



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

User Manual Parenteral Nutrition (PN)

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1.3	Michelle Foo (QA)	Update to v1.3 based on PhIS & CPS v1.3
1.4	Michelle Foo/Juridah Ayob (QA)	Change to the latest screen shot
1.5	Michelle Foo/Juridah Ayob (QA)	Change to the latest screen shot v1.5.1
1.6	Michelle Foo/Juridah Ayob (QA)	Update to version 1.6



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1. Introduction

1.1 Overview of Phis

Pharmacy Information System or better known as PhIS, is a complete and comprehensive system that integrates pharmacy related services geared towards pharmacy excellence. PhIS implementation would transform most of current manual process to electronic system would benefit facility end user in the health care sector.

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

1. Order Management
2. Inpatient Pharmacy
3. Outpatient Pharmacy
4. Medication Counselling
5. Ward Pharmacy
6. Pharmacy Inventory
7. Manufacturing of Cytotoxic Drug Reconstitution, Parenteral Nutrition, IV Admixture & Eye Drop , Radiopharmaceuticals and Extemporaneous
8. Adverse Drug Reaction & Drug Allergic (ADR & DAC)
9. Clinical Pharmacokinetics Services (TDM)
10. Drug Information & Consumer Education (DICE)
11. Medication Therapy Adherence Clinic (MTAC)
12. Data Mining (PhARM)

1.2 Purpose and Objectives

This user manual outlines the Parenteral Nutrition module and its key features/functionalities. The primary objective is to help guide user through the process of completing PhIS application process.

User will understand the following activities in details:
















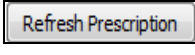
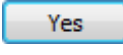
1.3 Organised Sections


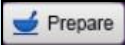
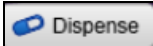

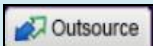
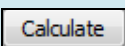


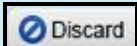
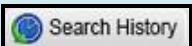


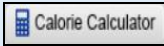
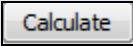
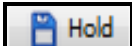
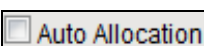
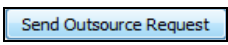
These are the sections within this document:

- Section 1 : Introduction
- Section 2 : Application Standard Features
- Section 3 : Parenteral Nutrition
- Section 4 : Acronyms

2. Application Standard Features

2.1 PhIS Legend

	Login to PhIS		Logout from PhIS
	Change Login Password		Reset Login Screen
	Expand Menu		Collapse Menu
	Display Home Tab		Expand Module
	Collapse Module		Close All Open Tabs
	Refresh Screen		Search Record
	Add/Create New Record		Show Help
	Print		Mandatory Field
	Calendar Icon		Search Icon
	Close Window		Radio Button
	Checkbox		Edit Record
	Cancel		Delete Record
	Save		Export and Open Report in Excel Format
	Confirm Button		Delete Item from the list
	Refresh Prescription		Yes Button
	OK Button		Dropdown Box
	Automatically Display/Retrieve Box		Empty Text Box

Parenteral Nutrition Module Legend			
	Verification Prescription		Preparation Prescription
	Dispensing		Edit and Print Label
	Outsource Product		Calculate
	Generate Worksheet		Release Batch
	Discard Batch		Search History
	Nutritional Assessment		Cancel Button
	Calorie Calculator		Calculate
	Hold Button		Auto allocation
	Sent Outsource Request		

Note

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

3. Parenteral Nutrition (PN)

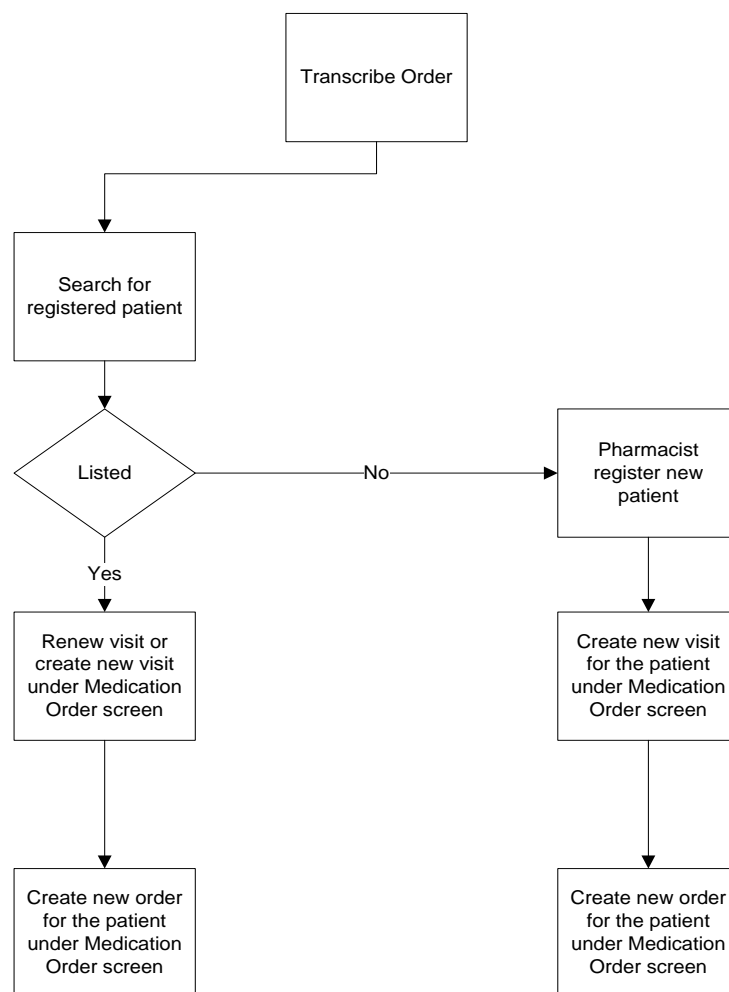
Overview

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

User Group

This module is intended for Authorized Pharmacist

Transcribe Order



Transcribe Order Process Flow

Functional Diagram

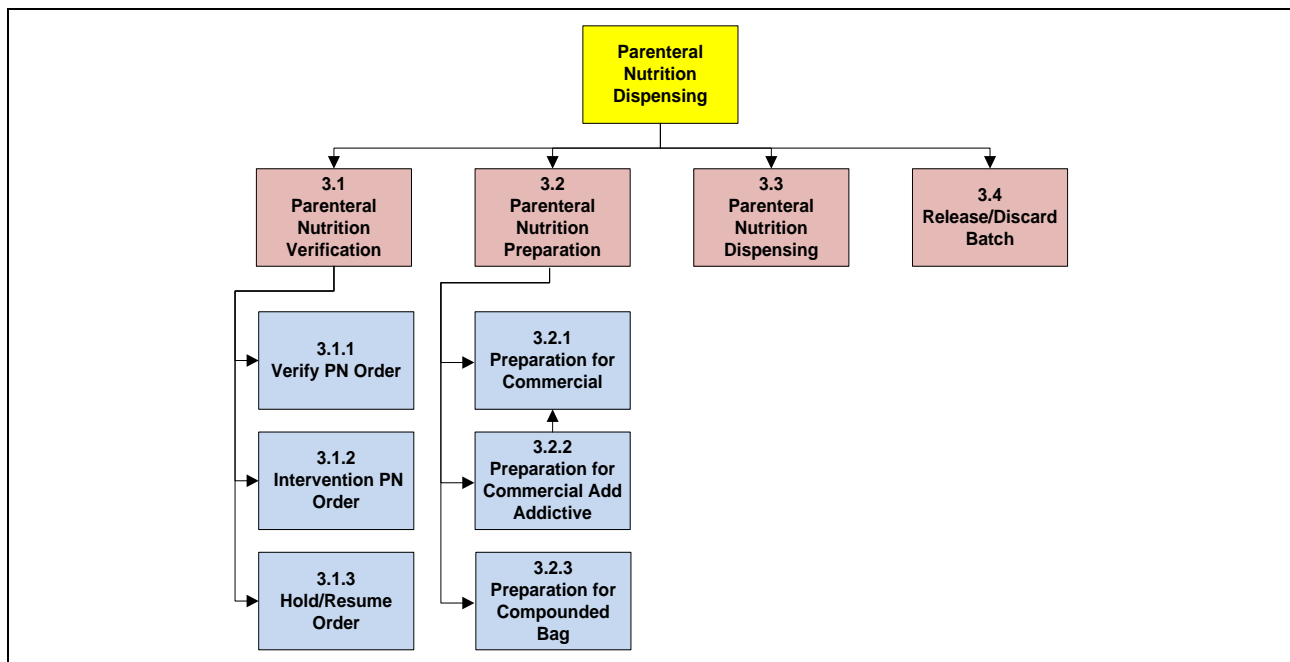


Figure 3.0-1

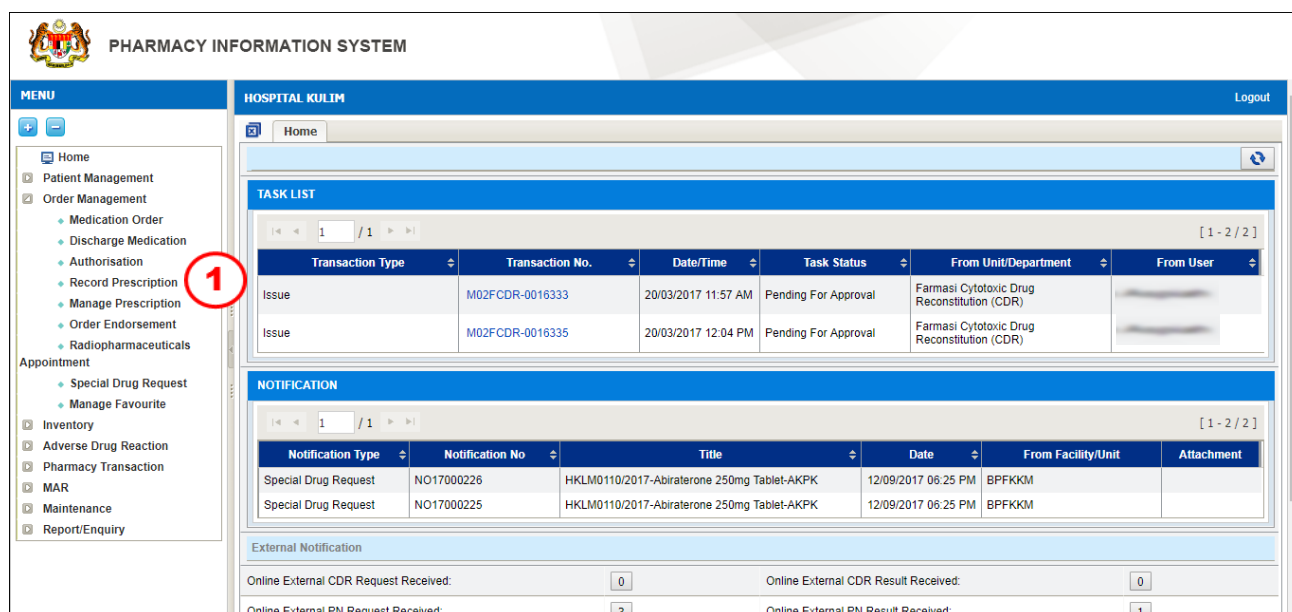
Functional Description

Parenteral Nutrition (PN) comprises of four (4) main functions:

- Verification**
 Verification is for pharmacist to verify the prescriptions received from transcribe order. This process is mandatory for all prescriptions receive before the user can proceed with dispensing preparation
- Preparation**
 The prescription and the drug preparation are made in the system that may integrate with inventory system. Professionals access system data directly with no need to send files or manual drug labeling.
- Dispensing**
 The prescription and the dispensing report are made in the system that may integrate with inventory system.
- Release/Discard Batch**
 Allow the user to release/discard the drug reserved for the patient back into inventory. User need to release this drug in order for it to be available in the drug inventory list.

3.1 Search Registered Patient

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



PHARMACY INFORMATION SYSTEM

HOSPITAL KULIM Logout

Home

TASK LIST

Transaction Type	Transaction No.	Date/Time	Task Status	From Unit/Department	From User
Issue	M02FCDR-0016333	20/03/2017 11:57 AM	Pending For Approval	Farmasi Cytotoxic Drug Reconstitution (CDR)	
Issue	M02FCDR-0016335	20/03/2017 12:04 PM	Pending For Approval	Farmasi Cytotoxic Drug Reconstitution (CDR)	

NOTIFICATION

Notification Type	Notification No	Title	Date	From Facility/Unit	Attachment
Special Drug Request	NO17000226	HKLM0110/2017-Abiraterone 250mg Tablet-AKPK	12/09/2017 06:25 PM	BPFKKM	
Special Drug Request	NO17000225	HKLM0110/2017-Abiraterone 250mg Tablet-AKPK	12/09/2017 06:25 PM	BPFKKM	

External Notification

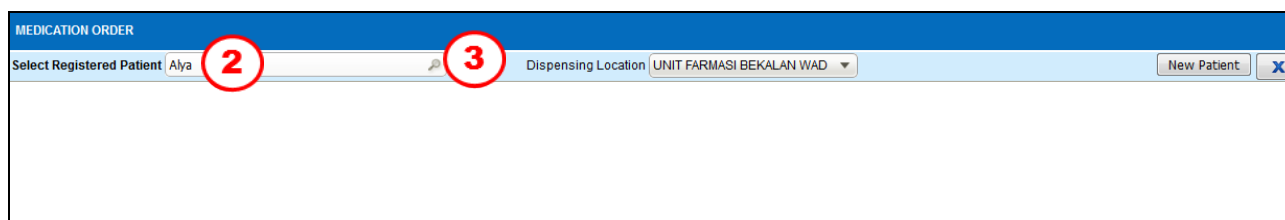
Online External CDR Request Received:	0	Online External CDR Result Received:	0
Online External PN Request Received:	3	Online External PN Result Received:	1

Figure 3.1-1 PhIS Home page

This page is used to search for a registered patient

STEP 1

Click on 'Order Management' menu followed by 'Record Prescription' and screen will be displayed as per Figure 3.1-1



MEDICATION ORDER

Select Registered Patient:


Dispensing Location:

Figure 3.1-2 Medication Order

STEP 2

Enter registered patient name

STEP 3

Click on the  button to search for a registered patient

Note

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

MEDICATION ORDER

Select Registered Patient: Dispensing Location:

Patient Search

1 < 5 / 5 > [41 - 46 / 46]

MRN Number	ID Number	Patient Name
HPSF00029460	860225015124M	NUR ALYA ADRIANA BT MOHD AZRI
HPSF00029472	800615016160	B/O SALYANTI BINTI MD SALEH
HPSF00030656	S2166223B	KAMALAMKHI D/O N KALYAPARMAL
HPSF00031200	080526010194	PUTRI NUR ALYA ZAHIRAH BINTI MUHAMMAD NURHAFFIQ
HPSF00031804	061202011138	ALYA NATASHA BINTI KHALID
HPSF00031844	881024095052	NUR ALYA SOFEA SOO TENG

Figure 3.1-3 Search Patient

STEP 4


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

Note

- Click on the 'Renew Visit' hyperlink to renew a visit for the same location.
- Select the 'Visit Type' and 'Location' to create a new visit.
- Click on the button to access to 'Visit Management' screen.

MEDICATION ORDER

Select Registered Patient: Dispensing Location:

 **ALYA NATASHA BINTI KHALID** MyKid: Age: Gender: MRN:

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

Height: cm Weight: kg BMI/BSA: m² (Last Updated: 17/07/2014)

[Lab Results](#) [Counselling History](#) [Demographic](#) [Pharmacist Notes](#) [Medication Profile](#) [Other Appointment](#)

VISIT/ADMISSION

Encounter No: Visit Type: Location: Department:

☐ Breast Feeding ☐ Pregnant Weeks

1 / 1

Encounter No	Visit/Admission Date	Visit Type	Visit Location	Discharge Date	Renew Visit
0214	17/07/2014	Outpatient	KLINIK PAKAR KANAK-KANAK		Renew Visit

PARTIAL SUPPLY

1 / 1

Order Date	Order Location	Prescription No	Next Collection Date	Next Collection Mode	Prescription Status
No Records Found!					

Figure 3.1-4 Medication Order Screen

MEDICATION ORDER

Select Registered Patient: HPSF00031804 Dispensing Location: UNIT FARMASI BEKALAN WAD New Patient

ALYA NATASHA BINTI KHALID MyKid: 061202011138 Age: 07 Years 08 Months 24 Days Gender: Female MRN: HPSF00031804

Address: Phone And Email: Diagnosis: No known Allergies

Height: cm Weight: kg BMI/BSA: 0/0 m² Update (Last Updated: 17/07/2014)

Upload Photo

[Lab Results](#) [Counselling History](#) [Demographic](#) [Pharmacist Notes](#) [Medication Profile](#) [Other Appointment](#)

VISIT/ADMISSION

Encounter No: Visit Type: Outpatient Location: KLINIK PAKAR ORTOPEDIK Department: Orthopaedic and Traur Clear Save Visit Management Patient Label

☐ Breast Feeding ☐ Pregnant Weeks

Encounter No	Visit/Admission Date	Visit Type	Visit Location	Discharge Date	Renew Visit
0214	17/07/2014	Outpatient	KLINIK PAKAR KANAK-KANAK		Renew Visit

PARTIAL SUPPLY

Order Date	Order Location	Prescription No	Next Collection Date	Next Collection Mode	Prescription Status
No Records Found!					

Figure 3.1-5 Visit/Admission Detail

STEP 5

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

MEDICATION ORDER

Select Registered Patient: HPSF00031804 Dispensing Location: UNIT FARMASI BEKALAN WAD New Patient

ALYA NATASHA BINTI KHALID MyKid: 061202011138 Age: 07 Years 08 Months 24 Days Gender: Female MRN: HPSF00031804

Address: Phone And Email: Diagnosis: No known Allergies

Height: cm Weight: kg BMI/BSA: 0/0 m² Update (Last Updated: 26/08/2014)

Upload Photo

[Lab Results](#) [Counselling History](#) [Demographic](#) [Pharmacist Notes](#) [Medication Profile](#) [Other Appointment](#)

VISIT/ADMISSION

Encounter No: 0434 Visit Type: Outpatient Location: KLINIK PAKAR KANAK-KANAK Department: Paediatric Medicine Clear Visit Management Patient Label

☐ Breast Feeding ☐ Pregnant Weeks

PARTIAL SUPPLY

VISIT RECORD

Original Prescriber Name: Original Order Transaction Number:

NORMAL ORDER - DRUG DETAILS

View Prescription Draft Confirm

Drug	Dosage	Admin Route	Frequency	Duration	Order Quantity	Start Date / Time	End Date / Time	Drug Indication	Drug Remarks	Available Qty
						26/08/2014 11:45 AM	26/08/2014 11:45 AM			

Advanced Search Alert Drug Name Order Details Order Qty Drug Info

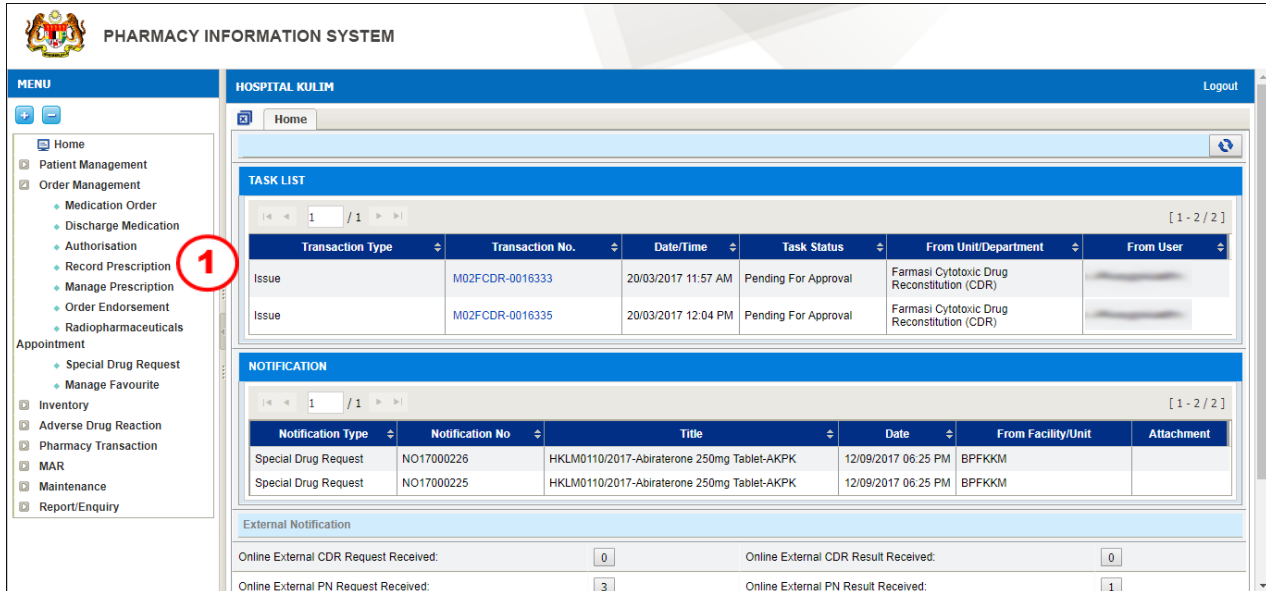
☐ Own Medication ☐ Ward Stock ☐ Patient Require Counselling

Add Modify Clear

Figure 3.1-6 Medication Order Detail

3.2 New Patient Registration

This page is used to register new patient



PHARMACY INFORMATION SYSTEM

MENU

- Home
- Patient Management
- Order Management
 - Medication Order
 - Discharge Medication
 - Authorisation
 - Record Prescription
 - Manage Prescription
 - Order Endorsement
 - Radiopharmaceuticals
- Appointment
 - Special Drug Request
 - Manage Favourite
- Inventory
- Adverse Drug Reaction
- Pharmacy Transaction
- MAR
- Maintenance
- Report/Enquiry

HOSPITAL KULIM

Home

TASK LIST

Transaction Type	Transaction No.	Date/Time	Task Status	From Unit/Department	From User
Issue	M02FCDR-0016333	20/03/2017 11:57 AM	Pending For Approval	Farmasi Cytotoxic Drug Reconstitution (CDR)	
Issue	M02FCDR-0016335	20/03/2017 12:04 PM	Pending For Approval	Farmasi Cytotoxic Drug Reconstitution (CDR)	

NOTIFICATION

Notification Type	Notification No	Title	Date	From Facility/Unit	Attachment
Special Drug Request	NO17000226	HKLM0110/2017-Abiraterone 250mg Tablet-AKPK	12/09/2017 06:25 PM	BPFKKM	
Special Drug Request	NO17000225	HKLM0110/2017-Abiraterone 250mg Tablet-AKPK	12/09/2017 06:25 PM	BPFKKM	

External Notification

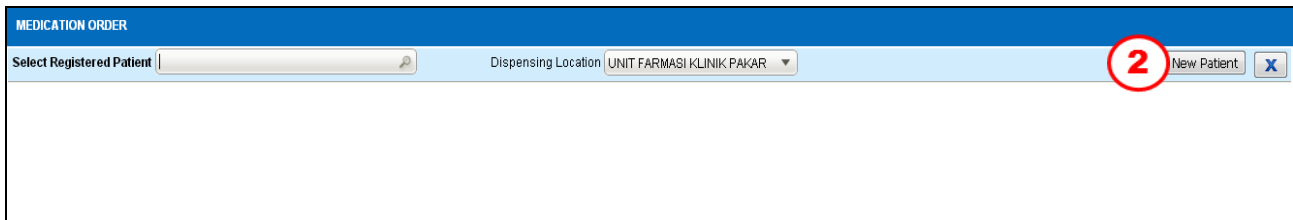
Online External CDR Request Received:	0	Online External CDR Result Received:	0
Online External PN Request Received:	3	Online External PN Result Received:	1

Figure 3.2-1 PhIS Home Page

To register a new patient, please perform the steps below

STEP 1

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



MEDICATION ORDER

Select Registered Patient:

