-style-type: none"> Not SPUB/external(walk-in) order (pharmacist modify SPUB/external(walk-in) order, no endorsement required) Only authorized user will be allowed to endorse the medication order. Pharmacist can continue dispense the order even without endorsement. Prescriber able to view endorsement list in their task list too.
2.	Refresh Listing	Click on the Refresh button to reset all searched records and searching criteria's to default value.



3.5.5.1.3 Input Validation Rules

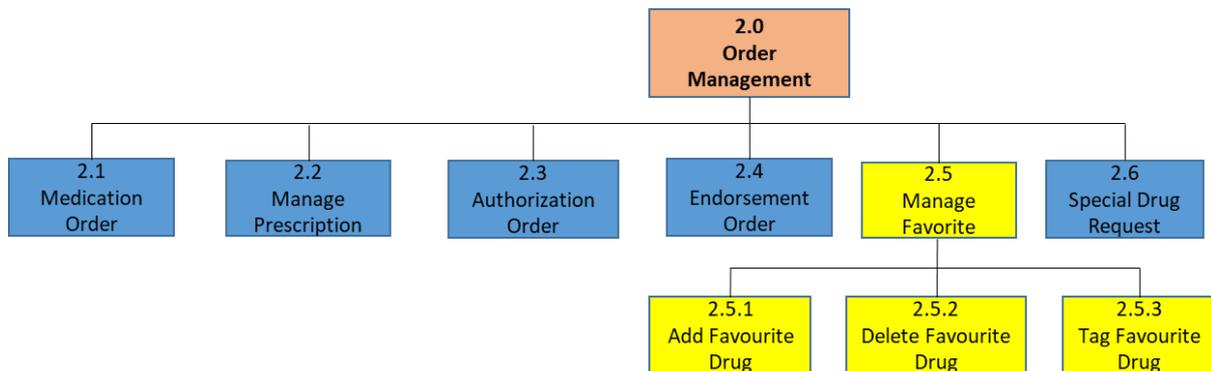
No.	Name	Description	Mandatory	Format
1.	Order By	Order By can be search through user ID by name. It can filter any username based on input value as minimum as 1 character.	No	Text field
2.	Order Location	Default value was set to All. Location will be listed in a drop down format and display based on user granted location.	No	Drop down
3.	Order Type	Default value set to Normal. Order Type will be listed in a drop down menu and consists of data (CDR, IV, Normal, PN, and Radiopharmaceutical).	No	Drop down

3.5.6 Integration

None.