Dispensing Location: UNIT FARMASI KLINIK PAKAR

New Patient

Figure 3.2-2 Transcribe Order Create New Patient

STEP 2

Click on the **New Patient** to register for new patient

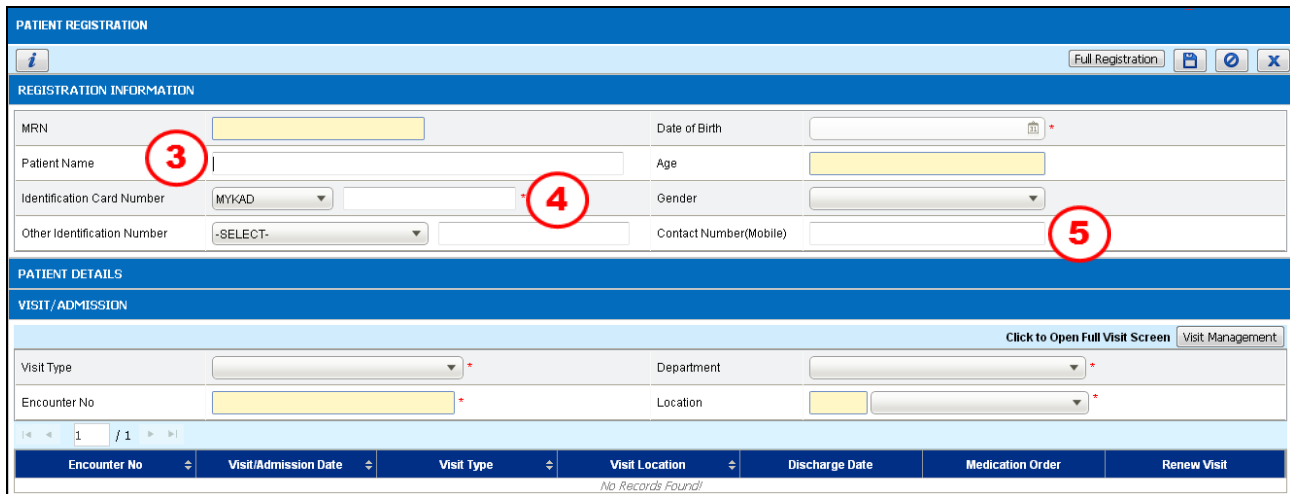


Figure 3.2-3 Registration Information

STEP 3

Enter **Patient Name**

STEP 4

Select from **Identification Card Number** drop down box:

- MYKAD
- MYKID

and enter the relevant number

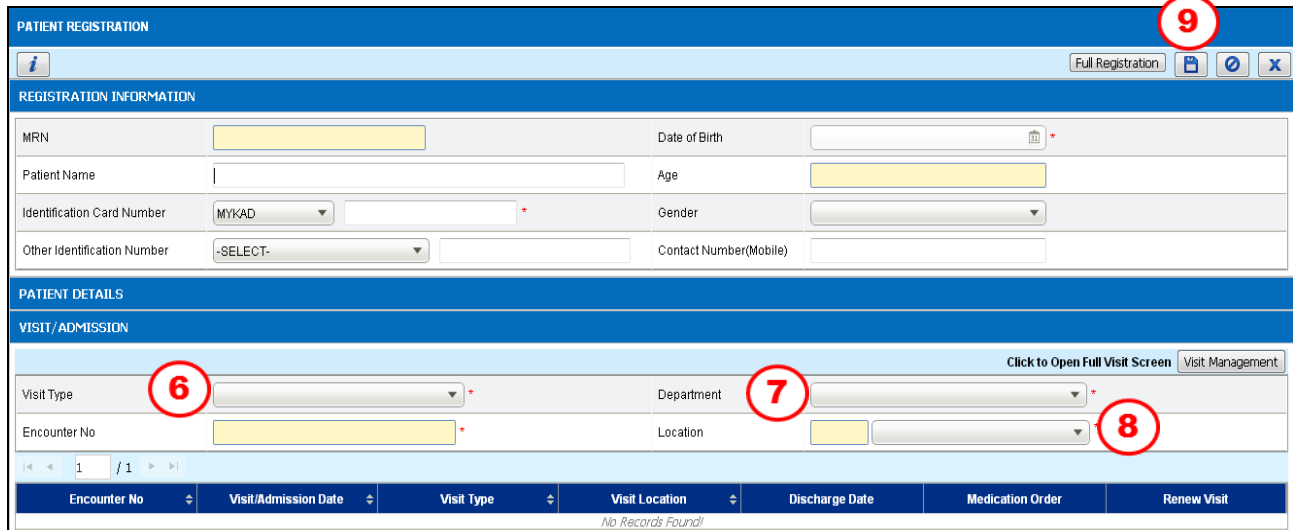
Note

- After enter the **Identification Card Number** the below details will be displayed:
 - Date of Birth (dd/mm/yy)
 - Age (42Y 05M 21D)
 - Gender (Male/Female)
- If MYKAD/MYKID is unavailable, user is required to select the **Other Identification Number** dropdown box:
 - BIRTH CERTIFICATE
 - DRIVING LICENSE
 - FATHER IC
 - MILITARY CARD NUMBER
 - MOTHER IC
 - OLD IC
 - PASSPORT
 - PENSION CARD
 - POLICE CARD NUMBER
 - UNKNOWN PATIENT
 - WORK PERMIT

and enter the relevant number.

STEP 5

Enter **Contact Number (Mobile)**



The screenshot shows the 'PATIENT REGISTRATION' form. It is divided into two main sections: 'REGISTRATION INFORMATION' and 'PATIENT DETAILS'. The 'REGISTRATION INFORMATION' section includes fields for MRN, Date of Birth, Patient Name, Age, Identification Card Number (with a MYKAD dropdown), Gender, Other Identification Number (with a -SELECT- dropdown), and Contact Number (Mobile). The 'PATIENT DETAILS' section includes a 'VISIT/ADMISSION' sub-section with fields for Visit Type, Department, Encounter No, and Location. Red circles are placed over the Visit Type dropdown (6), the Department dropdown (7), the Location dropdown (8), and the top right corner of the form (9). The bottom of the form shows a table with columns: Encounter No, Visit/Admission Date, Visit Type, Visit Location, Discharge Date, Medication Order, and Renew Visit. The table currently shows 'No Records Found'.

Figure 3.2-4 Visit/Admission

STEP 6

Select the **Visit Type** from dropdown box:

- Daycare
- Emergency
- Inpatient
- Outpatient
- Outsource
- SPUB
- Walk-in

STEP 7

Select the **Department** from dropdown box

Note

Department will tie to the selected visit type.

STEP 8

Select **Location** from dropdown box




Note

Location will tie to the selected Department.

STEP 9

Click on the  button to save the record

Note

- After click the save button, system will automatically generate the **MRN** (Medical Record Number) and ,  and  buttons will be enabled.

- Click on the **Full Registration** button to access to 'Visit Management' screen.
- Another option to register a new patient is to click on the **New Patient Registration** button located under Patient Quick Registration that will display the same screen as Figure 3.2-3.






PATIENT REGISTRATION						
<div>  <div>Full Registration</div> <div>+</div> <div></div> <div></div> <div></div> <div></div> </div>						
REGISTRATION INFORMATION						
MRN	HPSF00032105		Date of Birth	05/05/1965		
Patient Name	JAILANI BIN YUSUF		Age	49Y 02M 30D		
Identification Card Number	MYKAD	650505015233	Gender	MALE		
Other Identification Number	-SELECT-		Contact Number(Mobile)	0196743124		
PATIENT DETAILS						
VISIT/ADMISSION						
					Click to Open Full Visit Screen Visit Management	
Visit Type			Department			
Encounter No			Location			
<div> <div>1</div> <div>/ 1</div> </div>						
Encounter No	Visit/Admission Date	Visit Type	Visit Location	Discharge Date	Medication Order	Renew Visit
0003	04/08/2014	Outpatient	KLINIK PAKAR ORTOPEDIK		Create Order <div>10</div>	Renew Visit

Figure 3.2-5 Patient Registration

STEP 10

Click on the [Create Order](#) hyperlink and the 'Medication Order' screen will be displayed as per Figure 3.2-6

MEDICATION ORDER

Select Registered Patient

HPSF00032191

Dispensing Location

New Patient

X

AZLEEN BINTI ISMAIL

Mykad 750509145804

Age 39 Years 04 Months 24 Days

Gender Female

MRN HPSF00032191

Address

Phone And Email

Diagnosis

No known Allergies

Height 158 cm

Weight 57 kg

BMI/BSA 22.8 / 1.6 m²

Update (Last Updated :)

Upload Photo

Lab Results Counselling History Demographic Pharmacist Notes Medication Profile Other Appointment

VISIT/ADMISSION

Encounter No 0763

Visit Type Outpatient

Location KLINIK PAKAR ORTOPEDIK

Department Orthopaedic and Traum

Clear

Visit Management

Patient Label

Breast Feeding

Pregnant

Weeks

VISIT RECORD

Original Prescriber Name

Original Order Transaction Number

Clinic TCA

Patient Diagnosis

Allergy

Adverse Drug Reaction

Nutritional Assessment

Normal Order

Infusion Order

Parenteral Nutrition

Cytotoxic Drug Reconstitution

Therapeutic Drug Monitoring

Radiopharmaceuticals

NORMAL ORDER - DRUG DETAILS

View Order

Draft

Confirm

Drug

Advanced Search

Dosage

0

Admin Route

Frequency

Dosage Schedule

Duration

Start Date / Time

02/10/2014 11:55 AM

End Date / Time

02/10/2014 11:55 AM

Order Quantity

0

Drug Indication

Drug Remarks

Available Qty

Own Medication

Ward Stock

Patient Require Counselling

Add

Modify

Clear

Figure 3.2-6 Medication Order Details

4.0 Parenteral Nutrition (PN) Transcribe Order, Verify, Prepare and Dispense

Verification is for pharmacist to verify the prescriptions received from order management. In this stage, user has an option to do an intervention and hold/resume function.

4.1 Nutritional Assessment

To do nutritional assessment for new patient or existing patient's

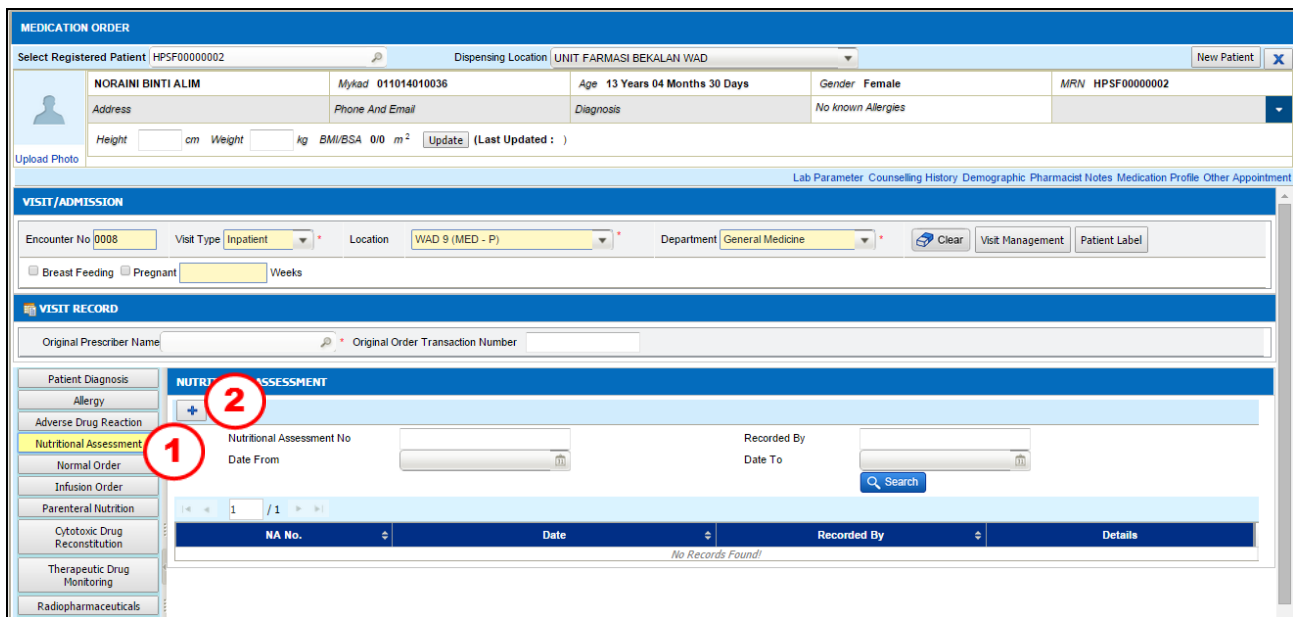


Figure 4.1-1 Nutritional Assessment

Nutritional Assessment allow user to record all nutritional assessment for new patient and existing patient

STEP 1

Click on the **Nutritional Assessment** button to do nutritional assessment for new patient or existing patient's

STEP 2

Click on the  button to add new nutritional assessment record

NUTRITIONAL ASSESSMENT			
NUTRITIONAL RISK SCREENING			
Initial Screening			
1. Is BMI < 20.5 ?		<input type="radio"/> Yes <input type="radio"/> No	
2. Has the patient lost weight within the last 3 months ?		<input type="radio"/> Yes <input type="radio"/> No	
3. Has the patient had a reduced dietary intake in the last week ?		<input type="radio"/> Yes <input type="radio"/> No	
4. Is the patient severely ill ? (e.g. in intensive therapy)		<input type="radio"/> Yes <input type="radio"/> No	
<p>Yes: If the answer is 'Yes' to any question, the final screening is performed.</p> <p>No: If the answer is 'No' to any question, the patient is re-screened at weekly intervals. If the patient e.g. is scheduled for a major operation, a preventive nutritional care plan is considered to avoid the associated risk status.</p>			
FINAL SCREENING			
Impaired nutritional status		Severity of disease	
Score		Score	
Note:			
Absent:	Normal nutritional status	Absent:	Normal nutritional status
Mild:	Wt loss > 5% in 3 mths or Food intake below 50-75% of normal requirement in preceding week	Mild:	Hip fracture* Chronic patients, in particular with acute complications: cirrhosis*, COPD*, Chronic hemodialysis, diabetes, oncology
Moderate:	Wt loss > 5% in 2 mths or BMI 18.5-20.5 + impaired general condition or Food intake 25-50% of normal requirement in preceding week	Moderate:	Major abdominal surgery* Stroke* Severe pneumonia, hematologic malignancy
Severe:	Wt loss 45% in 1 mth (> 15% in 3mths) or BMI < 18.5 + impaired general condition or Food intake 0-25% of normal requirement in preceding week in preceding week	Severe:	Head injury* Bone marrow transplantation* Intensive care patients (APACHE410)
Total Score			

Figure 4.1-2 Nutritional Assessment

Note

- Answer all question by selecting "Yes" or "No" for **Nutritional Risk Screening**.
- User have to select the **Impaired Nutritional Status** from the dropdown menu:
 - Absent
 - Mild Score
 - Moderate Score
 - Severe Score
- User have to select the **Severity of Disease** from the dropdown menu:
 - Absent
 - Mild Score
 - Moderate Score
 - Severe Score
- **Total Score** for final screening will automatically calculate and display by system.

NUTRITIONAL ASSESSMENT

Total Score :

if Age is \geq 70 years, total score above is inclusive +1

Score \geq 3: the patient is nutritionally at-risk and a nutritional care plan is initiated

Score < 3: weekly rescreening of the patient. If the patient e.g. is scheduled for a major operation, a preventive nutritional care plan is considered to avoid the associated risk status.

SGA HISTORY (Subjective Global Assessment of Nutritional Status HISTORY)

1. Weight change

Overall in past 6 months: kg % loss:

Change in past 2 weeks:

2. Dietary intake change: ☐ Yes ☐ No

3. Gastrointestinal symptoms(persisted>2 weeks)

☐ Nausea ☐ Loss of Appetite
☐ Vomiting ☐ Diarrhea

4. Functional Capacity ☐ No Dysfunction ☐ Dysfunction

PHYSICAL EXAMINATION

Specify for each sign: 0=normal 1=light 2=moderate 3-serious

Loss of subcutaneous fat (triceps, chest)
 Loss of muscle mass (quadriceps, femoris, deltoids, loss of bulk and tone detectable by palpation)
 Ankle edema
 Sacral edema
 Ascites

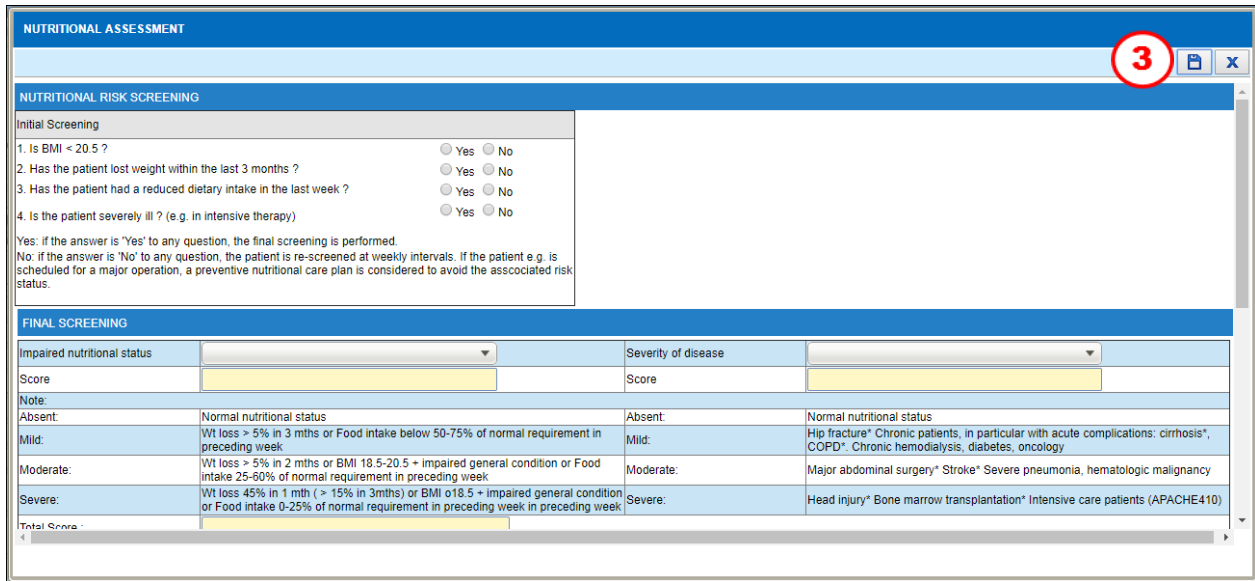
SGA score

Score Description:
A - Well nourished B - Malnourished C - Severe malnourished

Figure 4.1-3 Nutritional Assessment

Note

- All fields for 'SGA - Subjective Global Assessment of Nutritional Status (HISTORY)' section has to be entered by user.
- All field for 'Physical Examination' section has to be entered by user.



NUTRITIONAL ASSESSMENT

NUTRITIONAL RISK SCREENING

Initial Screening

1. Is BMI < 20.5 ? ☐ Yes ☐ No

2. Has the patient lost weight within the last 3 months ? ☐ Yes ☐ No

3. Has the patient had a reduced dietary intake in the last week ? ☐ Yes ☐ No

4. Is the patient severely ill ? (e.g. in intensive therapy) ☐ Yes ☐ No


Yes: If the answer is 'Yes' to any question, the final screening is performed.
No: If the answer is 'No' to any question, the patient is re-screened at weekly intervals. If the patient e.g. is scheduled for a major operation, a preventive nutritional care plan is considered to avoid the associated risk status.

FINAL SCREENING

Impaired nutritional status	Severity of disease
Score	Score
<p>Note:</p> <p>Absent: Normal nutritional status</p> <p>Mild: Wt loss > 5% in 3 mths or Food intake below 50-75% of normal requirement in preceding week</p> <p>Moderate: Wt loss > 5% in 2 mths or BMI 18.5-20.5 + impaired general condition or Food intake 25-60% of normal requirement in preceding week</p> <p>Severe: Wt loss 45% in 1 mth (> 15% in 3mths) or BMI < 18.5 + impaired general condition or Food intake 0-25% of normal requirement in preceding week</p>	

Figure 4.1-4 Nutritional Assessment

STEP 3

Click on the  button to save record and alert message will be displayed as per Figure 4.1-5.

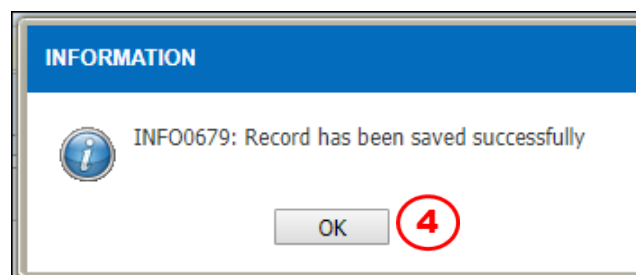


Figure 4.1-5 Information Alert Message

STEP 4

Click on the  button and 'Nutritional Assessment' listing screen will be displayed as per Figure 4.1-6.

MEDICATION ORDER

Select Registered Patient

HP5F00000002

Dispensing Location

UNIT FARMASI BEKALAN WAD

New Patient

X

NORAINI BINTI ALIM

Mykad 011014010036

Age 13 Years 04 Months 30 Days

Gender Female

MRN HP5F00000002

Address

Phone And Email

Diagnosis

No known Allergies

Height 176 cm

Weight 58 kg

BMI/BSA 18.7 / 1.67 m²

Update (Last Updated : 13/03/2015)

Upload Photo

Lab Parameter Counseling History Demographic Pharmacist Notes Medication Profile Other Appointment

VISIT/ADMISSION

Encounter No 0008

Visit Type Inpatient

Location WAD 9 (MED - P)

Department General Medicine

Clear

Visit Management

Patient Label

Breast Feeding

Pregnant

Weeks

Clear Visit

VISIT RECORD

Original Prescriber Name Dr. Adrian Tay Cheong Lan

Original Order Transaction Number

Patient Diagnosis

Allergy

Adverse Drug Reaction

Nutritional Assessment

Normal Order

Infusion Order

Parenteral Nutrition

Cytotoxic Drug Reconstitution

Therapeutic Drug Monitoring

NUTRITIONAL ASSESSMENT

Nutritional Assessment No

Date From

Recorded By

Date To

Search

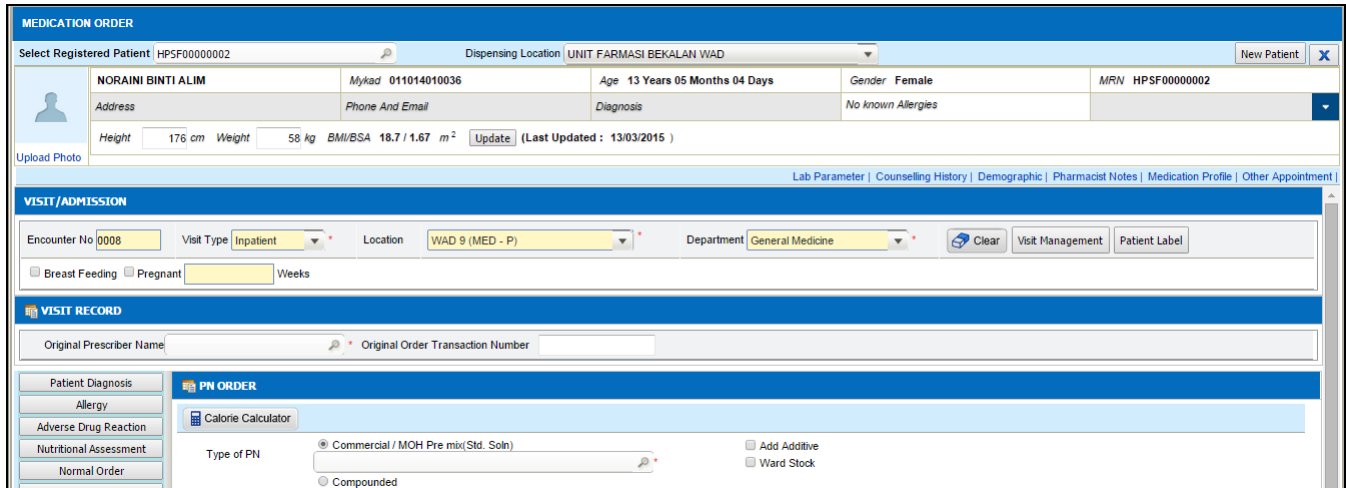
1 / 1

NA No.	Date	Recorded By	Details
NA15-03-0001	13/03/2015	Koh Chia Yan	NRS Total Score: 5, SGA Score: A - Well nourished

Figure 4.1-6 Nutritional Assessment Listing

4.2 Calorie Calculator


To calculate patient's calorie

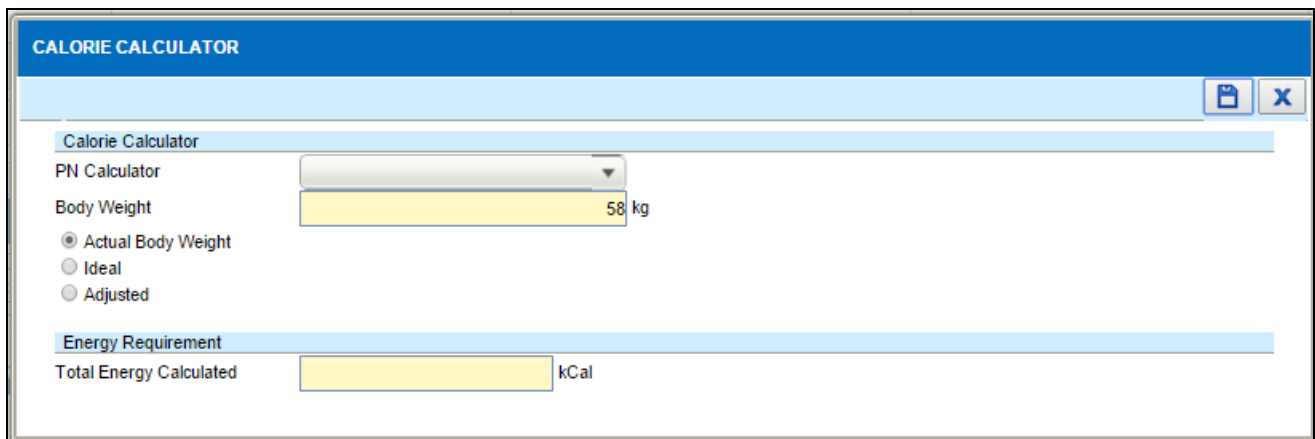


The screenshot shows the 'MEDICATION ORDER' form. At the top, it displays patient information: Select Registered Patient (HPSF0000002), Dispensing Location (UNIT FARMASI BEKALAN WAD), and a 'New Patient' button. Below this is a patient profile for NORAINI BINTI ALIM, including Mykad (011014010036), Age (13 Years 05 Months 04 Days), Gender (Female), MRN (HPSF0000002), Address, Phone And Email, Diagnosis, and No known Allergies. Physical attributes listed are Height (176 cm), Weight (58 kg), and BMI/BSA (18.7 / 1.67 m²). An 'Update' button is next to the BMI/BSA field, with a note '(Last Updated : 13/03/2015)'. Below the patient profile is a 'VITAT/ADMISSION' section with fields for Encounter No (0008), Visit Type (Inpatient), Location (WAD 9 (MED - P)), and Department (General Medicine). There are also checkboxes for 'Breast Feeding' and 'Pregnant' with a 'Weeks' field. A 'VITAT RECORD' section follows, with fields for 'Original Prescriber Name' and 'Original Order Transaction Number'. On the left, there is a sidebar with buttons for 'Patient Diagnosis', 'Allergy', 'Adverse Drug Reaction', 'Nutritional Assessment', and 'Normal Order'. The 'PN ORDER' section is highlighted, showing a 'Calorie Calculator' button. Below this, there are radio buttons for 'Type of PN': 'Commercial / MOH Pre mix (Std. Soln)' (selected), 'Compounded', 'Add Additive', and 'Ward Stock'.

Figure 4.2-1 Calorie Calculator

Note

- Calorie calculator allow user to calculate patient's calorie requirement.
- This value will be used as a guideline for user to order the required TPN order for patient.
- Click on the  button to calculate patient calorie.
- 'Calorie Calculator' screen will be displayed as per Figure 4.2-2.



The screenshot shows the 'CALORIE CALCULATOR' form. It has a title bar with a save icon and a close button. The form is divided into two main sections. The first section, 'Calorie Calculator', contains a 'PN Calculator' dropdown menu and a 'Body Weight' field with a value of 58 kg. Below this are three radio buttons: 'Actual Body Weight' (selected), 'Ideal', and 'Adjusted'. The second section, 'Energy Requirement', contains a 'Total Energy Calculated' field with a value of kCal.

Figure 4.2-2 Calorie Calculator

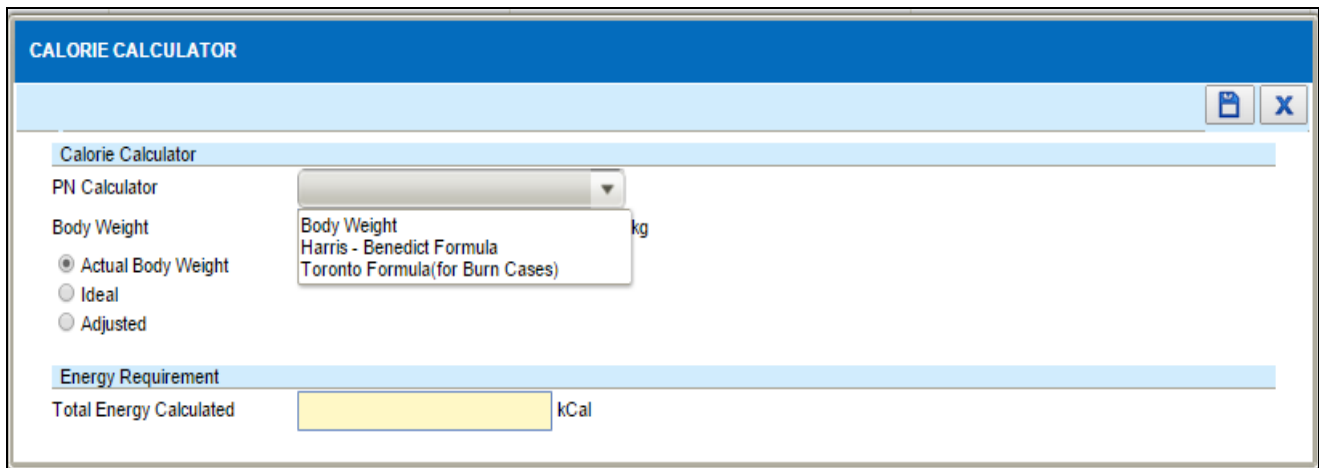
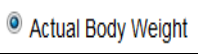
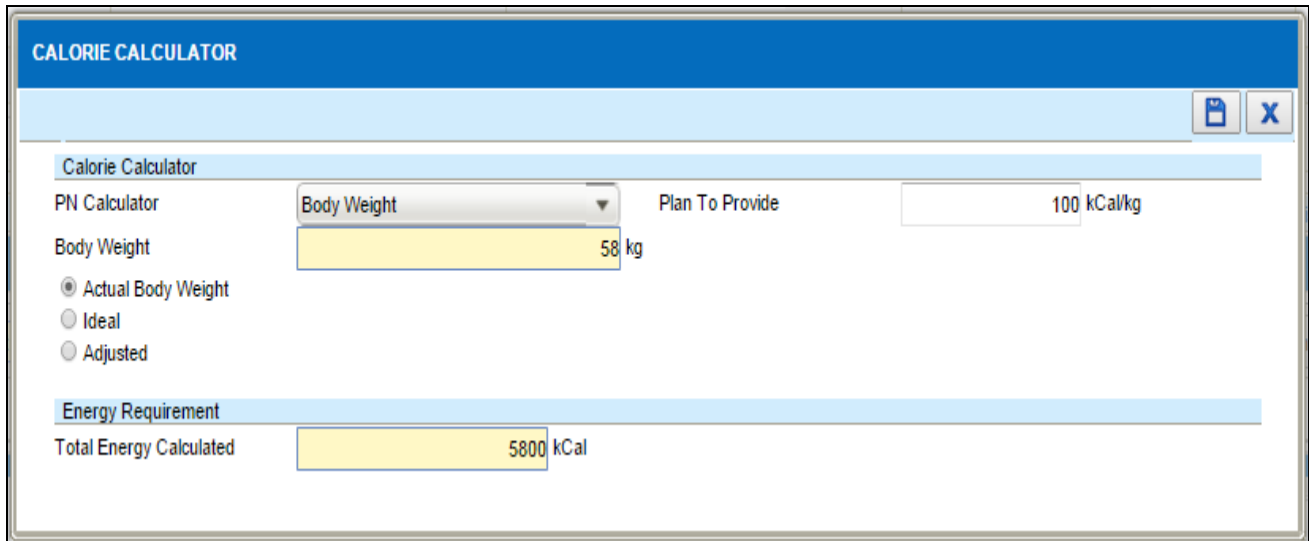


Figure 4.2-3 Calorie Calculator

Note

- By default the 'Body Weight' radio button will auto select the  of the patient.
- User have to select either one of the following 'Body Weight' radio button:
 - Actual Body Weight
 - Ideal
 - Adjusted
- Body Weight value will automatically display based on the information from 'Patient Banner'.
- There are three types of PN Calculator:
 - Body Weight
 - Harris-Benedict Formula
 - Toronto Formula(for Burn Cases)



CALORIE CALCULATOR

Calorie Calculator

PN Calculator: Body Weight (dropdown)

Plan To Provide: 100 kCal/kg

Body Weight: 58 kg

☒ Actual Body Weight
☐ Ideal
☐ Adjusted



Energy Requirement

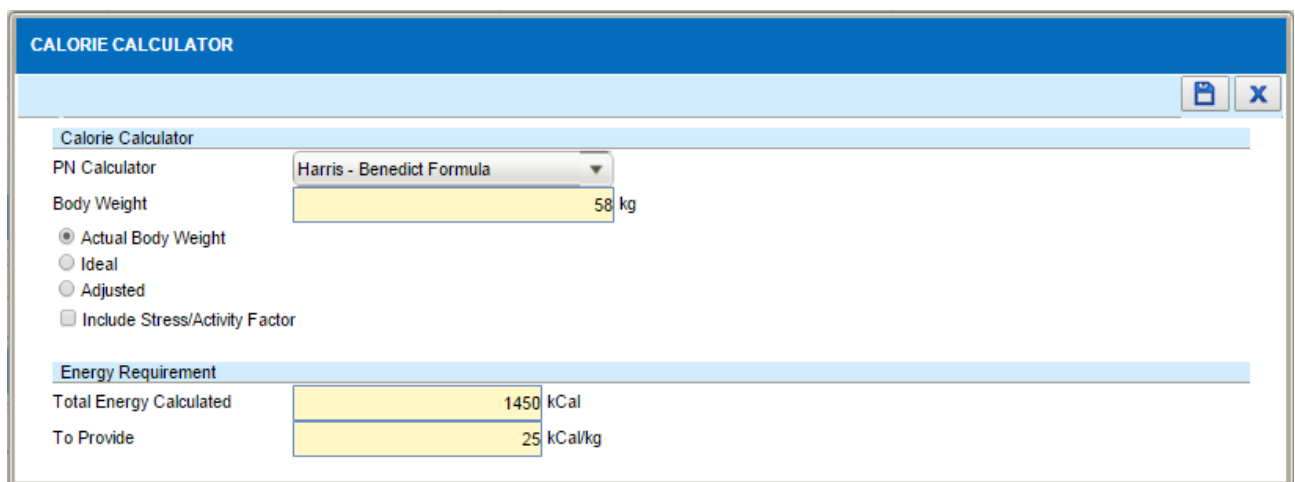
Total Energy Calculated: 5800 kCal

Figure 4.2-4 Calorie Calculator

Note

PN Calculator : Body Weight

- Select 'Body Weight' from 'PN Calculator' dropdown box.
- Enter the amount in 'Plan To Provide (kCal/kg)'.
- 'Total Energy Calculated' will be automatically calculated and displayed as per Figure 4.2-4.
- The  button to save record.
- The  button to close the screen.



CALORIE CALCULATOR

Calorie Calculator

PN Calculator: Harris - Benedict Formula (dropdown)

Body Weight: 58 kg

☒ Actual Body Weight
☐ Ideal
☐ Adjusted
☐ Include Stress/Activity Factor

Energy Requirement

Total Energy Calculated: 1450 kCal

To Provide: 25 kCal/kg

Figure 4.2-5 Calorie Calculator

Note

PN Calculator : Harris-Benedict Formula

- Select 'Harris – Benedict Formula' from 'PN Calculator' dropdown box.
- Select the ☒ 'Include Stress/Activity Factor' checkbox.
- 'Stress Factor', 'Activity Factor' and 'To Provide (kCal/kg)' will display after selected the 'Include Stress/ Activity Factor' checkbox as shown in Figure 4.2-6.

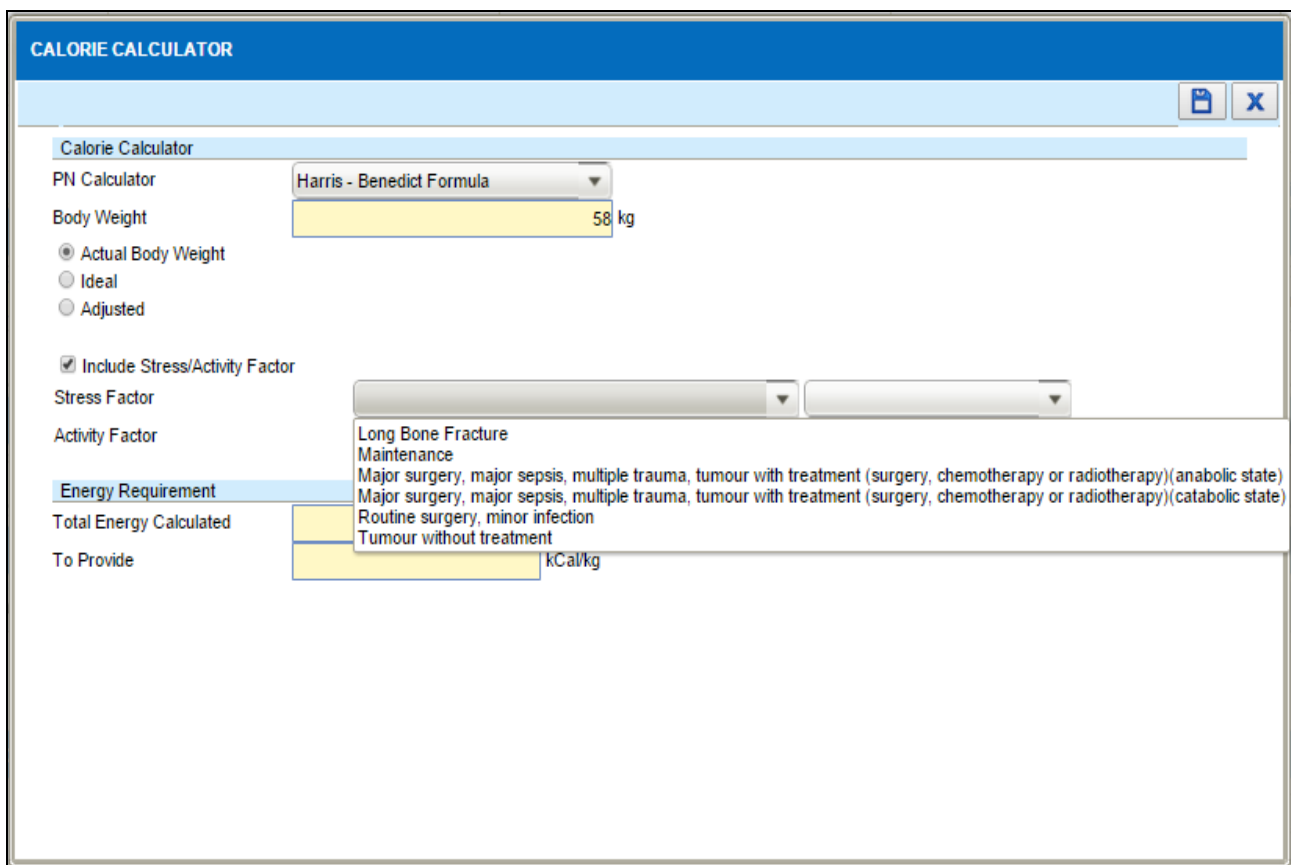


Figure 4.2-6 Calorie Calculator

Note

User have to select the type of 'Stress Factor' from the dropdown box:

- Long Bone Fracture.
- Maintenance.
- Major surgery, major sepsis, multiple trauma, tumour with treatment (surgery, chemotherapy or radiotherapy)(anabolic state).
- Major surgery, major sepsis, multiple trauma, tumour with treatment (surgery, chemotherapy or radiotherapy)(catabolic state).
- Routine surgery, minor infection.
- Tumour without treatment.

CALORIE CALCULATOR

Calorie Calculator

PN Calculator

Harris - Benedict Formula

Body Weight

58 kg

Actual Body Weight

Ideal

Adjusted

Include Stress/Activity Factor

Stress Factor

Long Bone Fracture

1.5

Activity Factor

Energy Requirement

Total Energy Calculated

kCal

To Provide

kCal/kg

Figure 4.2-7 Calorie Calculator

Note

Value of the 'Stress Factor' will be automatically calculated by system.

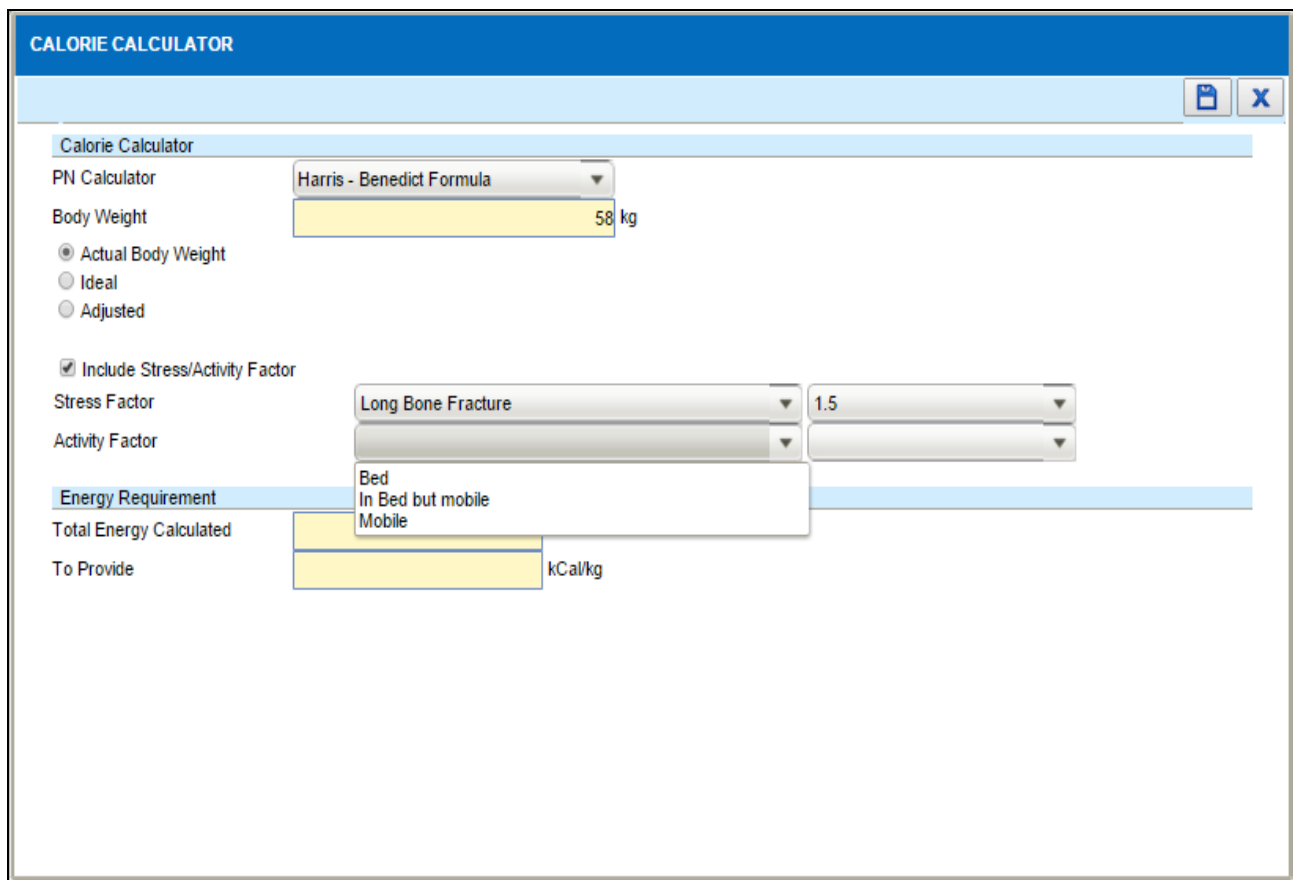


Figure 4.2-8 Calorie Calculator

Note

From the dropdown box user have to select type of 'Activity Factor' list which are:

- Bed
- In Bed but mobile
- Mobile

CALORIE CALCULATOR

Calorie Calculator

PN Calculator

Harris - Benedict Formula

Body Weight

58 kg

☒ Actual Body Weight
 ☐ Ideal
 ☐ Adjusted

☒ Include Stress/Activity Factor

Stress Factor

Long Bone Fracture

1.5

Activity Factor

Bed

1.1

Energy Requirement

Total Energy Calculated

2392.5 kCal

To Provide



41.2 kCal/kg

Save

Close

Figure 4.2-9 Calorie Calculator

Note

- Value of the 'Activity Factor' will be automatically calculated by system.
- Amount of 'Total Energy Calculated' and 'To Provide (kCal/kg)' will be automatically calculated after selected the 'Activity Factor' as per Figure 4.2-9.
- The  button to save record.
- The  button to close the screen.