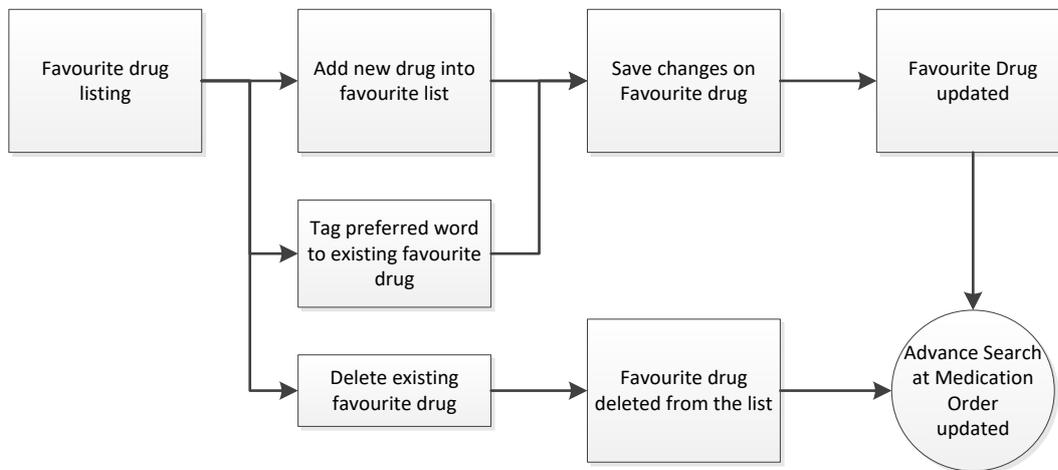
3.6 Manage Favorite

3.6.1 Overview



MF.OMV1: Manage Favorite

3.6.2 Block Diagram



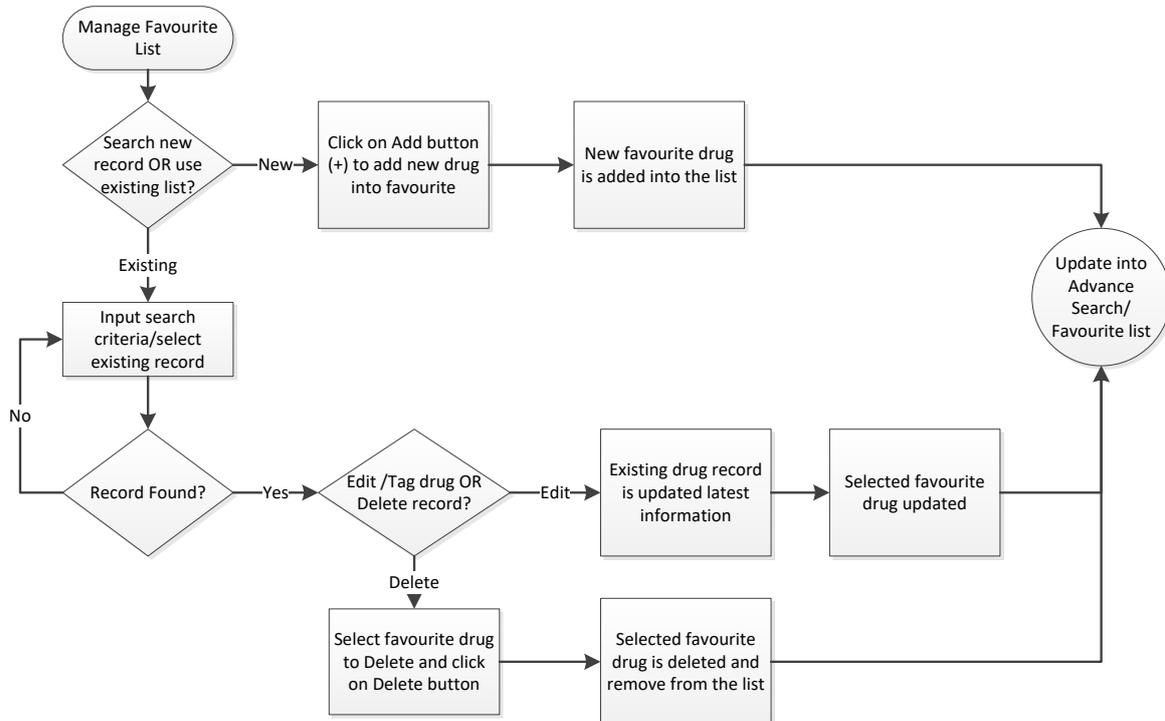
MF.BD1: Manage Favorite

3.6.3 Purpose

User can create their own favorite drug to help them speed up prescribing/transcribing process. User can manage their own list in this screen. Function available are:

- i. Add new drug to favorite list
- ii. Remove drug from favorite list
- iii. Tag (group) drug by user preference