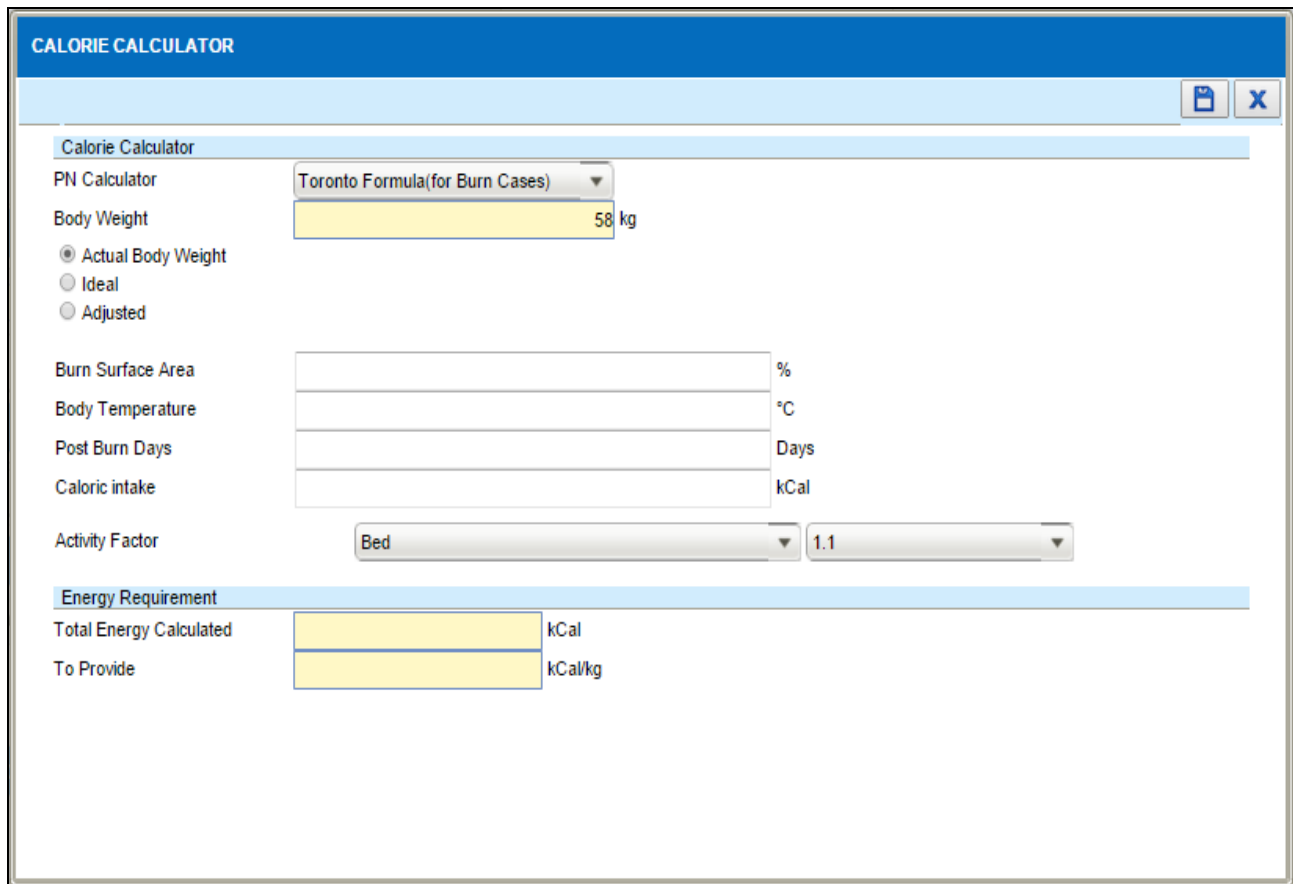




Figure 4.2-10 Calorie Calculator

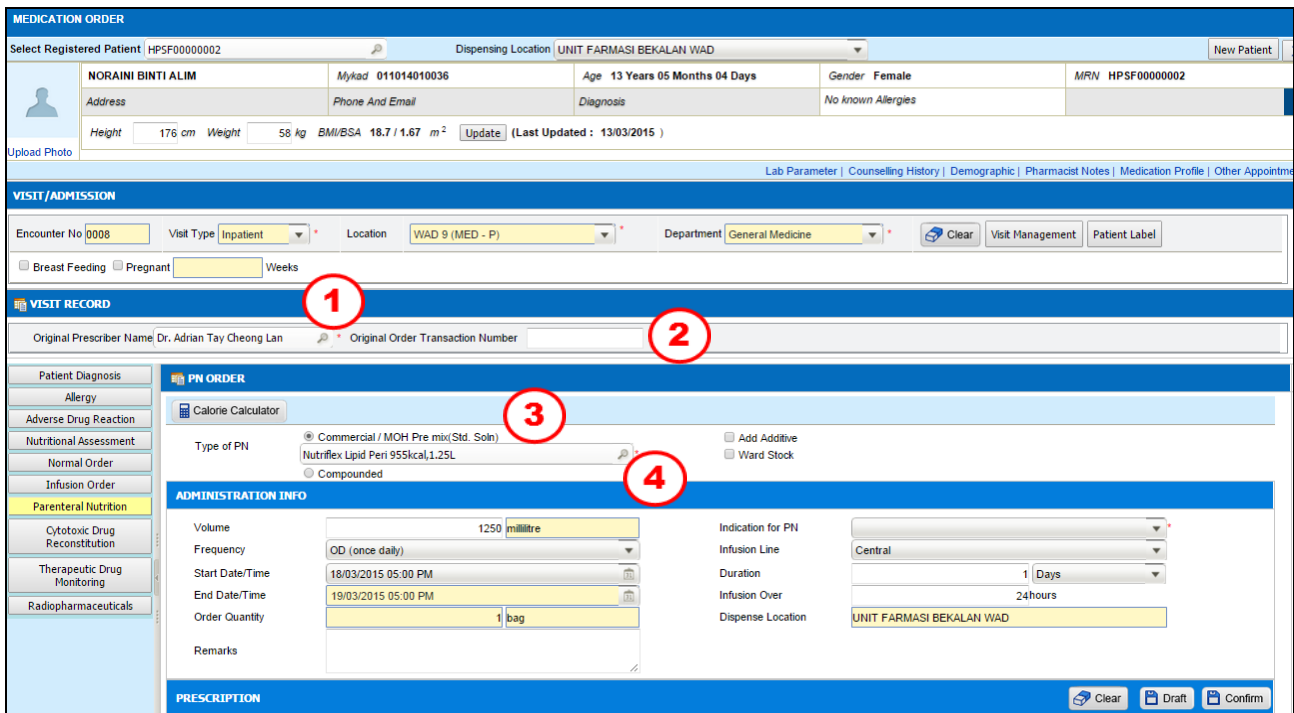
Note

PN Calculator : Toronto Formula

- Select 'Toronto Formula (for Burn Cases)' from 'PN Calculator' dropdown box.
- Enter fields as below:
 - Burn Surface Area
 - Body Temperature
 - Post Burn Days
 - Calorie Intake
- User have to select type of 'Activity Factor' from the dropdown box:
 - Bed
 - In Bed but mobile
 - Mobile
- Value of the 'Activity Factor' will be automatically calculated by system.

- *‘Total Energy Calculated’ and ‘To Provide (kCal/kg)’ will be automatically calculated after selected the ‘Activity Factor’ as per Figure 4.2-10.*
- The  button to save record.
- The  button to close the screen.

4.3 Commercial/MOH Pre mix (Std Soln)




The screenshot shows the 'MEDICATION ORDER' form. At the top, it displays patient information: NORAINI BINTI ALIM, Mykad 011014010036, Age 13 Years 05 Months 04 Days, Gender Female, MRN HPSF00000002. Below this is the 'VISIT/ADMISSION' section with fields for Encounter No (0008), Visit Type (Inpatient), Location (WAD 9 (MED - P)), and Department (General Medicine). The 'VIT RECORD' section shows the Original Prescriber Name (Dr. Adrian Tay Cheong Lan) and Original Order Transaction Number. The 'PN ORDER' section includes a 'Type of PN' dropdown menu with options: Commercial / MOH Pre mix(Std. Soln) (selected), Nutriflex Lipid Peri 955kcal,1.25L, and Compounded. The 'ADMINISTRATION INFO' section contains fields for Volume (1250 millilitre), Frequency (OD (once daily)), Start Date/Time (18/03/2015 05:00 PM), End Date/Time (19/03/2015 05:00 PM), Order Quantity (1 bag), Indication for PN, Infusion Line (Central), Duration (1 Days), Infusion Over (24hours), and Dispense Location (UNIT FARMASI BEKALAN WAD). The 'PRESCRIPTION' section at the bottom has buttons for Clear, Draft, and Confirm. Numbered annotations 1 through 4 point to the search icon for the prescriber name, the transaction number field, the 'Type of PN' dropdown, and the search icon for the product, respectively.

Figure 4.3-1 PN Order : Commercial

Commercial / MOH Pre Mix (Std. Soln) allow user to order ready made product from manufacturer or facility

STEP 1

Click on the  button to search for **Original Prescriber Name**

STEP 2

Enter the **Original Order Transaction Number**

STEP 3

Select on the ☒ **Commercial / MOH Pre mix(Std. Soln)** radio button for 'Type of PN'

STEP 4

Click on the  button to search for product


Drugs		
Drug Code	<input type="text"/>	<input type="button" value="Search"/>
Drug Name	<input type="text"/>	
1 / 1		
Drug Code	Drug Name	Details
PNA00012	Kabiven Central 1400kcal, 1.54L	Details
PNA00001	Nutriflex Lipid Peri 955kcal, 1.25L	Details
PNA00004	Nutriflex Lipid Plus 1265kcal, 1.25L	Details
PNP00010	PN Soln 10, Starter without K+, 48.3kcal	Details
PNP00020	PN Soln A 300ml High Sodium	Details
PNP00021	PN Soln B1, 400ml, Normal sodium Dext 10%	Details
PNP00022	PN Soln B2, 400ml Normal sodium, Dext 12%	Details

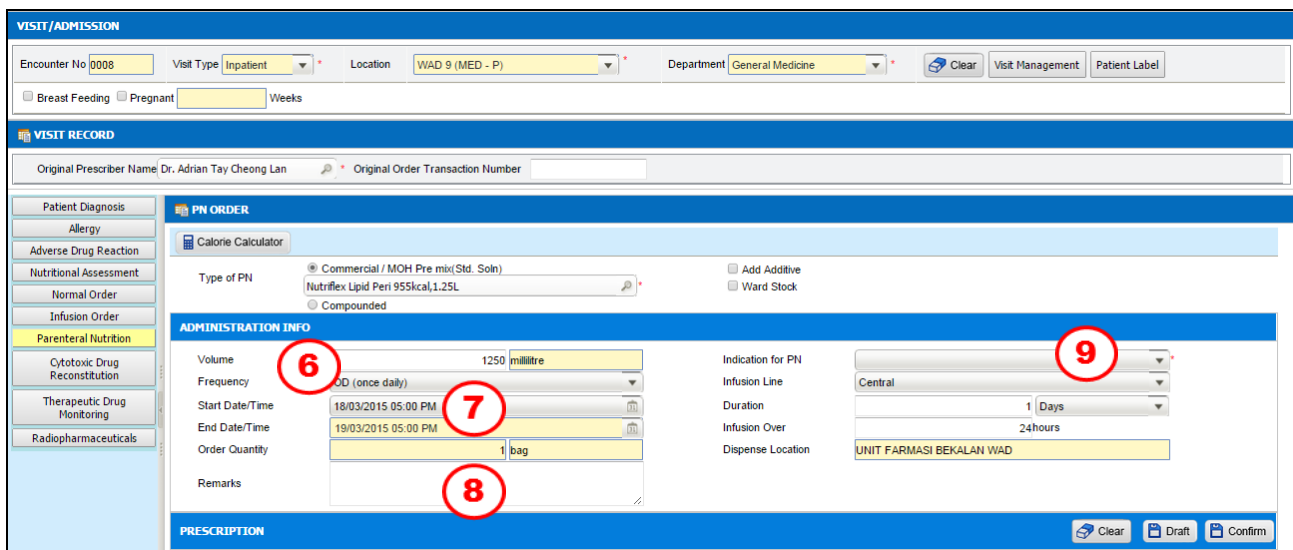
Figure 4.3-2 Drugs Listing

STEP 5

Select product that required for patient

Note

- To search for product record(s), user may search by criteria as follow:
 - Drug Code
 - Drug Name
- Click on the  button to search for the product.
- Click on the [Details](#) button to view product ingredients and content.



The screenshot shows the 'PN ORDER' form in the PhIS system. The form is divided into several sections: 'VISIT/ADMISSION', 'VISIT RECORD', 'PN ORDER', 'ADMINISTRATION INFO', and 'PRESCRIPTION'. The 'PN ORDER' section includes a 'Calorie Calculator' and a 'Type of PN' dropdown menu. The 'ADMINISTRATION INFO' section contains fields for 'Volume', 'Frequency', 'Start Date/Time', 'End Date/Time', 'Order Quantity', 'Remarks', 'Indication for PN', 'Infusion Line', 'Duration', 'Infusion Over', and 'Dispense Location'. Red circles are placed around specific fields: 6 is around the 'Volume' field, 7 is around the 'Frequency' field, 8 is around the 'Remarks' field, and 9 is around the 'Indication for PN' dropdown menu.

Figure 4.3-3 PN Order : Commercial

STEP 6

Enter **Volume** and select **Frequency** field

Note

- All information will be automatically displayed based on the information from PN Source Content and PN Constituents Reference Range.
- This field still can be change by the user if applicable.

STEP 7

Select **Start Date/Time**

Note

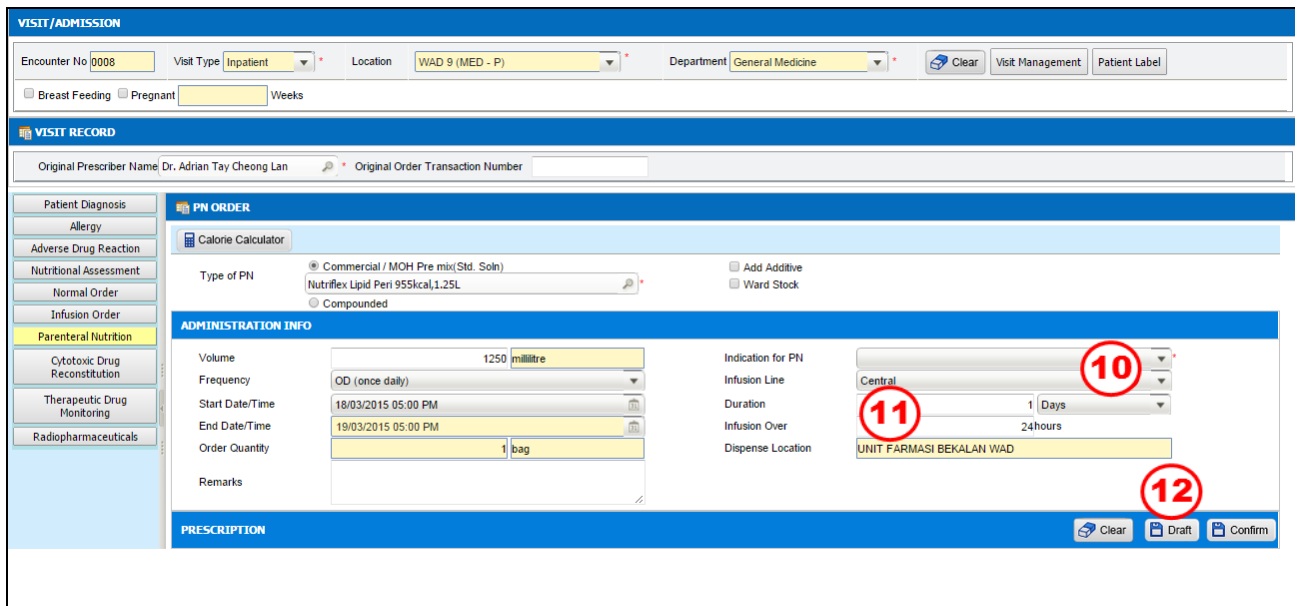
- **Start Date/Time** and will be automatically default to current date but still can be change by the user if applicable.
- **End Date/Time** will be displayed according to duration product given.
- **Order Quantity** will be automatically displayed and base on the information from PN Source Content and PN Constituents Reference Range.

STEP 8

Enter Remarks if applicable

STEP 9

Select Indication for PN from the dropdown menu



The screenshot shows the 'VISIT/ADMISSION' and 'PN ORDER' sections of the software. The 'PN ORDER' section includes a 'Type of PN' dropdown set to 'Commercial / MOH Pre mix (Std. Soln)', a 'Volume' field set to '1250 millilitre', and an 'Administration Info' section with fields for 'Indication for PN' (set to 'Central'), 'Infusion Line' (set to 'Central'), 'Duration' (set to '1 Days'), 'Infusion Over' (set to '24hours'), and 'Dispense Location' (set to 'UNIT FARMASI BEKALAN WAD'). Red circles with numbers 10, 11, and 12 highlight the 'Indication for PN', 'Duration', and 'Infusion Over' fields respectively. The 'Draft' button is also visible at the bottom right.

Figure 4.3-4 PN Order : Commercial

STEP 10

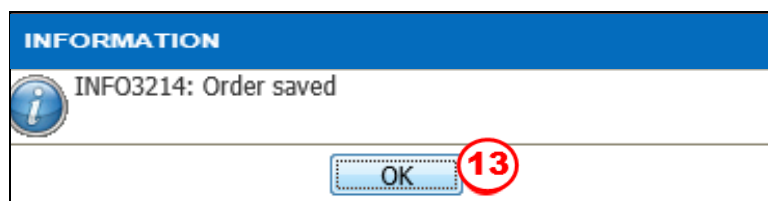
Select **Infusion Line** from drop down menu

STEP 11

Enter/select **Duration** and **Infusion Over** field

STEP 12

Click on the  button to save record and alert message will be displayed as per Figure 4.3-5

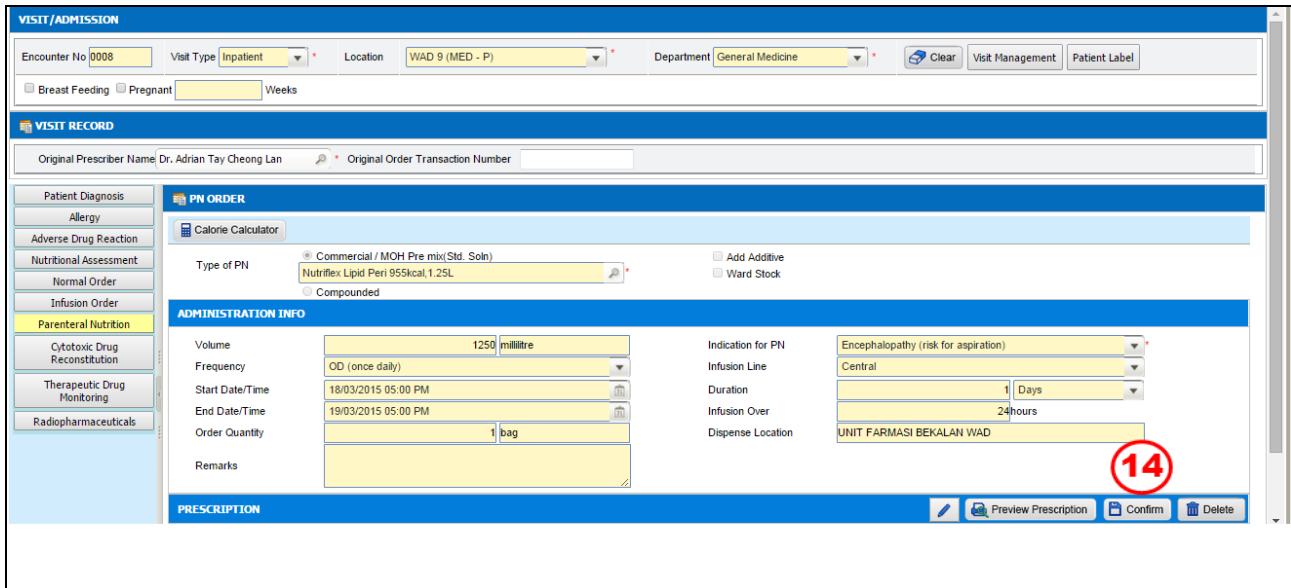


The screenshot shows an 'INFORMATION' dialog box with the message 'INFO3214: Order saved'. Below the message is an 'OK' button, which is highlighted with a red circle and the number 13.

Figure 4.3-5 Information Alert message

STEP 13

Click on the  button to save order record



VISIT/ADMISSION

Encounter No 0008 Visit Type Inpatient Location WAD 9 (MED - P) Department General Medicine

VISIT RECORD

Original Prescriber Name Dr. Adrian Tay Cheong Lan Original Order Transaction Number

PN ORDER

Calorie Calculator

Type of PN Commercial / MOH Pre mix (Std. Soln) Nutriflex Lipid Peri 955kcal, 1.25L

ADMINISTRATION INFO

Volume 1250 millilitre Frequency OD (once daily) Start Date/Time 18/03/2015 05:00 PM End Date/Time 19/03/2015 05:00 PM Order Quantity 1 bag

Indication for PN Encephalopathy (risk for aspiration) Infusion Line Central Duration 1 Days Infusion Over 24 hours Dispense Location UNIT FARMASI BEKALAN WAD

PRESCRIPTION



Preview Prescription Confirm Delete



Figure 4.3-6 PN Order : Commercial

STEP 14

Click on the C button to confirm prescription

Note

- User can directly click on  button to directly confirm order without clicking on  button first.

- Click on the  link and 'PN Order Details' screen will be displayed as per Figure 4.3-8.
- Click on the  link and 'PN Remarks' screen will be displayed as per Figure 4.3-9.

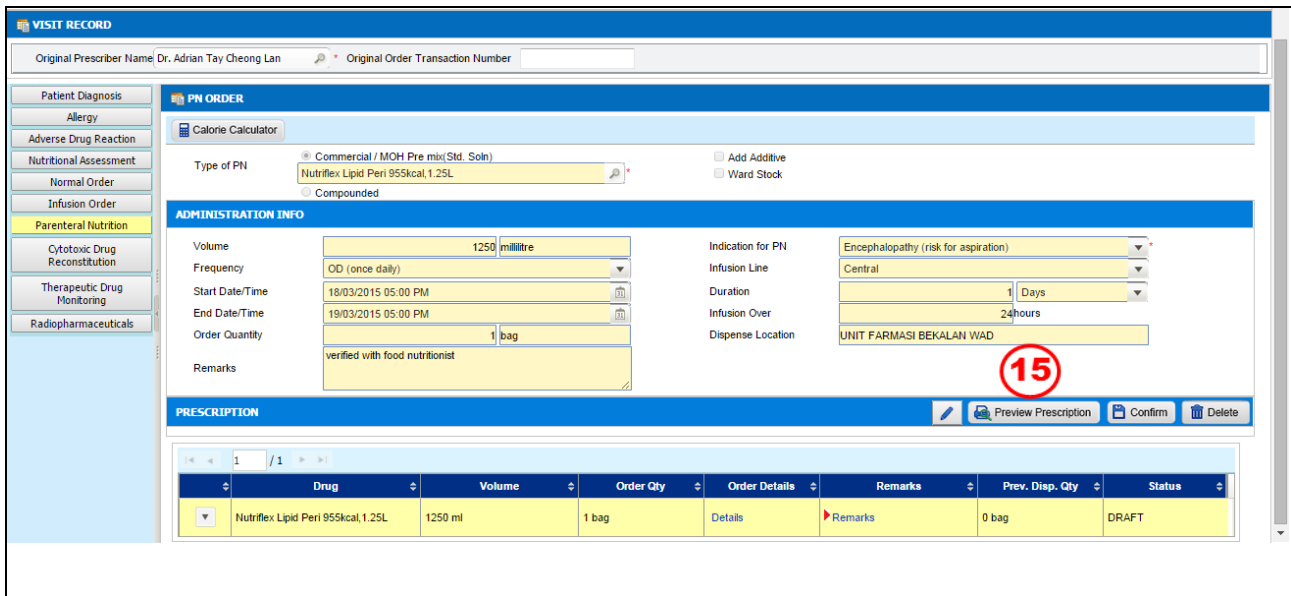


Figure 4.3-7 PN Order : Commercial

STEP 15

Click on the  button to preview and print PN prescription as per Figure 4.3-10

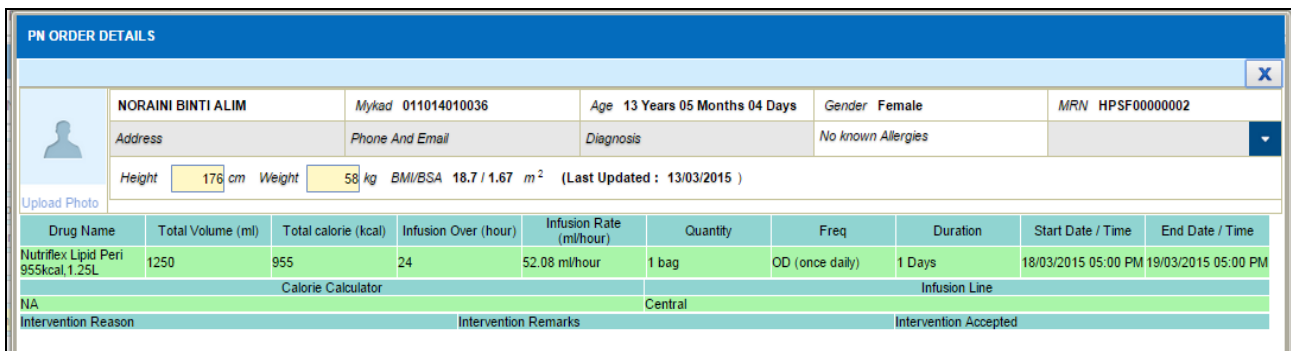


Figure 4.3-8 PN Order Details

Note

'PN Order Details' screen as per Figure 4.3-8.

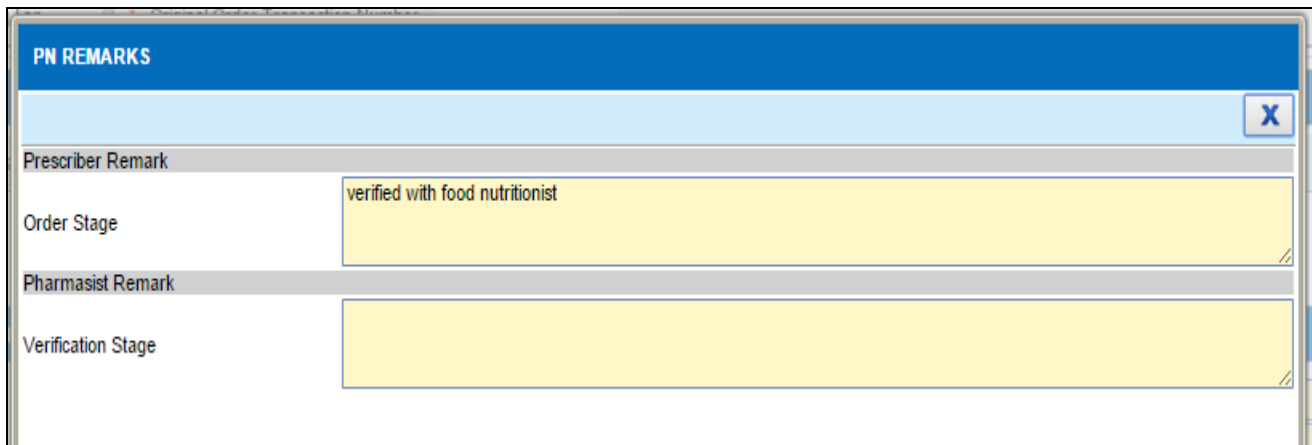


Figure 4.3-9 PN Remarks

Note

'PN Remarks' screen as per Figure 4.3-9.

Ministry Of Health, Malaysia
Hospital Pakar Sultanah Fatimah, Muar
PARENTERAL NUTRITION

Patient Name: NORAINI BINTI ALIM
Age: 13 Years 05 Months 04 Days **MRN:** HPSF00000002
Gender: Female **Prescription :** 90000133807
Height / Weight / BSA: 176 cm/58 kg/1.67 **Order Date / Time**
Room No / Bed: **Location:** WAD 9 (MED - P)
ID No: 011014010036 **Diagnosis:**
Allergy:

TPN Order: Nutriflex Lipid Peri 955kcal, 1.25L **Order Quantity:** 1 bag
Start Date/Time: 18/03/2015 05:00 PM **End Date/Time:** 19/03/2015 05:00 PM

	Content / bag
Volume (ml)	1250
Calorie (kCal)	955
Protein (g)	40
Carbohydrate (g)	80
Lipid (g)	50
Sodium (mmol)	50
Potassium (mmol)	30
Calcium (mmol)	3
Magnesium (mmol)	3
Phosphate (mmol)	7.5
Chloride (mmol)	48
Acetate (mmol)	40
Trace Element (ml)	NA
Multivitamin (ml)	NA
Water Soluble Vitamin (ml)	NA
Fat Soluble Vitamin (ml)	NA

Infusion Over: 24 hr **Infusion Rate:** 52.08 ml/hr
Frequency: OD (once daily) **Infusion Route:** Central
Prescriber: Dr. Adrian Tay Cheong Lan **Remarks:** verified with food nutritionist
Designation: Pegawai Perubatan
Order Date/Time: 18/03/2015 10:42 AM

Figure 4.3-10 Sample of PN Prescription

Note

Sample of PN prescription is as shown in Figure 4.3-10.

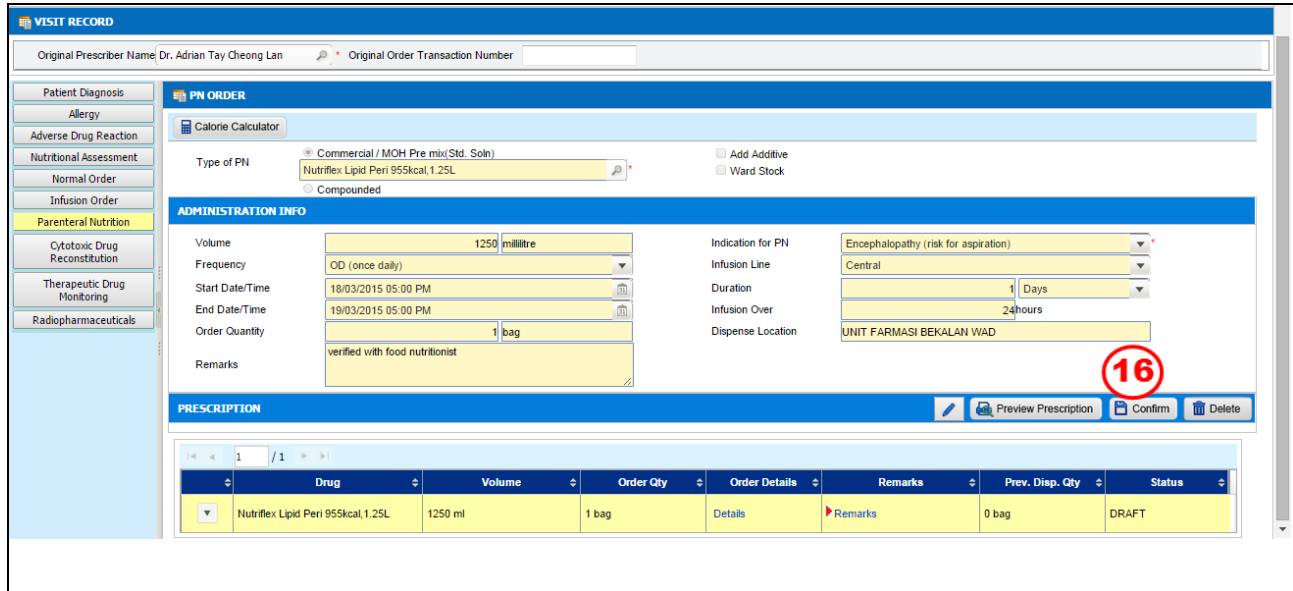



Figure 4.3-11 PN Order : Commercial

STEP 16

Click on the  button to confirm record order and alert message will be appeared as per Figure 4.3-12

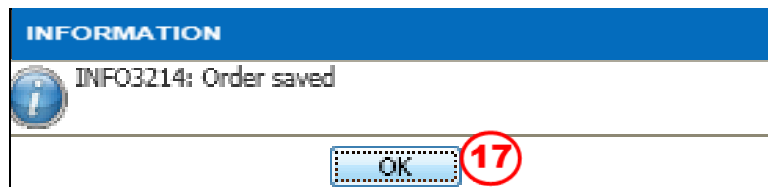

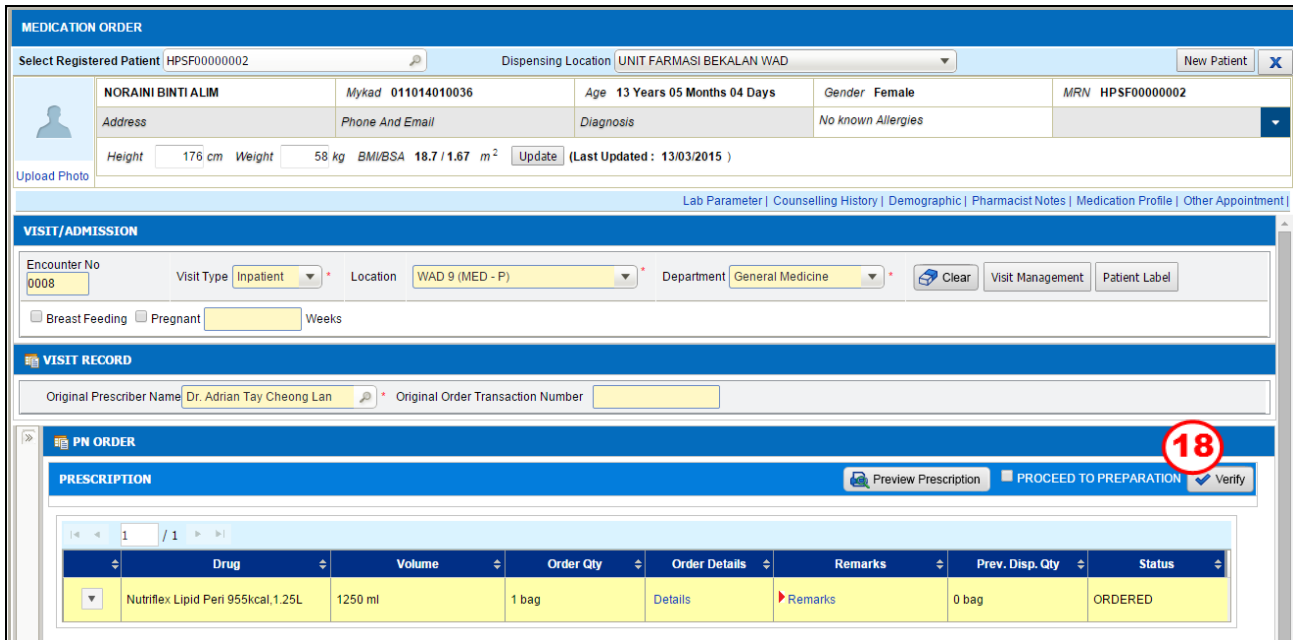


Figure 4.3-12 Information Alert Message

STEP 17

Click on the  button to confirm ordered saved and to verify PN Order screen will be appeared as per Figure 4.3-13



MEDICATION ORDER

Select Registered Patient: HPSF00000002 Dispensing Location: UNIT FARMASI BEKALAN WAD New Patient X

Patient Information:
 NORAINI BINTI ALIM Mykad: 011014010036 Age: 13 Years 05 Months 04 Days Gender: Female MRN: HPSF00000002
 Address: Phone And Email: Diagnosis: No known Allergies
 Height: 176 cm Weight: 58 kg BMI/BSA: 18.7 / 1.67 m² Update (Last Updated: 13/03/2015)

VISIT/ADMISSION
 Encounter No: 0008 Visit Type: Inpatient Location: WAD 9 (MED - P) Department: General Medicine
 Breast Feeding: ☐ Pregnant: ☐ Weeks:

VISIT RECORD
 Original Prescriber Name: Dr. Adrian Tay Cheong Lan Original Order Transaction Number:


PN ORDER 18

PRESCRIPTION Preview Prescription ☐ PROCEED TO PREPARATION ☒ Verify


Drug	Volume	Order Qty	Order Details	Remarks	Prev. Disp. Qty	Status
Nutriflex Lipid Peri 955kcal, 1.25L	1250 ml	1 bag	Details	Remarks	0 bag	ORDERED

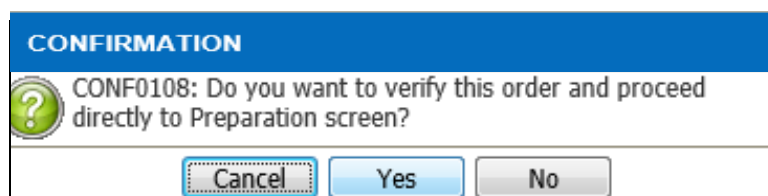
Figure 4.3-13 PN Order : Verification

STEP 18

Click on the  button to verify the order and alert message will be displayed as per Figure 4.3-14

Note

- Click on the  button to confirm the verification.
- Verified order will be flowed to preparation stage.




CONFIRMATION

CONF0108: Do you want to verify this order and proceed directly to Preparation screen?

Figure 4.3-14 Confirmation Alert Message

PN PREPARATION


NORAINI BINTIALIM Mykad: 011014010036 Age: 13 Years 05 Months 04 Days Gender: Female MRN: HPSF00000002
 Address: Phone And Email: Diagnosis: No known Allergies
 Height: 176 cm Weight: 58 kg BMI/BSA: 18.7 / 1.67 m² [Update](#) (Last Updated: 13/03/2015)
[Upload Photo](#)

[Lab Parameter](#) | [Counselling History](#) | [Demographic](#) | [Pharmacist Notes](#) | [Medication Profile](#) | [Other Appointment](#)
 Encounter No: 0008 Admission Date: 13/03/2015 Attending Practitioner: Koh Chia Yan Visit Location: WAD 9 (MED - P) Rx No: 90000133807

PHARMACY ORDER

Prepared Date/Time: 18/03/2015 03:21 PM

PRESCRIPTION [PROCEED TO DISPENSING](#) [Prepare](#) [Label](#)

	Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Remarks	Prev Disp	Status
▼	Nutriflex Lipid Peri 955kcal,1.25L	1250 ml	1 bag	Details	0 bag	19 bag	Remarks	0 bag	VERIFIED

Figure 4.3-15 PN Preparation

STEP 19

Click on the **0 bag** link to allocate quantity and 'Item Batch Details' screen will be displayed as per Figure 4.3-16

ITEM BATCH DETAILS

Drug Code: PNA00001 Default SKU: bag [Save Record](#)
 Drug Name: Nutriflex Lipid Peri 955kcal,1.25L

BATCH DETAIL

Batch No.	Expiry Date	Available Qty	Balance Qty	Allocated Qty
DMHPSF14	31/03/2015	9973	1	20 1
batch123	23/07/2015	9995	0	0

Total Location Quantity: 19968 Total Allocated Quantity: 1

Figure 4.3-16 Item Batch Details

STEP 20

Enter **Allocated Qty**

STEP 21

Click on the [Save Record](#) button to save record

CONFIRMATION

CONF0002: Are you sure you want to save?

[Cancel](#) [Yes](#) **22** [No](#)

Figure 4.3-17 Confirmation Alert Message

STEP 22

Click on the [Yes](#) button to confirm save

PN PREPARATION

NORAINI BINTIALIM Mykad: 011014010036 Age: 13 Years 05 Months 04 Days Gender: Female MRN: HPSF00000002

Address: Phone And Email: Diagnosis: No known Allergies

Height: 176 cm Weight: 58 kg BMI/BSA: 18.7 / 1.67 m² (Last Updated: 13/03/2015)

Upload Photo

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

Encounter No: 0008 Admission Date: 13/03/2015 Attending Practitioner: Koh Chia Yan Visit Location: WAD 9 (MED - P) Rx No: 90000133807

PHARMACY ORDER

Prepared Date/Time: 18/03/2015 04:37 PM

PRESCRIPTION

	Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Remarks	Prev Disp	Status
	Nutriflex Lipid Peri 955kcal,1.25L	1250 ml	1 bag	Details	1 bag	1 bag	Remarks	0 bag	VERIFIED

Figure 4.3-18 PN Preparation

Note

Edit Label

Click on the button to edit label and 'PN Edit Label' window will display as per Figure 4.3-19.

PN EDIT LABEL

☒ Select for print

Drug Name: Nutriflex Lipid Peri 955kcal,1.25L

Total Volume: 1250 ml

Infusion Over: 24 Hour(s)

Infusion Rate: 52.08 mL/Hour

Prepared Date/Time: 18/03/2015 4:37 PM Shelf Life: 24 Hours


Expiry Date/Time: 19/03/2015 4:37 PM

Batch/Worksheet No:

Figure 4.3-19 PN Preparation

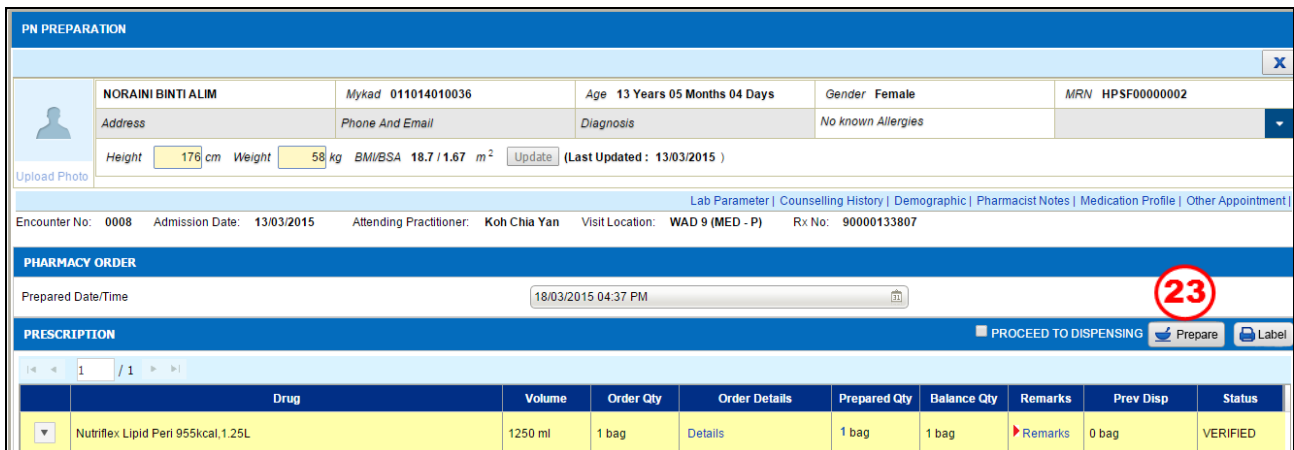
Note

- Select the ☒ Select for print radio button to print label.
- User allows to edit **Infusion Over** and enter/select **Shelf Life** field.
- Prepared Date/Time** and **Expiry Date/Time** field will be automatically displayed after enter the **Shelf Life** field.
- Drug Name**, **Total Volume**, **Infusion Rate** and **Batch/Worksheet No** field will be automatically displayed by system.
- The button to print label.

- The  button to close 'PN Edit Label' window.
- Sample PN Label as per Figure 4.3-20.

HOSPITAL PAKAR SULTANAH FATIMAH, MUAR		
Nutriflex Lipid Peri 955kcal, 1.25L		
NAME :NORAINI BINTI ALIM		
AGE : 13 Years 05 Months 04 Days		
MRN : HPSF00000002	WARD/BED NO: WAD 9 (MED - P)	
Total 1250 ml/bag		
Content per bag		
Protein	40 g	
Dextrose	80 g	
Lipid	50 g	
Sodium	50 mmol	
Potassium	30 mmol	
Calcium	3 mmol	
Magnesium	3 mmol	
Phosphate	7.5 mmol	
Chloride	48 mmol	
Acetate	40 mmol	
Trace Element	0 ml	
Vitamins	0 vial	
Calories	955 kcal	
Osmolarity	840 mOsmol/l	
Date and Time of Administration :		
Infusion Rate	52.08 mL/Hrs	
Batch No	Expiry Date 19/03/2015 4:37 PM	Price : RM
Do not use if any visible solid particles, growth or precipitation appears		
Store in refrigerator (2-8 °C). Protect from light (Once open use within 48 hours)		
Ensure PN Solution is at room temperature before infusion		
TO BE INFUSED VIA CENTRAL VENOUS LINE		

Figure 4.3-20 Sample PN Label



Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Remarks	Prev Disp	Status
Nutriflex Lipid Peri 955kcal, 1.25L	1250 ml	1 bag	Details	1 bag	1 bag	Remarks	0 bag	VERIFIED

Figure 4.3-21 Sample PN Label

STEP 23

Click on the  button to prepare PN order

Note

Proceed to Dispensing function will allow user to go the next stage screen for each patient record.

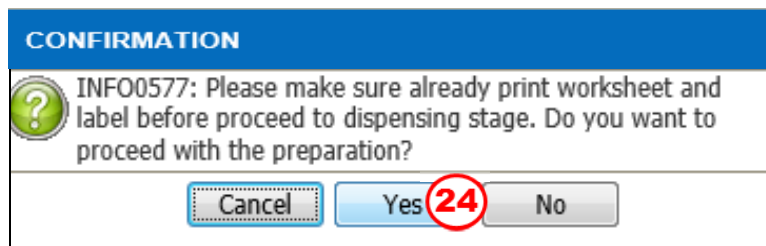
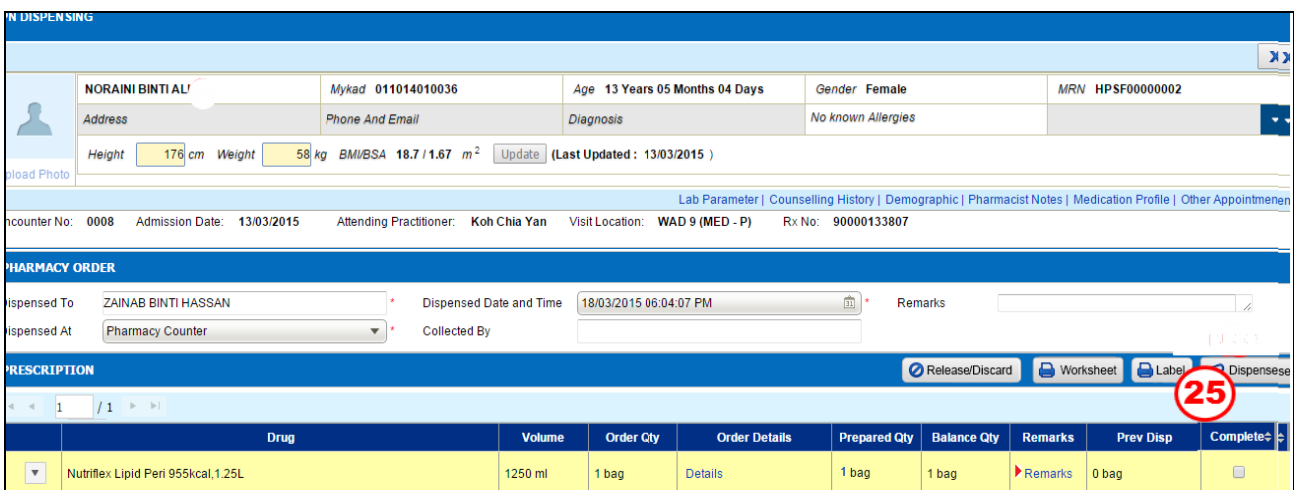


Figure 4.3-22 Confirmation Alert Message

STEP 24


Click on the  button to confirm prepare order



Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Remarks	Prev Disp	Complete
Nutriflex Lipid Peri 955kcal, 1.25L	1250 ml	1 bag	Details	1 bag	1 bag	Remarks	0 bag	<input type="checkbox"/>

Figure 4.3-23 PN Dispensing

STEP 25

Click on the  button and alert message will be displayed as per Figure 4.3-24

STEP 26

Click on the  button to confirm prepare order

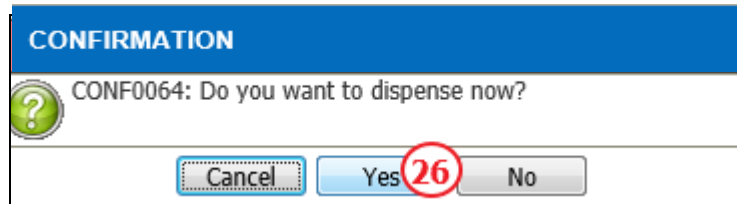
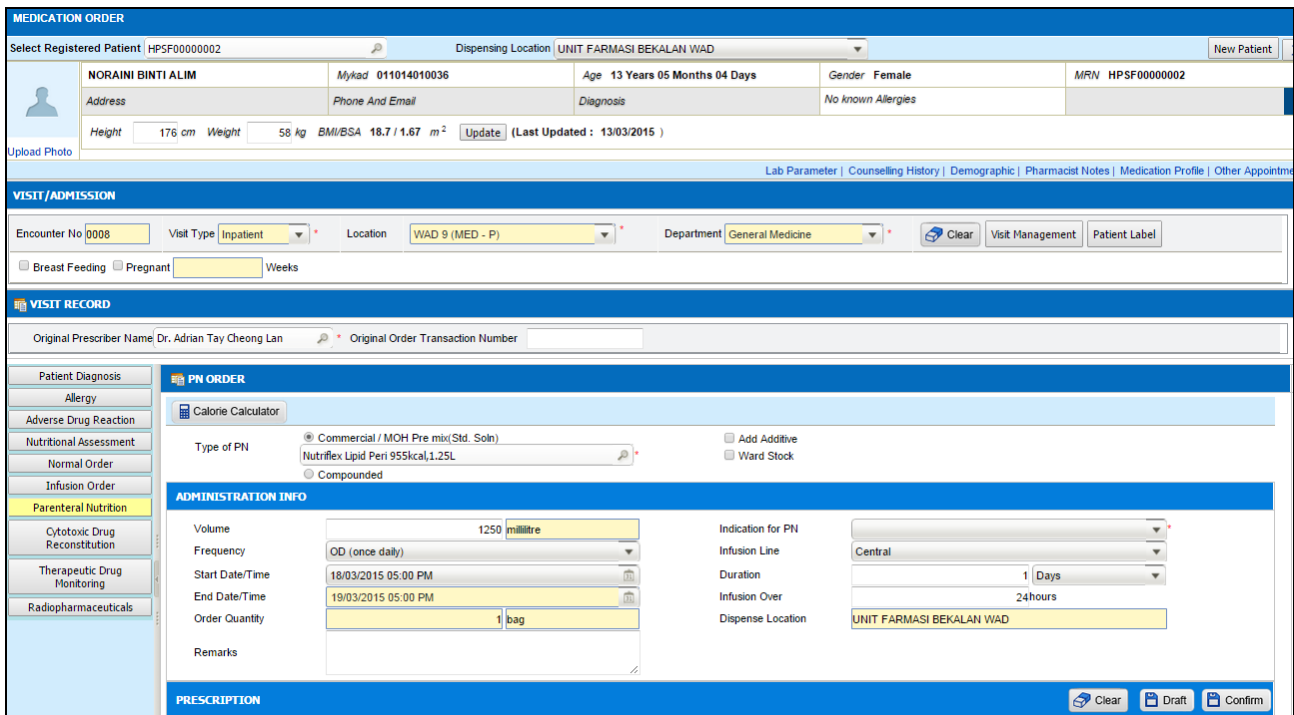


Figure 4.3-24 Confirmation Alert Message

Note

User only can do **Hold/Resume** Order at dispensing activity stage.