3.6.4 Screen Navigation Diagram

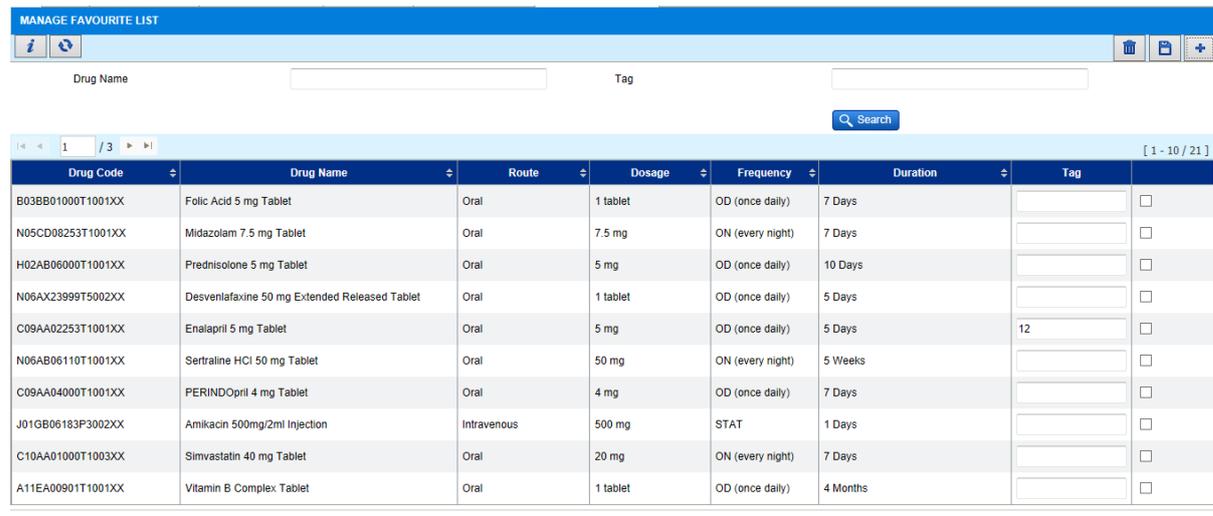


MF.SND1: Manage Favorite

3.6.5 Detail Functionality and Screen

3.6.5.1 Manage Favorite Listing

3.6.5.1.1 Screen Design

ID	MF.SD1
Description	Manage Favourite Listing
<p>Diagram</p> 	
Notes	<ul style="list-style-type: none"> • Click on 'Search' button to search the drug record. • Click on 'Save' button to save the drug record changes. • Click on 'Delete' button to delete the drug record. • Click on 'Add(+)' button to add new drug record. • Double click on drug name to open drug details for edited.
Cross References	None.

3.6.5.1.2 Application Business Rules

No.	Name	Description
1.	Favourite List	Listing of drugs will be by prescriber. Each prescriber will have different list of favourite drug and they themselves can manage the list.
2.	Refresh Listing	Click on the Refresh button to reset all searched records and searching criteria's to default value.

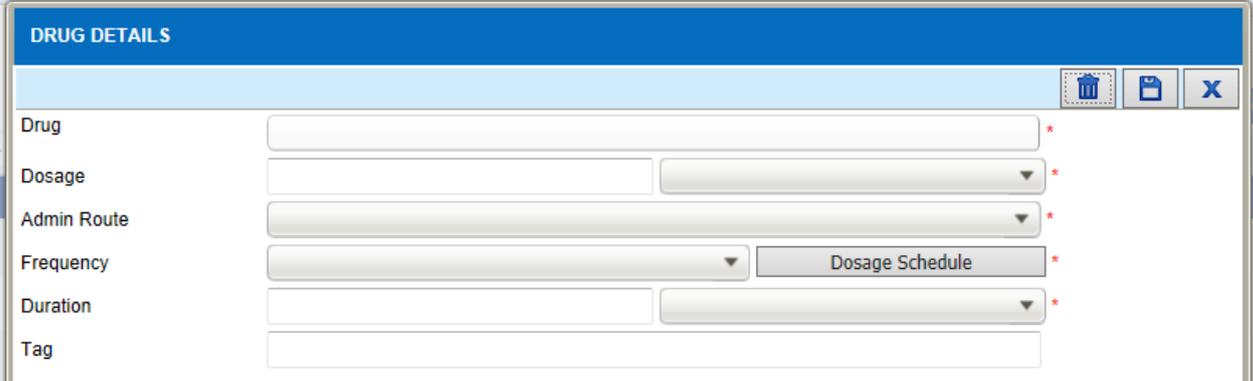
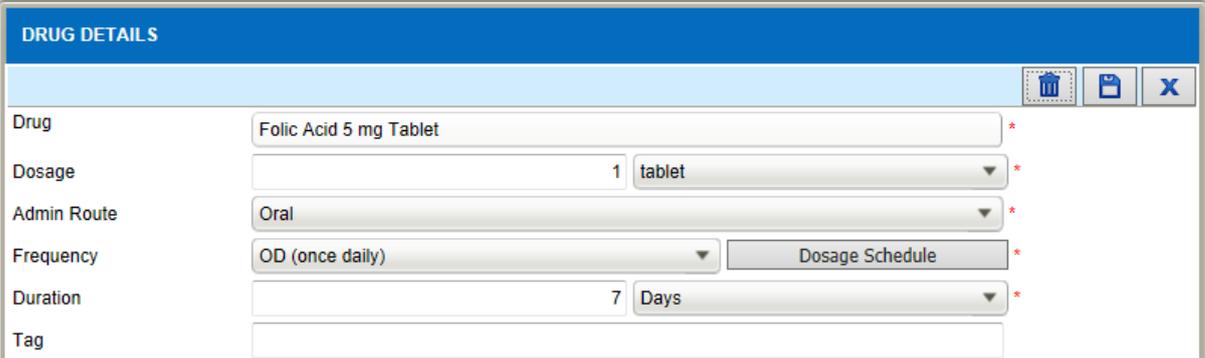
3.6.5.1.3 Input Validation Rules

No.	Name	Description	Mandatory	Format
1.	Drug Name	Drug name can be search by Active Ingredient, Drug Name and Trade Name. Trade Name is common brand name for this drug. Information defined in drug master.	Yes	Text field
2.	Tag (search field)	User can search by preferred name in Tag Text field. Input value is a preferred word set by the prescriber to	No	Text field (Searching)

No.	Name	Description	Mandatory	Format
		few drugs which easier for them to find a group of drugs that can refer to a type of diagnosis.		field)
3.	Tag (input field)	Enter a preferred same tag words for few drugs to group it together.	No	Text field

3.6.5.2 Manage Favorite

3.6.5.2.1 Screen Design

ID	MF.SD2
Description	Manage Favourite Add
Diagram	
<p>i. Add new drugs</p> 	
<p>ii. Edit existing drug</p> 	
Notes	<ul style="list-style-type: none"> • Click on 'Delete' button to delete the existing drug from favourite list. • Click on 'Save' button to save changes of favourite drug. • Click on 'Close button to close the pop up window. • Click on 'Dosage Schedule' button to open dosage schedule screen.
Cross References	None.