4.4 Commercial/MOH Pre Mix (Std. Soln) Add Additive



MEDICATION ORDER

Select Registered Patient: HPSF00000002 Dispensing Location: UNIT FARMASI BEKALAN WAD New Patient

Patient Information:
 Name: NORAINI BINTI ALIM Mykad: 011014010036 Age: 13 Years 05 Months 04 Days Gender: Female MRN: HPSF00000002
 Address: Phone And Email: Diagnosis: No known Allergies
 Height: 176 cm Weight: 58 kg BMI/BSA: 18.7 / 1.67 m² Update (Last Updated: 13/03/2015)

VISIT/ADMISSION

Encounter No: 0008 Visit Type: Inpatient Location: WAD 9 (MED - P) Department: General Medicine Clear Visit Management Patient Label

VISIT RECORD

Original Prescriber Name: Dr. Adrian Tay Cheong Lan Original Order Transaction Number:

PN ORDER

Calorie Calculator

Type of PN: ☒ Commercial / MOH Pre mix (Std. Soln) ☐ Add Additive ☐ Ward Stock
☐ Nutriflex Lipid Peri 955kcal, 1.25L ☐ Compounded

ADMINISTRATION INFO

Volume: 1250 ml Indication for PN: Central
 Frequency: OD (once daily) Infusion Line: Central
 Start Date/Time: 18/03/2015 05:00 PM Duration: 1 Days
 End Date/Time: 19/03/2015 05:00 PM Infusion Over: 24 hours
 Order Quantity: 1 bag Dispense Location: UNIT FARMASI BEKALAN WAD

PRESCRIPTION Clear Draft Confirm

Figure 4.4-1 Medication Order

'Commercial Add Additive' function allows user to order ready made product with additional PN component

Note

- Repeat **STEP 1 – STEP 5** at section [4.3.Commercial/MOH Pre mix \(Std Soln\)](#).
- Select product and check on the ☒ 'Add Additive' checkbox.
- Repeat **STEP 6 – STEP 12** at section [4.3.Commercial/MOH Pre mix \(Std Soln\)](#)

PN ORDER

Calorie Calculator

Type of PN: ☒ Commercial / MOH Pre mix(Std. Soln) ☐ Add Additive
Nutriflex Lipid Peri 955kcal,1.25L ☐ Compounded

ADMINISTRATION INFO

PN COMPONENT

	Requirement Per Day	Per Bag(Per Ordering)
Electrolytes		
Sodium(Natrium),Na+	<input type="text"/> mmol	<input type="text"/> 50 (50)mmol
Potassium(Kalium),K+	<input type="text"/> mmol	<input type="text"/> 30 (30)mmol
Calcium,Ca2+	<input type="text"/> mmol	<input type="text"/> 3 (3)mmol
Magnesium,Mg+	<input type="text"/> mmol	<input type="text"/> 3 (3)mmol
Phosphate,(PO4)2-	<input type="text"/> mmol	<input type="text"/> 7.5 (7.5)mmol
Acetate(CH3COO)	<input type="text"/> mmol	<input type="text"/> 40 (40)mmol
Trace elements		
L-Glutamin	<input type="text"/> ml	<input type="text"/> 0 (0)ml
Vitamin		
<input checked="" type="radio"/> Single Vitamin <input type="radio"/> Multi Vitamin		
Water soluble	<input type="text"/> ml	<input type="text"/> 0ml
Fat soluble	<input type="text"/> ml	<input type="text"/> 0ml

Figure 4.4-2 Single Vitamin

STEP 1

Enter value of **Electrolytes** that require for patient per day

Note

- User need to enter total electrolytes required for patient per day.
- All value must be more than per bag ordering.
- All value in all **Per Bag (Per Ordering)** field will be automatically default by system.

STEP 2

Select ☒ Single Vitamin radio button

Note

- **Water soluble** and **Fat soluble** field will be automatically displayed as per Figure 4.4-2.
- Enter value of **Water soluble** and **Fat soluble**.

Or

Select ☐ Multi Vitamin radio button

Note

Vitamin(Water and Fat soluble) field will be automatically displayed as per Figure 4.4-3.

Vitamin

☐ Single Vitamin ☒ Multi Vitamin

Vitamin(Water and Fat Soluble) 10 ml 0 ml

Figure 4.4-3 Multivitamin

PN COMPONENT		
Electrolytes	Requirement Per Day	Per Bag(Per Ordering)
Sodium(Natrium),Na+	<input type="text"/> mmol	18.2 (18.2) mmol
Potassium(Kalium),K+	<input type="text"/> mmol	6.67 (6.67) mmol
Calcium,Ca2+	<input type="text"/> 4mmol	3 (3) mmol
Magnesium,Mg+	<input type="text"/> 7 mmol	0.76 (0.76) mmol
Phosphate,(PO4)2-	<input type="text"/> mmol	3.56 (3.56) mmol
Acetate(CH3COO)	<input type="text"/> mmol	11.11 (11.11) mmol
Trace elements	<input type="text"/> ml	2.2 (2.2) ml
L-Glutamin	<input type="text"/> ml	0ml
Vitamin		
<input type="radio"/> Single Vitamin	<input type="radio"/> Multi Vitamin	

3

PRESCRIPTION					
					<input type="button" value="Clear"/> <input type="button" value="Draft"/> <input type="button" value="Confirm"/>

<div style="display: flex; align-items: center;"> <div style="border: 1px solid #ccc; padding: 2px 5px; margin-right: 5px;">1</div> <div style="margin: 0 5px;">/ 1</div> <div style="border: 1px solid #ccc; padding: 2px 5px; margin-left: 5px;">></div> </div>					
Drug	Volume	Order Qty	Order Details	Remarks	Status
No Records Found!					

Figure 4.4-4 Medication Order

STEP 3

Click on the button to confirm record order and alert message will be appeared as per Figure 4.4-5


INFORMATION	
	INF03214: Order saved
<input type="button" value="OK"/> 4	

Figure 4.4-5 Information Alert Message

STEP 4

Click on the button to confirm ordered saved and to verify PN Order screen will be appeared as per Figure 4.4-6

MEDICATION ORDER

Select Registered Patient: HPSF00000002 Dispensing Location: UNIT FARMASI BEKALAN WAD New Patient

Patient Information:
 Name: NORAINI BINTIALIM Mykad: 011014010036 Age: 13 Years 05 Months 04 Days Gender: Female MRN: HPSF00000002
 Address: Phone And Email: Diagnosis: No known Allergies
 Height: 176 cm Weight: 58 kg BMI/BSA: 18.7 / 1.67 m² Update (Last Updated: 13/03/2015)

VISIT/ADMISSION
 Encounter No: 0008 Visit Type: Inpatient Location: WAD 9 (MED - P) Department: General Medicine Clear Visit Management Patient Label
☐ Breast Feeding ☐ Pregnant Weeks

VISIT RECORD
 Original Prescriber Name: Dr. Adrian Tay Cheong Lan Original Order Transaction Number:

PN ORDER 5

PRESCRIPTION PROCEED TO PREPARATION Verify

Drug	Volume	Order Qty	Order Details	Remarks	Status
Nutriflex Lipid Peri 955kcal, 1.25L with Additive	1250 ml	1 bag	Details	Remarks	ORDERED

Figure 4.4-6 PN Order : Verify

STEP 5

Click on the Verify button to verify the order and alert message will be displayed as per Figure 4.4-7

Note

- Click on the Yes button to confirm the verification.
- Verified order will be flowed to preparation stage.

CONFIRMATION

? CONF0061: Do you want to proceed with the verification?

Cancel Yes No

Figure 4.4-7 Confirmation Alert Message

PN PREPARATION

Patient Information:
 Name: NORAINI BINTI ALIM | Mykad: 011014010036 | Age: 13 Years 05 Months 04 Days | Gender: Female | MRN: HPSF00000002
 Address: | Phone And Email: | Diagnosis: | No known Allergies:
 Height: 176 cm | Weight: 58 kg | BMI/BSA: 18.7 / 1.67 m² | Update (Last Updated: 13/03/2015)

Encounter Information:
 Encounter No: 0008 | Admission Date: 13/03/2015 | Attending Practitioner: Koh Chia Yan | Visit Location: WAD 9 (MED - P) | Rx No: 90000133807

PHARMACY ORDER
 Prepared Date/Time: 18/03/2015 04:37 PM

PRESCRIPTION | PROCEED TO DISPENSING | Prepare | Worksheet | Label

Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Prepare Worksheet	Remarks	Prev Disp	Status
Nutriflex Lipid Peri 955kcal,1.25L with Additive	1250 ml	1 bag	6	1 bag	1 bag	Details	Remarks	0 bag	VERIFIED

Figure 4.4-8 PN Preparation

STEP 6

Click on the **0 bag** link to allocate quantity and 'Item Batch Details' screen will be displayed as per Figure 4.4-9

ITEM BATCH DETAILS

Drug Code: PNA00001 | Default SKU: bag **8**

Drug Name: Nutriflex Lipid Peri 955kcal,1.25L

BATCH DETAIL

Batch No.	Expiry Date	Available Qty	Balance Qty	Allocated Qty
DMHPSF14	01/04/2015	10087	1	7

Total Location Quantity: 10087 | Total Allocated Quantity: 1

Figure 4.4-9 Item Batch Details

STEP 7

Enter **Allocated Qty**

STEP 8

Click on the **Save** button to save record

CONFIRMATION

CONF0002: Are you sure you want to save?

Cancel
Yes 9
No

Figure 4.4-10 Confirmation Alert Message

STEP 9

Click on the Yes button to confirm save

PN PREPARATION

Upload Photo

NORAINI BINTI ALIM

Mykad: 011014010036

Age: 13 Years 05 Months 04 Days

Gender: Female

MRN: HPSF00000002

Address

Phone And Email

Diagnosis

No known Allergies

Height: 176 cm

Weight: 58 kg

BMI/BSA: 18.7 / 1.67 m²

Update (Last Updated: 13/03/2015)

Encounter No: 0008

Admission Date: 13/03/2015

Attending Practitioner: Koh Chia Yan

Visit Location: WAD 9 (MED - P)

Rx No: 90000133807

PHARMACY ORDER

Prepared Date/Time

18/03/2015 04:37 PM

PRESCRIPTION

1 / 1

PROCEED TO DISPENSING

Prepare

Worksheet

Label



	Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Prepare Worksheet	Remarks	Prev Disp	Status
▼	Nutriflex Lipid Peri 955kcal, 1.25L with Additive	1250 ml	1 bag	Details	1 bag	1 bag	Details 10	Remarks	0 bag	VERIFIED

Figure 4.4-11 PN Preparation

STEP 10

Click on the **Prepare Worksheet** Details button to prepare worksheet as per Figure 4.4-12

PREPARE WORKSHEET

Intervention ☒ Auto Allocation  

DETAIL

Macronutrient
Glucose g
Lipid g
Protein g

Vitamin
Vitamin Solution ml
Water soluble ml
Fat soluble ml

Trace elements
Trace elements ml
Acetate mmol
L-Glutamin ml

Electrolytes
Sodium(Natrium),Na+ mmol
Potassium(Kalium),K+ mmol
Calcium,Ca2+ mmol
Magnesium,Mg+ mmol
Phosphate,(PO4)2- mmol

Item selected	Volume (ml)	Order Quantity	Allocated Quantity	Calorie (kcal)	Osmolarity (mOsmol)	Acetate (mmol)	Phosphate (mmol)	Sodium (mmol)	Potassium (mmol)	Calcium (mmol)	Magnesium (mmol)	Chloride (mmol)
	0		0	0	0	0	0	0	0	0	0	0
Potassium Dihydrogen Phosphate Injection	0		0	0	0	0	0	0	0	0	0	0
Sodium Chloride 3% 500mL IV soln	0		0	0	0	0	0	0	0	0	0	0
	0		0	0	0	0	0	0	0	0	0	0
Calcium Gluconate 10% Inj	0		0	0	0	0	0	0	0	1	0	0
Magnesium Sulphate 50% Inj (49.3%/5mL)	0		0	0	0	0	0	0	0	0	4	0
Peditrace 10mL Inj	0		0	0	0	Trace Elements						
	0		0	0	0	Vitamin Solutions						
Soluvit N 10 ml Inj	0		0	0	0	Water Soluble Vitamins						
	0		0	0	0	Fat Soluble Vitamins						
	0		0	0	0	L-Glutamin						
Total Preparation	0				0 mOsmol/L	0	0	0	0	0	0	0



Calculate

Figure 4.4-12 Prepare Worksheet

Note

- **Macronutrient, Vitamin field and Electrolytes field** display the quantity to be added into the bag.
- Click on the **Calculate** button to calculate PN content value.
- **Volume (ml), Order Quantity, Calorie (kcal), Osmolrity(mOsmol), Content and Total Preparation** will be automatically calculated and displayed by system as per Figure 4.4-13.

PREPARE WORKSHEET

Intervention ☒ Auto Allocation  

DETAIL

Macronutrient
Glucose g
Lipid g
Protein g

Vitamin
Vitamin Solution ml
Water soluble ml
Fat soluble ml

Trace elements
Trace elements ml
Acetate mmol
L-Glutamin ml

Electrolytes
Sodium(Natrium),Na+ mmol
Potassium(Kalium),K+ mmol
Calcium,Ca2+ mmol
Magnesium,Mg+ mmol
Phosphate,(PO4)2- mmol

Item selected	Volume (ml)	Order Quantity	Allocated Quantity	Calorie (kcal)	Osmolarity (mOsmol)	Acetate (mmol)	Phosphate (mmol)	Sodium (mmol)	Potassium (mmol)	Calcium (mmol)	Magnesium (mmol)	Chloride (mmol)
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
Calcium Gluconate 10% Inj	4.55	1 amp	0	0	3.04	0	0	0	0	1	0	0
Magnesium Sulphate 50% Inj (49.3%/5mL)	2	1 amp	0	0	8	0	0	0	0	0	4	0
	0	0	0	0	0	Trace Elements						
	0	0	0	0	0	Vitamin Solutions						
	0	0	0	0	0	Water Soluble Vitamins						
	0	0	0	0	0	Fat Soluble Vitamins						
	0	0	0	0	0	L-Glutamin						
Total Preparation	6.55				1685.5 mOsmol/L	0	0	0	0	1	4	0

Calculate

Figure 4.4-13 Prepare Worksheet

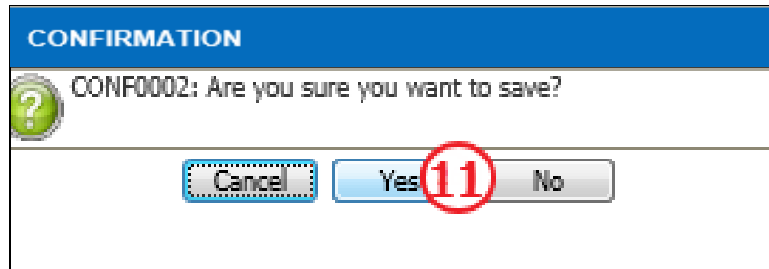
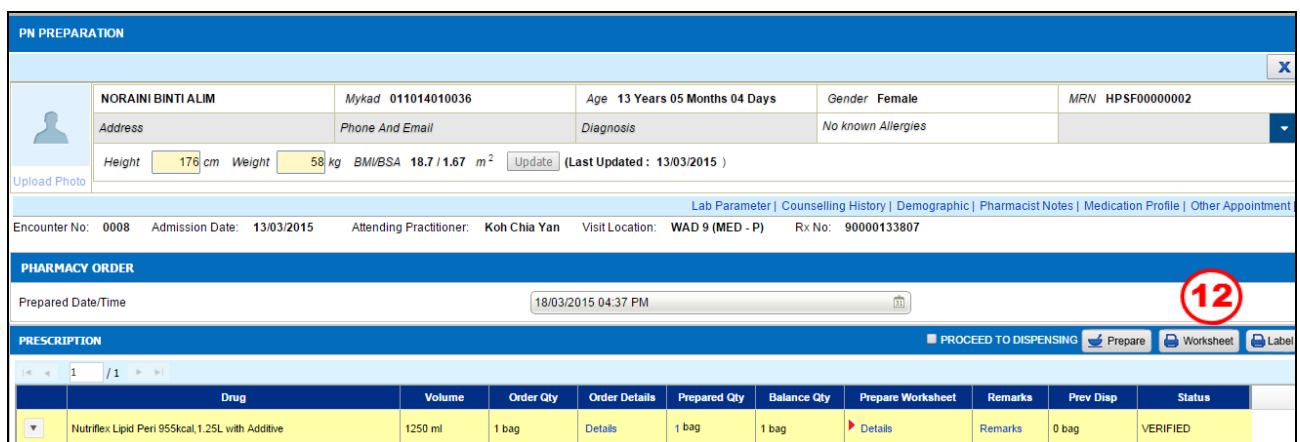


Figure 4.4-14 Confirmation Alert Message

STEP 11

Click on the  button to save record




The "PN PREPARATION" screen displays patient information for NORAINI BINTI ALIM. It includes fields for Mykad, Age, Gender, MRN, Address, Phone And Email, Diagnosis, and No known Allergies. Patient vitals (Height: 176 cm, Weight: 58 kg, BMI/BSA: 18.7 / 1.67 m²) are shown with an "Update" button. The "PHARMACY ORDER" section shows the "Prepared Date/Time" as 18/03/2015 04:37 PM, with a red circle and the number "12" next to it. The "PRESCRIPTION" table lists one item: Nutriflex Lipid Peri 955kcal 1.25L with Additive, with a quantity of 1 bag and a status of VERIFIED. Buttons for "Prepare", "Worksheet", and "Label" are visible at the bottom right.

Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Prepare Worksheet	Remarks	Prev Disp	Status
Nutriflex Lipid Peri 955kcal 1.25L with Additive	1250 ml	1 bag	Details	1 bag	1 bag	Details	Remarks	0 bag	VERIFIED

Figure 4.4-15 PN Preparation

STEP 12

Click on the  button to generate worksheet as per Figure 4.4-15

PARENTERAL NUTRITION WORKSHEET
MINISTRY OF HEALTH
Hospital Pakar Sultanah Fatimah, Muar

Patient Name : MOHD ALI BIN TAIB WorkSheet : A045-190315
MRN : HPSF00018211 Prepared Date/Time : 19/03/2015 10:13 AM
Ward/Bed No : WAD 8 (MED - L) Prescription # : 80000133874
Age : 51 Years 03 Months 14 Days
Gender : Male
Body Weight : 45 kg

DRUG NAME	VOLUME (ml)	QUANTITY	BATCH NO	COMPONENT DETAIL (PER DAY)
Nutriflex Lipid Peri 955kcal,1.25L	1250	1 bag	DMHPSF14	-
Magnesium Sulphate 50% Inj (49.3%/5mL)	2	1 ampoule	335074	4 mmol
Calcium Gluconate 10% Inj	4.55	1 ampoule	14195015	1 mmol
TPN Volume Bag	1256.55	1 Bag		

Worksheet Generated By : Shantasaroopini a/p Sathia Moorthy Date : 19/03/2015
Worksheet and Label Checked By : Supervised By :
Bag Prepared By :
Final Product Checked By :

Figure 4.4-16 Sample PN Worksheet

Note

Sample of PN Worksheet as per Figure 4.4-16.

PN EDIT LABEL

☒ Select for print


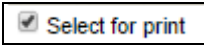
Drug Name: Nutriflex Lipid Peri 955kcal,1.25L with Additive
Total Volume: 1250 ml
Infusion Over: 24 Hour(s)
Infusion Rate: 52.08 mL/Hour
Prepared Date/Time: 19/03/2015 10:13 AM
Expiry Date/Time: 20/03/2015 10:13 AM
Batch / Worksheet No: A045-190315

Shelf Life * 24 Hours

Figure 4.4-17 PN Edit Label

Note

Edit Label

- Click on the  button to edit label and **PN Edit Label** window will display as per Figure 4.4-18.
- Select the  radio button to print label.
- User is allowed to edit **Infusion Over**, **Date Prepared** and **Shelf Life** field.
- Expiry Date** will be automatically displayed after enter the **Shelf Life** field.
- Drug Name**, **Total Volume**, **Infusion Rate** and **Batch No** will be automatically displayed by system.

HOSPITAL PAKAR SULTANAH FATIMAH, MUAR		
Nutriflex Lipid Peri 955kcal, 1.25L with Additive		
NAME : MOHD ALI BIN TAIB		
AGE : 51 Years 03 Months 14 Days		
MRN : HPSF00018211	WARD/BED NO: WAD 8 (MED - L)	
Total 1256.55 ml/bag		
Content per bag		
Protein	40 g	
Dextrose	80 g	
Lipid	50 g	
Sodium	50 mmol	
Potassium	30 mmol	
Calcium	4 mmol	
Magnesium	7 mmol	
Phosphate	7.5 mmol	
Chloride	48 mmol	
Acetate	40 mmol	
Trace Element	0 mL	
Vitamins	0 mL	
Calories	955 kcal	
Osmolarity	844.41 mOsm/l	
L-Glutamin	0 ml	
Date and Time of Administration :		
Infusion Rate	52.08 ml/Hrs	
Worksheet ID A045-190315	Expiry Date 20/03/2015 10:13	Price : RM
Do not use if any visible solid particles, growth or precipitation appears		
Store in refrigerator (2-8 °C). Protect from light (Once open use within 48 hours)		
Ensure PN Solution is at room temperature before infusion		
TO BE INFUSED VIA CENTRAL VENOUS LINE		

Figure 4.4-18 PN Edit Label

PN PREPARATION

Encounter No: 0008 Admission Date: 13/03/2015 Attending Practitioner: Koh Chia Yan Visit Location: WAD 9 (MED - P) Rx No: 90000133807

PHARMACY ORDER

Prepared Date/Time: 18/03/2015 04:37 PM

PRESCRIPTION

Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Prepare Worksheet	Remarks	Prev Disp	Status
Nutriflex Lipid Peri 955kcal, 1.25L with Additive	1250 ml	1 bag	Details	1 bag	1 bag	Details	Remarks	0 bag	VERIFIED

Figure 4.4-19 PN Preparation

STEP 13

Click on the  button to prepare PN order

Note

Proceed to Dispensing function will allow user to go next stage screen for each patient record.

CONFIRMATION

INFO0577: Please make sure already print worksheet and label before proceed to dispensing stage. Do you want to proceed with the preparation?

Figure 4.4-20 PN Confirmation Alert Message

STEP 14

Click on the  button to confirm prepare order

PN DISPENSING

Encounter No: 0008 Admission Date: 13/03/2015 Attending Practitioner: Koh Chia Yan Visit Location: WAD 9 (MED - P) Rx No: 90000133807

PHARMACY ORDER

Dispensed To: ZAINAB BINTI HASSAN Dispensed Date and Time: 18/03/2015 06:04:07 PM Remarks:


Dispensed At: Pharmacy Counter Collected By:

PRESCRIPTION

Drug	Volume	Order Qty	Order Details	Prepared Qty	Prev Disp	Balance Qty	Remarks	Status	Complete
Nutriflex Lipid Peri 955kcal, 1.25L with Additive	1250 ml	1 bag	Details	1 bag	0 bag	1 bag	Remarks	PREPARED	<input type="button" value="Dispense"/>

Figure 4.4-21 PN Dispensing

STEP 15

Click on the  button and alert message will be displayed as per Figure 4.4-22

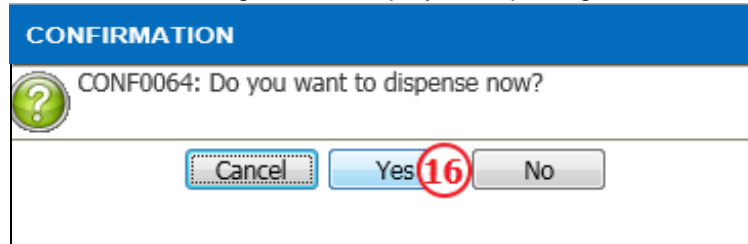


Figure 4.4-22 Confirmation Alert message

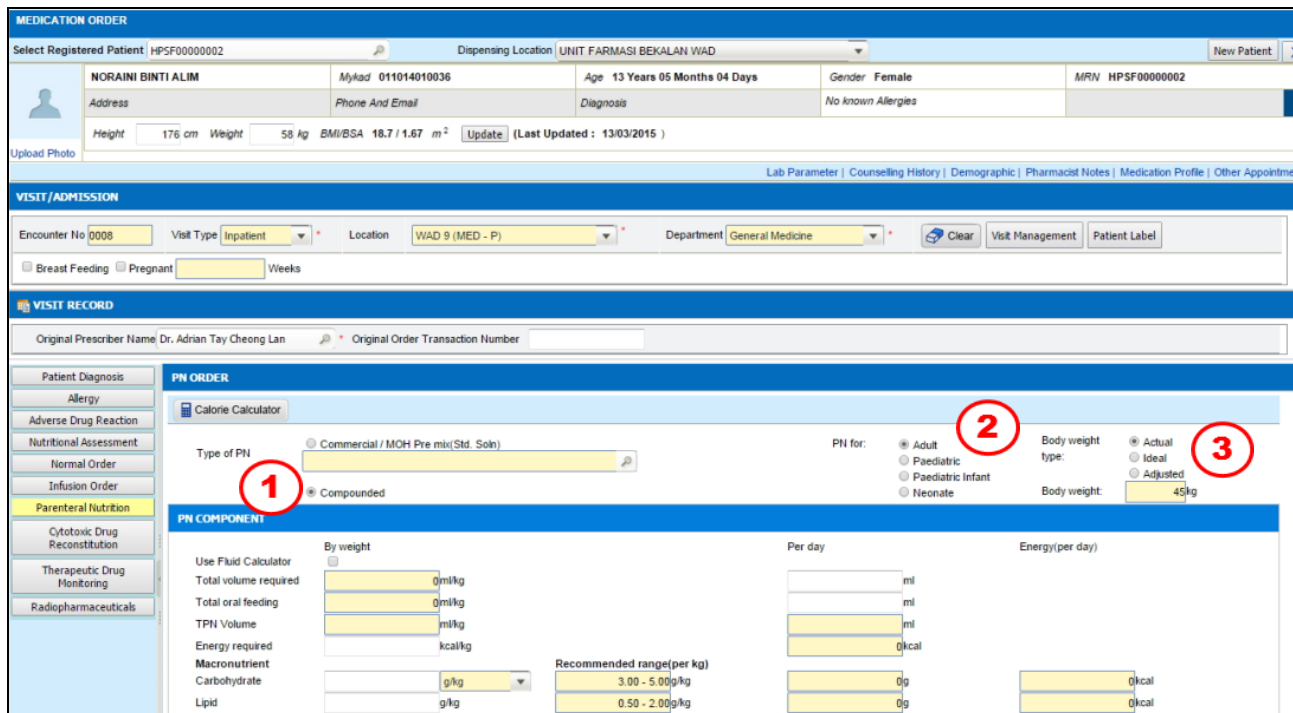
STEP 16

Click on the  button to confirm prepare order

Note

- User only can do **Hold/Resume** Order at Dispensing activity.
- When release batch, drug and PN bag quantity will be returned back to inventory. When discard batch, drug and PN bag quantity will be deducted from inventory.
- Once drug already released or discarded, drug will be displayed back in Preparation screen for re-allocation of new batch qty.

4.5 Compounded (Adult)



MEDICATION ORDER

Select Registered Patient: HPSF00000002 Dispensing Location: UNIT FARMASI BEKALAN WAD New Patient

Patient Information:
 NORAINI BINTI ALIM Mykad: 011014010036 Age: 13 Years 05 Months 04 Days Gender: Female MRN: HPSF00000002
 Address: Phone And Email: Diagnosis: No known Allergies
 Height: 176 cm Weight: 58 kg BMI/BSA: 18.7 / 1.67 m² Update (Last Updated: 13/03/2015)

VISIT/ADMISSION
 Encounter No: 0008 Visit Type: Inpatient Location: WAD 9 (MED - P) Department: General Medicine
 Breast Feeding: Pregnant: Weeks:

VISIT RECORD
 Original Prescriber Name: Dr. Adrian Tay Cheong Lan Original Order Transaction Number:

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

PN ORDER Details:
 Type of PN: ☒ Commercial / MOH Pre mix (Std. Soln.) ☒ **Compounded** (1)
 PN for: ☒ **Adult** (2) ☐ Paediatric ☐ Paediatric Infant ☐ Neonate
 Body weight type: ☒ **Actual** (3) ☐ Ideal ☐ Adjusted
 Body weight: 45 kg

PN COMPONENT
 Use Fluid Calculator: ☐
 Total volume required: 0 ml/kg
 Total oral feeding: 0 ml/kg
 TPN Volume: 0 ml/kg
 Energy required: 0 kcal/kg
 Recommended range(per kg):
 Carbohydrate: 3.00 - 5.00 g/kg
 Lipid: 0.50 - 2.00 g/kg

Figure 4.5-1 Medication Order

PN Compounded allow user to order compounded PN with customized nutrition based on patient requirement.

STEP 1

Select on ☒ **Compounded** radio button for 'Type of PN'

STEP 2

Select on ☒ **Adult** radio button for 'PN For'

STEP 3

Select on the 'Body weight' type radio button to use for calculation either as:

- Actual
- Ideal
- Adjusted

Note

By default Body weight type show the **Actual** body weight of the patient. **Value** for **Body Weight (kg)** will change base on selected **Body Weight type**.

PN ORDER

Calorie Calculator

Type of PN: ☐ Commercial / MOH Pre mix(Std. Soln) ☐ Compounded

PN for: ☒ Adult ☐ Paediatric ☐ Paediatric Infant ☐ Neonate

Body weight type: ☒ Actual ☐ Ideal ☐ Adjusted

Body weight: 80kg

PN COMPONENT

Use Fluid Calculator: ☐

	By weight	Recommended range(per kg)	Per day	Energy(per day)
Total volume required	<input type="text"/> ml/kg		<input type="text"/> ml	
Total oral feeding	<input type="text"/> 0ml/kg		<input type="text"/> ml	
TPN Volume	<input type="text"/> ml/kg		<input type="text"/> ml	
Energy required	<input type="text"/> kcal/kg		<input type="text"/> kcal	
Macronutrient				
Carbohydrate	<input type="text"/> g/kg	3.00 - 5.00g/kg	<input type="text"/> g	<input type="text"/> 0kcal
Lipid	<input type="text"/> g/kg	0.50 - 2.00g/kg	<input type="text"/> g	<input type="text"/> 0kcal
Protein	<input type="text"/> g/kg	0.50 - 2.00g/kg	<input type="text"/> g	<input type="text"/> 0kcal
L-Glutamin	<input type="text"/> ml/kg	1.50 - 2.50ml/kg	<input type="text"/> ml	<input type="text"/> 0kcal
Carbohydrate:Lipid(kcal)	<input type="text"/> 0 : 0	Nitrogen Content	<input type="text"/> g	NPC:NRatio
Electrolytes				
Sodium(Natrium),Na+	<input type="text"/> mmol/kg	1.00 - 2.00mmol/kg	<input type="text"/> mmol	
Potassium(Kalium),K+	<input type="text"/> mmol/kg	0.70 - 1.50mmol/kg	<input type="text"/> mmol	
Calcium,Ca2+	<input type="text"/> mmol/kg	0.10 - 0.15mmol/kg	<input type="text"/> mmol	
Magnesium,Mg+	<input type="text"/> mmol/kg	0.05 - 0.15mmol/kg	<input type="text"/> mmol	
Phosphate,(PO4)2-	<input type="text"/> mmol/kg	0.50 - 0.70mmol/kg	<input type="text"/> mmol	
Chloride,Cl+	<input type="text"/> mmol/kg	1.30 - 2.00mmol/kg	<input type="text"/> mmol	
Acetate(CH3COO)	<input type="text"/> mmol/kg	0.00 - 0.00mmol/kg	<input type="text"/> mmol	
Trace elements	<input type="text"/> ml/kg	0.00 - 10.00ml	<input type="text"/> ml	
Vitamin				
<input type="radio"/> Single Vitamin	<input type="radio"/> Multi Vitamin			

ADMINISTRATION INFO

PRESCRIPTION

Figure 4.5-2 PN Component

Note

PN Component

- Once 'Use Fluid Calculator' checkbox is selected, system will auto calculate the 'Total Volume required' based on the body weight.
- User can enter 'Total Oral feeding' volume per day (if any) and system will auto calculate the 'Total oral feeding' per kg and 'TPN Volume'.
- Enter value for **Total volume required per day (ml)**.
- Value **By Weight** will automatically calculate and display after enter the **Total volume required per day (ml)**.
- Enter value for **Energy required By Weight (kcal/kg)**.
- Value **Per day** will automatically calculate and display after enter the **Energy required By Weight (kcal/kg)**.

Macronutrient

- Enter value of the **Macronutrient** that applicable for the **PN Component**.
- All entered value must between the **Recommended Range (per kg)**. System still allow if not between recommended range.

All value **Per day** and **Energy(per day)** will automatically calculate and display.

- **L-Gutamin** is an optional function. Value of **By weight** and **Energy(per day)** will automatically display.
- Value of **Carbohydrate:Lipid(kcal) Content, Nitrogen** and **NPC:Ratio** will automatically calculate and display.

Electrolytes

- Enter value of the **Electrolytes** that applicable for the PN Component.
- All entered value must between the **Recommended Range (per kg)**. System still allow if not between recommended range.
- **Chloride ,Cl⁻** and **Acetate (CH₃COO)** is optional function.
- All value **Per day** will automatically calculate and display.
- Enter value of the **Trace elements Per day**.
- Value **By Weight** will automatically calculate and display after enter the **Trace elements Per day** value.

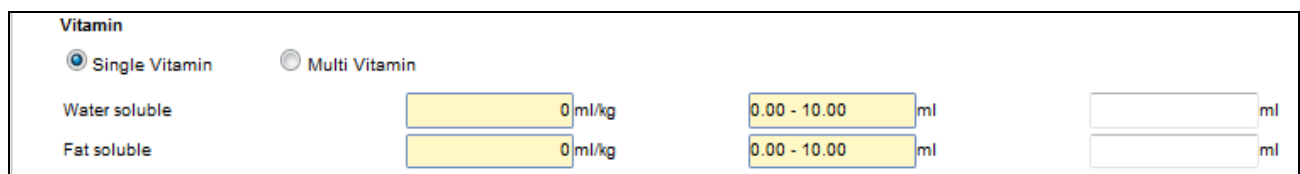


Figure 4.5-3 shows the 'Single Vitamin' form. It has a 'Vitamin' section with two radio buttons: 'Single Vitamin' (selected) and 'Multi Vitamin'. Below this, there are two rows: 'Water soluble' and 'Fat soluble'. Each row has a yellow input field for '0 ml/kg', a yellow range field for '0.00 - 10.00 ml', and a white output field for 'ml'.

Figure 4.5-3 Single Vitamin

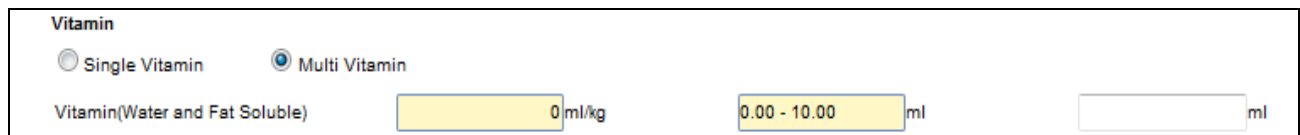


Figure 4.5-4 shows the 'Multi Vitamin' form. It has a 'Vitamin' section with two radio buttons: 'Single Vitamin' and 'Multi Vitamin' (selected). Below this, there is one row: 'Vitamin(Water and Fat Soluble)'. It has a yellow input field for '0 ml/kg', a yellow range field for '0.00 - 10.00 ml', and a white output field for 'ml'.

Figure 4.5-4 Multi Vitamin

NOTE

- Select either **Single Vitamin** or **Multivitamin** radio button.
- Vitamin have 2 types vitamin:
 - **Single Vitamin**
 - **Multi Vitamin**

If user select **Single Vitamin** radio button; **Water soluble** and **Fat soluble** field will automatically display by system as per Figure 4.5-3.

- If user select **Multi Vitamin** radio button; **Vitamin(Water and Fat Soluble)** field will automatically display by system as per Figure 4.5-4.

PN ORDER

Calorie Calculator

Type of PN

☐ Commercial / MOH Pre mix (Std. Soln)
☒ Compounded

PN for:

☐ Adult
☒ Paediatric
☐ Paediatric Infant
☐ Neonate

Body weight

type:

☒ Actual
☐ Ideal
☐ Adjusted

Body weight:

20kg

PN COMPONENT

ADMINISTRATION INFO

Volume

5200 ml

Frequency

OD

Start Date/Time

19/03/2015 05:00 PM

End Date/Time

20/03/2015 05:00 PM

Order Quantity

1 BAG

Remarks

Indication for PN

Encephalopathy (risk for aspiration)

Infusion Line

Central

Duration

1 Days

Infusion Over

24hours

Dispense Location

UNIT NUTRISI PARENTERAL

PRESCRIPTION

Clear

Draft

Confirm

1 / 1

Drug

Volume

Order Qty

Order Details

Remarks

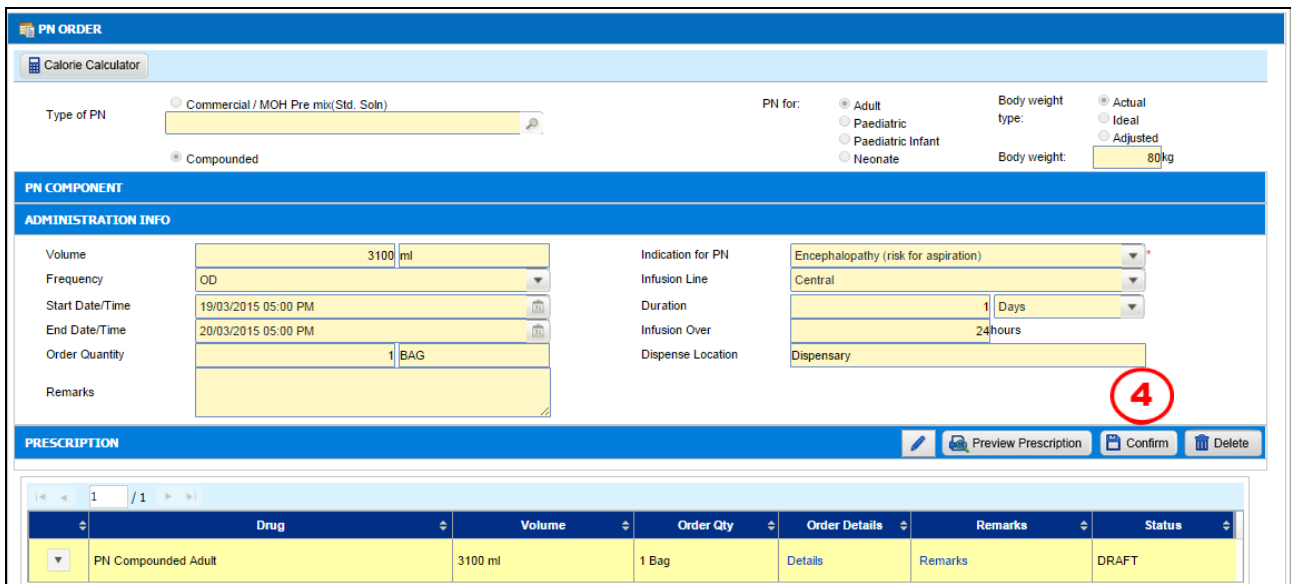
Status

No Records Found!

Figure 4.5-5 Administration Info

Note

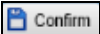
- **Volume** will be automatically displayed by system and user is not allow to change at this field.
- **Infusion Line** will be automatically default to **Central** but user is allow to change at this field and select type of **Infusion Line** from the dropdown box.
- **Frequency** and **Duration** field will be automatically displayed and user is not allow to change this field.
- Default value for:
 - **Frequency** : OD (daily)
 - **Duration** : 1 day
- **Start Date/Time** will be automatically default to current date but still can be change by the user if applicable.
- **End Date/Time** will be displayed according to duration product given.
- **Infusion Over** will be automatically default to 24 hours but user is allow to change at this field.
- Select **Indication for PN** from the dropdown box.
- **Dispense Location** will be automatically default by system.
- Enter **Remarks** if applicable.

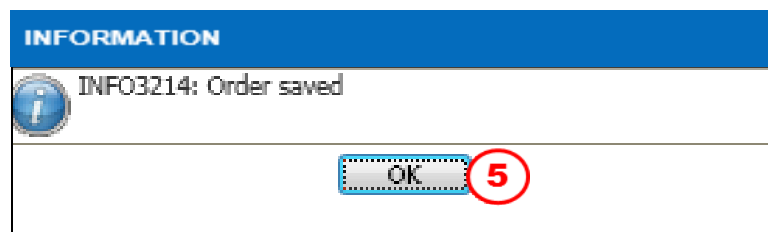


The screenshot shows the 'PN ORDER' form. The 'Type of PN' is set to 'Commercial / MOH Pre mix(Std. Soln)'. The 'PN for:' section has 'Adult' selected. The 'Body weight type' is 'Actual' and the 'Body weight' is '80 kg'. The 'PN COMPONENT' section is expanded, showing 'ADMINISTRATION INFO'. The 'Volume' is '3100 ml', 'Frequency' is 'OD', 'Start Date/Time' is '19/03/2015 05:00 PM', 'End Date/Time' is '20/03/2015 05:00 PM', and 'Order Quantity' is '1 BAG'. The 'Indication for PN' is 'Encephalopathy (risk for aspiration)', 'Infusion Line' is 'Central', 'Duration' is '1 Days', 'Infusion Over' is '24 hours', and 'Dispense Location' is 'Dispensary'. A red circle with the number '4' is placed over the 'Confirm' button in the 'PRESCRIPTION' section. Below the form is a table with one row: 'PN Compounded Adult', '3100 ml', '1 Bag', 'Details', 'Remarks', and 'DRAFT'.

Figure 4.5-6 Prescription

STEP 4


Click on the  button to confirm record order and alert message will be appeared as per Figure 4.5-7

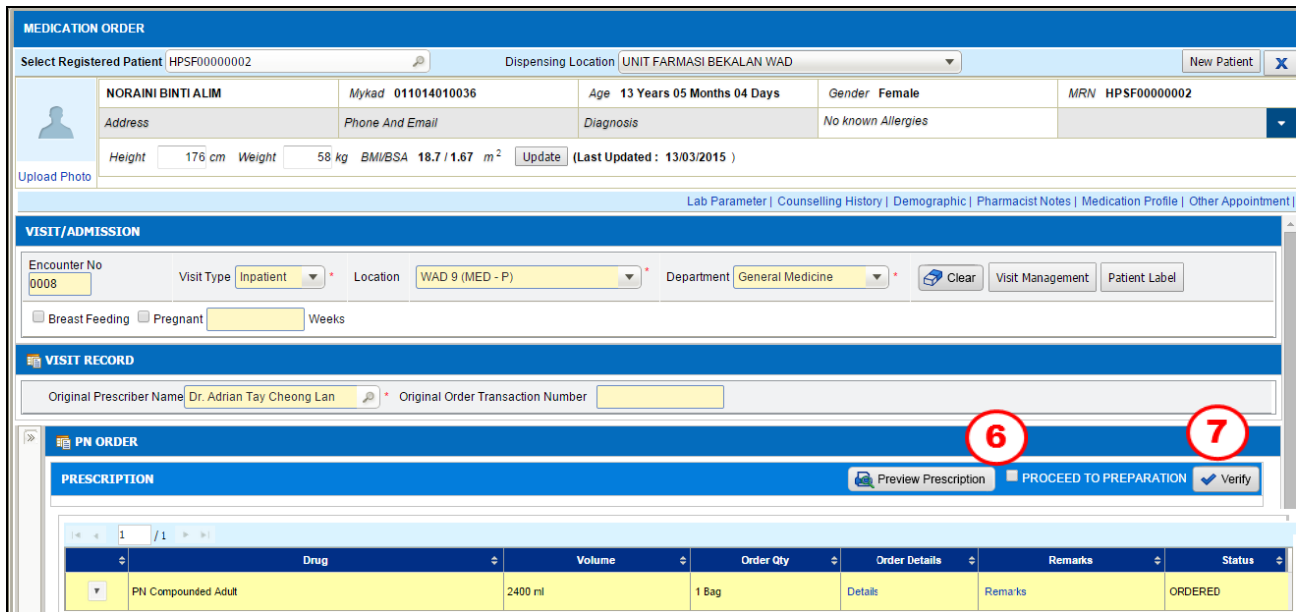


The screenshot shows an 'INFORMATION' alert message box. It contains the text 'INFO3214: Order saved' and an 'OK' button. A red circle with the number '5' is placed over the 'OK' button.

Figure 4.5-7 Information Alert Message

STEP 5

Click on the  button to confirm ordered saved and to verify PN Order screen will be appeared as per Figure 4.5-8



MEDICATION ORDER

Select Registered Patient: HPSF00000002 Dispensing Location: UNIT FARMASI BEKALAN WAD New Patient X

Patient Information:
 NORAINI BINTI ALIM Mykad: 011014010036 Age: 13 Years 05 Months 04 Days Gender: Female MRN: HPSF00000002
 Address: Phone And Email: Diagnosis: No known Allergies
 Height: 176 cm Weight: 58 kg BMI/BSA: 18.7 / 1.67 m² Update (Last Updated: 13/03/2015)

VISIT/ADMISSION
 Encounter No: 0008 Visit Type: Inpatient Location: WAD 9 (MED - P) Department: General Medicine
 Breast Feeding: Pregnant: Weeks:

VISIT RECORD
 Original Prescriber Name: Dr. Adrian Tay Cheong Lan Original Order Transaction Number:

PN ORDER

PRESCRIPTION Preview Prescription PROCEED TO PREPARATION Verify

Drug	Volume	Order Qty	Order Details	Remarks	Status
PN Compounded Adult	2400 ml	1 Bag	Details	Remarks	ORDERED

Figure 4.5-8 Prescription

STEP 6

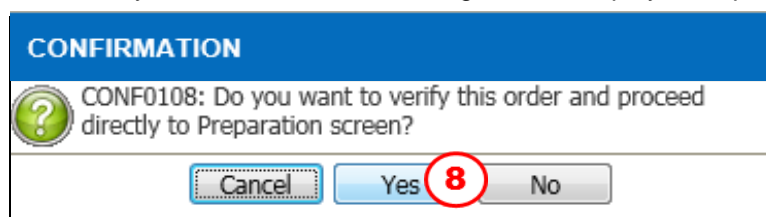
Check the ☒ **PROCEED TO PREPARATION** check box

Note

☒ **PROCEED TO PREPARATION** button function will allow user to go to directly open preparation screen for each patient record.