3.6.5.2.2 Application Business Rules

No.	Name	Description
1.	Dosage Schedule (Split dose)	i. The optimum therapeutic dose and optimum interval between doses e.g.: <i>Prednisolone 5mg tablet, 10 mg (8:00 am), 5 mg (8:00pm)</i> ii. User also can change the time only without change the dose. (Some patient required specific time and not follow exactly time in frequency master) e.g.: for BD dose instead of 8:00 and 8:00 pm, user want to change to 6:00 am and 6:00am <i>Prednisolone 5mg tablet, 5 mg (6:00 am), 5 mg (6:00pm)</i>

3.6.5.2.3 Input Validation Rules

No.	Name	Description	Mandatory	Format
1.	Drug	Drug name can be search by Active Ingredient, Drug Name and Trade Name. Trade Name is common brand name for this drug. Information defined in drug master.	Yes	Text field
2.	Dosage	Dosage of the drug required (per administration). Value will be defaulted to selected drug strength. If drug without strength, value will be defaulted to quantity value from drug master.	Yes	Drop down list
3.	Administration Route	Drug administration route	Yes	Drop down list
4.	Frequency	Drug frequency	Yes	Drop down list
5.	Duration	Duration of the order in days, weeks or months.	Yes	Text field
6.	Tag	Preferred word to the drug	No	Text field

3.6.6 Integration

None.

3.7 Special Drug Request

Special Drug Request will allow pharmacist to key-in the request and send it to KPK for approval before can proceed with procurement of approved special drug.

The main purpose of Special Drug Request module is for pharmacist. Pharmacist will key-in the request after it has been manually recommended by Hospital Director. Only recommended request will be key-in. Not recommended request will not be key-in. This request will then submit to HQ for approval. User in HQ will process the request and send the approval status back to facility. Only approved request can be purchased by facility using procurement of approved special drug function. Refer to SDD on Special Drug Request under document PHIS_CPS_SDD_SDR_v1.0 for details.



3.8 Outpatient/Inpatient Dispensing

Outpatient and Inpatient dispensing in Full Based are explained under document PHIS_CPS_SDD_OPIP_v1.0.docx. Refer to this document for full screens, rules and validation.

4. References

Document	Description/ Expansion
PhIS_CPS_SDD_OPIP_v1.0	System Design Document (SDD) for Outpatient and Inpatient Pharmacy Module
PhIS_CPS_SDD_OM_PB_v1.0	System Design Document (SDD) for Order Management for Pharmacy Based Module
PhIS_CPS_SDD_MC_v1.0	System Design Document (SDD) for Medication Counselling module
PhIS_CPS_SDD_Manufacturing_v1.0	System Design Document (SDD) for Manufacturing of Cytotoxic Drug Reconstitution, Parenteral Nutrition, IV Admixture & Eye Drops, and Radiopharmaceuticals module
PhIS_CPS_SDD_Ward_Pharmacy_v1.0	System Design Document (SDD) for Ward Pharmacy module
PhIS_CPS_SDD_Integration_v1.2	System Design Document (SDD) for Integration
PhIS_CPS_SDD_PM_v1.0	System Design Document (SDD) for Patient Management module

5. Acronyms

Item	Description
URS	User Requirement Specification
SDD	System Design Documentation
SPUB	<i>Sistem Pendispensan Ubat-Ubatan Bersepadu</i> (Integrated Drug Dispensing System)
IWP	Integration Web Portal
KPK	<i>Ketua Penolong Pengarah</i>
IV	Intravenous
CDR	Cytotoxic Drug Reconstitution
MTAC	Medication Therapy Adherence Clinic
PN	Parenteral Nutrition
TDM	Therapeutic Drug Monitoring
MAR	Medication Administration Record



6. Appendix

ⁱ Drug Category - Prescriber category who is allowed to start the medication:

Category	Definition
A*	Consultant/Specialists for specific Indications only
A	Consultant/Specialists
A/KK	Consultant/Specialists/Family Physician Specialists
B	Medical Officer/House Officer
C	Paramedical staff
C+	Paramedical Staff doing midwifery