STEP 7

Click on the ☒ **Verify** button to verify the order and alert message will be displayed as per Figure 4.5-9



CONFIRMATION

CONF0108: Do you want to verify this order and proceed directly to Preparation screen?

Cancel Yes No

Figure 4.5-9 Information Alert Message

STEP 8

Click on the button to confirm the verification

PN PREPARATION

Patient Information:
 Name: NORAINI BINTI ALIM | Mykad: 011014010036 | Age: 13 Years 05 Months 04 Days | Gender: Female | MRN: HPSF00000002
 Address: | Phone And Email: | Diagnosis: | No known Allergies:
 Height: 176 cm | Weight: 58 kg | BMI/BSA: 18.7 / 1.67 m² | Update (Last Updated: 13/03/2015)

Encounter No: 0008 | **Admission Date:** 13/03/2015 | **Attending Practitioner:** Koh Chia Yan | **Visit Location:** WAD 9 (MED - P) | **Rx No:** 90000133807

PHARMACY ORDER
 Prepared Date/Time: 18/03/2015 04:37 PM

PRESCRIPTION
 PROCEED TO DISPENSING | Prepare | Worksheet | Label | Outsource

Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Prepare Worksheet	Remarks	Prev Disp	Status
PN Compounded Adult	2400 ml	1 Bag	Details	1 Bag	1 Bag	Details 9	Remarks	0 Bag	VERIFIED

Figure 4.5-10 Pharmacy Order

STEP 9

Click on the **Prepare Worksheet** **Details** button to prepare worksheet as per Figure 4.5-11

PREPARE WORKSHEET

Intervention ☒ Auto Allocation

DETAIL

TPN volume: 2400 ml | Energy required: 0 kcal | Product category: 3 in 1

Macronutrient
 Glucose: 0 g | Vitamin: 0 ml
 Lipid: 0 g | Water soluble: 0 ml
 Protein: 0 g | Fat soluble: 0 ml

Electrolytes
 Sodium (Na⁺): 0 mmol | Calcium Ca²⁺: 0 mmol
 Potassium (K⁺): 0 mmol | Magnesium Mg²⁺: 0 mmol

Trace elements: 0 ml
 Acetate: 0 mmol
 L-Glutamin: 0 ml
 Phosphate (PO₄)₂: 0 mmol

Item selected	Volume (ml)	Order Quantity	Allocated Quantity	Calorie (kcal)	Osmolarity (mOsmol/l)	Lipid (g)	Glucose (g)	Protein (g)	Acetate (mmol)	Phosphate (mmol)	Sodium (mmol)	Potassium (mmol)	Calcium (mmol)	Magnesium (mmol)	Chloride (mmol)
Fat emulsion, Intralipid 20% 250ml IV Soln	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dextrose 50% IV soln 500ml	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amino acid 6.53% (Vaminolact) 100ml IV Soln	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium Dihydrogen Phosphate Injection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Chloride 3% 500mL IV soln	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calcium Gluconate 10% Inj	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium Sulphate 50% Inj (49.3%/5mL)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedtrace 10mL Inj	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solvit N 10 ml Inj	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sterile Water for Inj 500mL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Preparation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Calculate

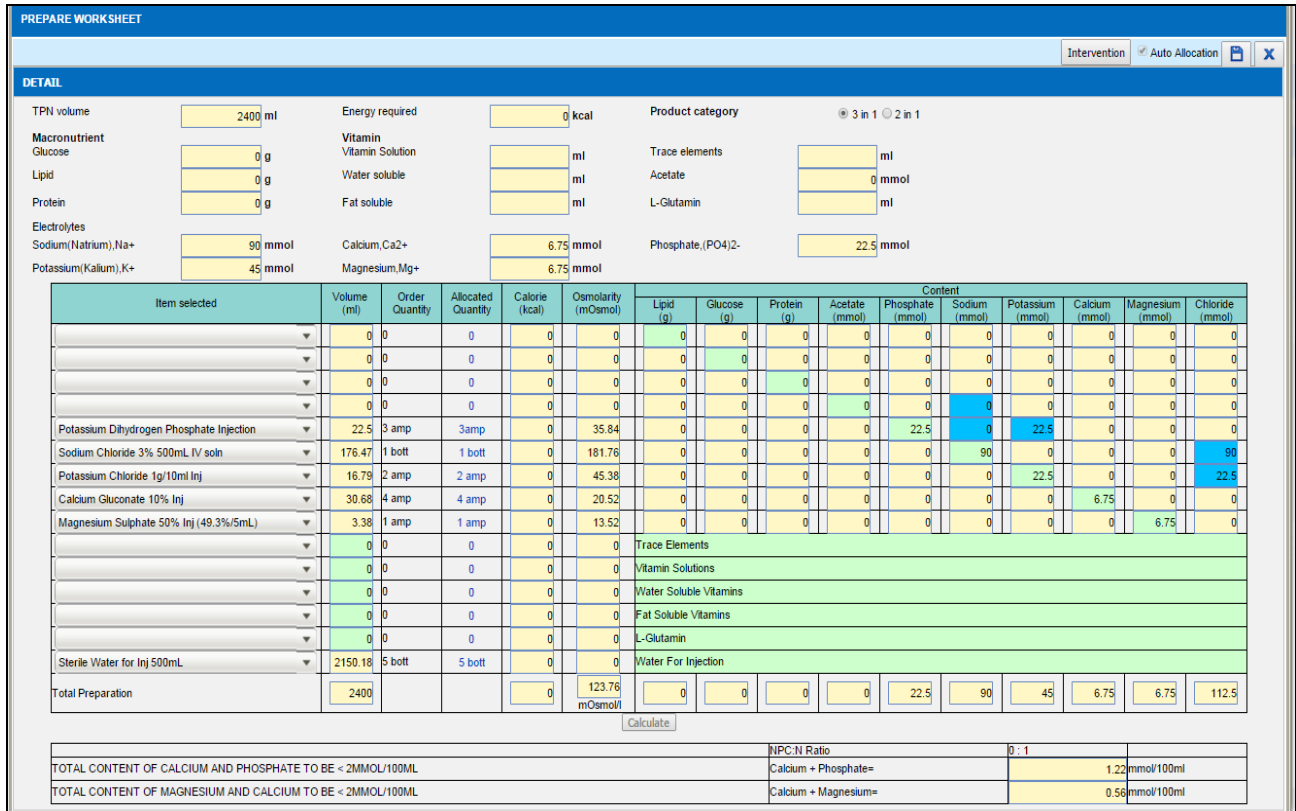
TOTAL CONTENT OF CALCIUM AND PHOSPHATE TO BE < 2MMOL/100ML
 TOTAL CONTENT OF MAGNESIUM AND CALCIUM TO BE < 2MMOL/100ML

NPC:N Ratio
 Calcium + Phosphate = 0 mmol/100ml
 Calcium + Magnesium = 0 mmol/100ml



Figure 4.5-11 Prepare Worksheet

Note

- **Macronutrient, Vitamin field and Electrolytes field display the quantity to be added into the bag.**
- Click on the **Calculate** button to calculate PN content value.
- **Volume (ml), Order Quantity, Calorie (kcal), Osmolarity(mOsmol), Content and Total Preparation will be automatically calculated and displayed by system.**



PREPARE WORKSHEET

Intervention ☒ Auto Allocation  

DETAIL

TPN volume: 2400 ml Energy required: 0 kcal Product category: ☒ 3 in 1 ☐ 2 in 1

Macronutrient: Glucose: 0 g Vitamin: Vitamin Solution: ml Trace elements: ml
Lipid: 0 g Water soluble: ml Acetate: 0 mmol
Protein: 0 g Fat soluble: ml L-Glutamin: ml

Electrolytes: Sodium(Natrium),Na+: 90 mmol Calcium,Ca2+: 6.75 mmol Phosphate,(PO4)2-: 22.5 mmol
Potassium(Kalium),K+: 45 mmol Magnesium,Mg+: 6.75 mmol

Item selected	Volume (ml)	Order Quantity	Allocated Quantity	Calorie (kcal)	Osmolarity (mOsmol)	Lipid (g)	Glucose (g)	Protein (g)	Acetate (mmol)	Phosphate (mmol)	Sodium (mmol)	Potassium (mmol)	Calcium (mmol)	Magnesium (mmol)	Chloride (mmol)
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium Dihydrogen Phosphate Injection	22.5	3 amp	3amp	0	35.84	0	0	0	0	22.5	0	22.5	0	0	0
Sodium Chloride 3% 500mL IV soln	176.47	1 bott	1 bott	0	181.76	0	0	0	0	0	90	0	0	0	90
Potassium Chloride 1g/10ml Inj	16.79	2 amp	2 amp	0	45.38	0	0	0	0	0	0	22.5	0	0	22.5
Calcium Gluconate 10% Inj	30.68	4 amp	4 amp	0	20.52	0	0	0	0	0	0	0	6.75	0	0
Magnesium Sulphate 50% Inj (49.3%/5mL)	3.38	1 amp	1 amp	0	13.52	0	0	0	0	0	0	0	0	6.75	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sterile Water for Inj 500mL	2150.18	5 bott	5 bott	0	0	0	0	0	0	0	0	0	0	0	0
Total Preparation	2400			0	123.76 mOsmol/l	0	0	0	0	22.5	90	45	6.75	6.75	112.5

Calculate

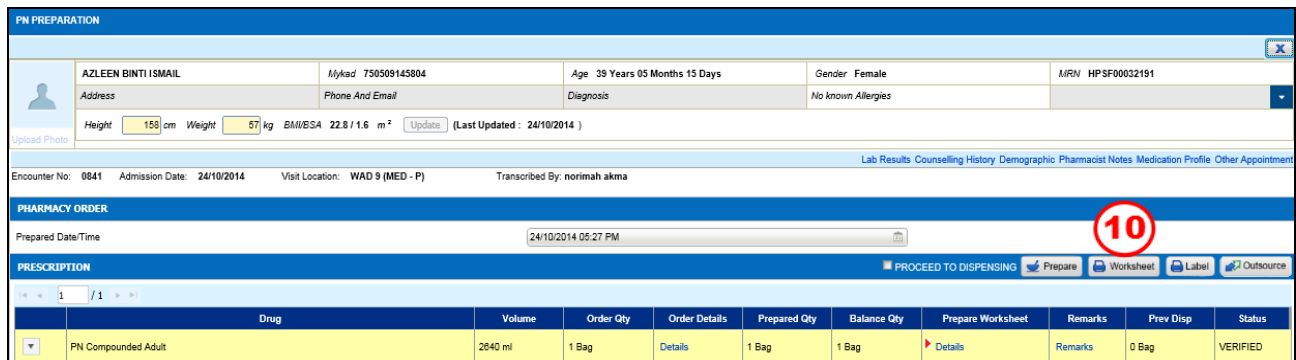
TOTAL CONTENT OF CALCIUM AND PHOSPHATE TO BE < 2MMOL/100ML NPC:N Ratio: 0.1
Calcium + Phosphate= 1.22mmol/100ml

TOTAL CONTENT OF MAGNESIUM AND CALCIUM TO BE < 2MMOL/100ML
Calcium + Magnesium= 0.58mmol/100ml


Figure 4.5-12 Prepare Worksheet

Note

- Check on the **Auto Allocation** checkbox.
- Click on the **Save** button to save record.
- **Allocated Quantity** will be automatically calculated and displayed by system after click on the save button as per Figure 4.5-12.



PN PREPARATION

 AZLEEN BINTI ISMAIL Mykad: 750509145804 Age: 39 Years 05 Months 15 Days Gender: Female MRN: HPSF00032191

Address: Phone And Email: Diagnosis: No known Allergies

Height: 158 cm Weight: 57 kg BMI/BSA: 22.8 / 1.6 m² Update (Last Updated: 24/10/2014)





Encounter No: 0041 Admission Date: 24/10/2014 Visit Location: WAD 9 (MED - P) Transcribed By: norimah akma

Lab Results: Counselling History Demographic Pharmacist Notes Medication Profile Other Appointment

PHARMACY ORDER

Prepared Date/Time: 24/10/2014 05:27 PM

PRESCRIPTION

PROCEED TO DISPENSING    

Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Prepare Worksheet	Remarks	Prev Disp	Status
PN Compounded Adult	2640 ml	1 Bag	Details	1 Bag	1 Bag	Details	Remarks	0 Bag	VERIFIED

Figure 4.5-13 PN Preparation

ADULT PARENTERAL NUTRITION WORKSHEET
MINISTRY OF HEALTH
Hospital Pakar Sultanah Fatimah, Muar

Patient Name : MOHD ALI BIN TAIB WorkSheet : A047-190315
MRN : HPSF00018211 Prepared Date/Time : 19/03/2015 02:24 PM
Ward/Bed No : WAD 8 (MED - L) Prescription # : 80000133892
Age : 51 Years 03 Months 14 Days
Gender : Male
Body Weight : 45 kg

DRUG NAME	VOLUME (ml)	QUANTITY	BATCH NO	COMPONENT DETAIL (PER DAY)
Sterile Water for Inj 500mL	2150.18	5 bottle	DMHPSF14	NA
Sodium Chloride 3% 500mL IV soln	176.47	1 bottle	13334341..	90 mmol
Potassium Dihydrogen Phosphate Injection	22.5	3 ampoule	345076	22.5 mmol
Magnesium Sulphate 50% Inj (49.3%/5mL)	3.38	1 ampoule	335074	6.75 mmol
Potassium Chloride 1g/10ml Inj	16.79	2 ampoule	DMHPSF14	45 mmol
Calcium Gluconate 10% Inj	30.68	4 ampoule	14195015	6.75 mmol
TPN Volume Bag	2400	1 Bag		

Worksheet Generated By : Shantasaroopini a/p Sathia Moorthy Date : 19/03/2015
Worksheet and Label Checked By : Supervised By :
Bag Prepared By :
Final Product Checked By :

Figure 4.5-14 Sample PN Worksheet

Note

Sample of PN Worksheet as per Figure 4.5-14.

PN EDIT LABEL

☒ Select for print

Drug Name: PN Compounded Adult
Total Volume: 2400 ml
Infusion Over: 24 Hour(s)
Infusion Rate: mL/Hour
Prepared Date/Time: 19/03/2015 2:24 PM
Expiry Date/Time: 20/03/2015 2:24 PM
Batch / Worksheet No: A047-190315

Shelf Life: 24 Hours


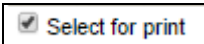
Figure 4.5-15 PN Edit Label

STEP 10

Click on the  button to print Worksheet

Note

Edit Label

- Click on the  button to edit label and **PN Edit Label** window will display as per Figure 4.5-16.
- Select the  radio button to print label.
- User is allowed to edit **Infusion Over**, **Date Prepared** and **Shelf Life** field.
- Expiry Date** will be automatically displayed after enter the **Shelf Life** field.

Drug Name, **Total Volume**, **Infusion Rate** and **Batch No** will be automatically displayed by system.

HOSPITAL PAKAR SULTANAH FATIMAH, MUAR		
PARENTERAL NUTRITION (Adult)		
NAME : MOHD ALI BIN TAIB		
AGE : 51 Years 03 Months 14 Days		
MRN : HPSF00018211	WARD/BED NO: WAD 8 (MED - L)	
Total 2400 ml/bag		
Content per bag		
Protein	0 g	
Dextrose	0 g	
Lipid	0 g	
Sodium	90 mmol	
Potassium	45 mmol	
Calcium	6.75 mmol	
Magnesium	6.75 mmol	
Phosphate	22.5 mmol	
Chloride	112.5 mmol	
Acetate	0 mmol	
Trace Element	0 mL	
Vitamins	0 mL	
Calories	0 kcal	
Osmolarity	123.76 mOsm/l	
L-Glutamin	0 ml	
Date and Time of Administration :		
Infusion Rate	0 ml/Hrs	
Worksheet ID A047-190315	Expiry Date 20/03/2015 2:24 PM	Price : RM
Do not use if any visible solid particles, growth or precipitation appears		
Store in refrigerator (2-8 °C). Protect from light (Once open use within 48 hours) Ensure PN Solution is at room temperature before infusion		
TO BE INFUSED VIA CENTRAL VENOUS LINE		

Figure 4.5-16 Sample PN Label

PN PREPARATION

Patient Information:
 Name: NORAINI BINTI ALIM | Mykad: 011014010036 | Age: 13 Years 05 Months 04 Days | Gender: Female | MRN: HPSF00000002
 Address: | Phone And Email: | Diagnosis: | No known Allergies
 Height: 176 cm | Weight: 58 kg | BMI/BSA: 18.7 / 1.67 m² | Update (Last Updated: 13/03/2015)

Encounter No: 0008 | **Admission Date:** 13/03/2015 | **Attending Practitioner:** Koh Chia Yan | **Visit Location:** WAD 9 (MED - P) | **Rx No:** 90000133807

PHARMACY ORDER
 Prepared Date/Time: 18/03/2015 04:37 PM

PRESCRIPTION ☒ PROCEED TO DISPENSING

Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Prepare Worksheet	Remarks	Prev Disp	Status
PN Compounded Adult	2400 ml	1 Bag	Details	1 Bag	1 Bag	<input type="button" value="Details"/>	Remarks	0 Bag	VERIFIED

Figure 4.5-17 PN Preparation

STEP 11

Click on the  button to prepare PN order

CONFIRMATION

INFO0577: Please make sure already print worksheet and label before proceed to dispensing stage. Do you want to proceed with the preparation?

Figure 4.5-18 Confirmation Alert Message

STEP 12

Click on the button to confirm prepare order

PN DISPENSING

Patient Information:
 Name: NORAINI BINTI ALIM | Mykad: 011014010036 | Age: 13 Years 05 Months 04 Days | Gender: Female | MRN: HPSF000000002
 Address: | Phone And Email: | Diagnosis: | No known Allergies
 Height: 176 cm | Weight: 58 kg | BMI/BSA: 18.7 / 1.67 m² | Update (Last Updated: 13/03/2015)

Encounter No: 0008 | **Admission Date:** 13/03/2015 | **Attending Practitioner:** Koh Chia Yan | **Visit Location:** WAD 9 (MED - P) | **Rx No:** 90000133807

PHARMACY ORDER
 Dispensed To: ZAINAB BINTI HASSAN | Dispensed Date and Time: 18/03/2015 06:04:07 PM | Remarks: |
 Dispensed At: Pharmacy Counter | Collected By: |

PRESCRIPTION

Drug	Volume	Order Qty	Order Details	Prepared Qty	Prev Disp	Balance Qty	Remarks	Status	Complete
PN Compounded Adult	2400 ML	1 Bag	Details	1 Bag	0 Bag	1 Bag	Remarks	PREPARED	<input type="checkbox"/>

Figure 4.5-19 PN Preparation

STEP 13

Click on the  button and alert message will be displayed as per Figure 4.5-20

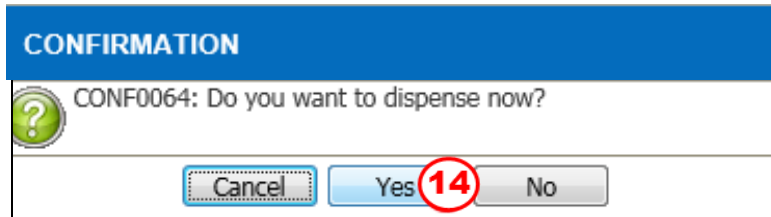


Figure 4.5-20 Confirmation Alert Message

STEP 14

Click on the  button to confirm prepare order

Note

- User only can do **Hold/Resume** Order at dispensing activity.
- When release batch, drug and PN bag quantity will be returned back to inventory. When discard batch, drug and PN bag quantity will be deducted from inventory.
- Once drug already released or discarded, drug will be displayed back in Preparation screen for re-allocation of new batch qty.

4.6 Compounded (Paediatric)

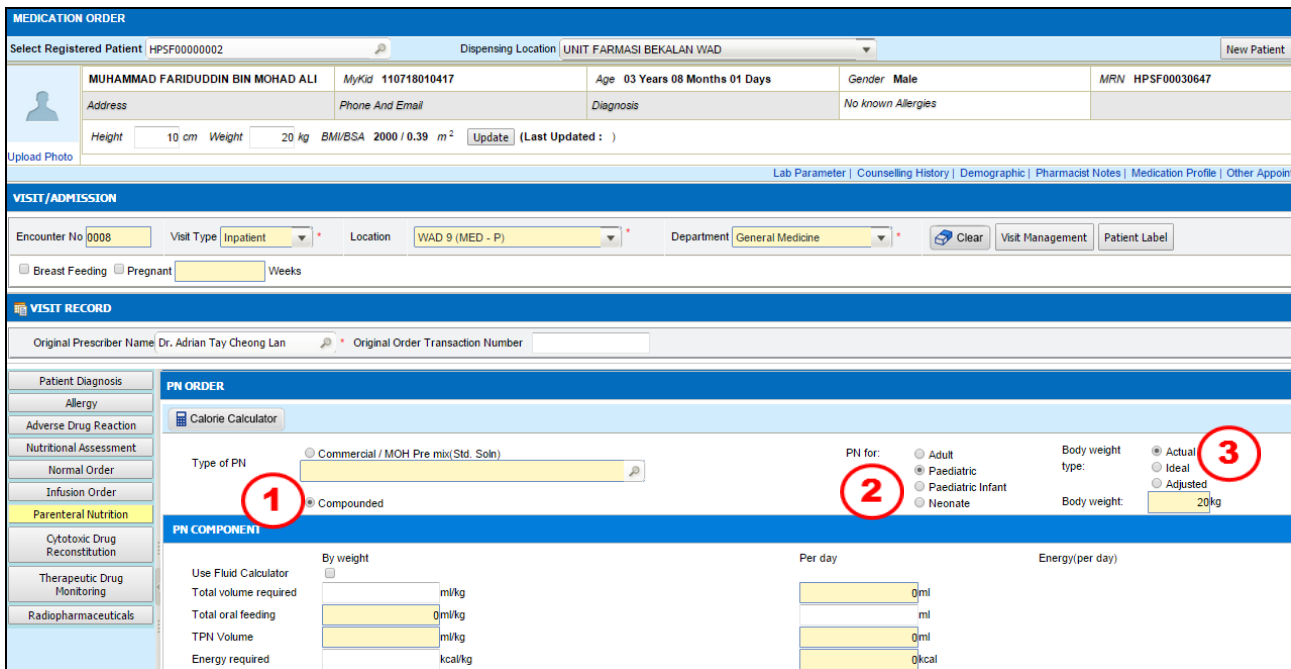


Figure 4.6-1 Medication Order

PN Compounded (Paediatric) allow user to order Parenteral Nutrition for patient between 3 years old to 12 years old.

STEP 1

Select on **Compounded** radio button for 'Type of PN'

STEP 2

Select on **Paediatric** radio button for 'PN for'

STEP 3

Select on the 'Body weight type' radio button to use for calculation either as:

- Actual
- Ideal
- Adjusted

PN COMPONENT					
By weight		Per day		Energy(per day)	
Use Fluid Calculator	<input type="checkbox"/>				
Total volume required	260ml/kg		5200ml		
Total oral feeding	0ml/kg		ml		
TPN Volume	260ml/kg		5200ml		
Energy required	kcal/kg		0kcal		
Macronutrient					
Carbohydrate	g/kg	Recommended range(per kg) 3.00 - 10.50g/kg	0g		0kcal
Lipid	1g/kg	1.00 - 2.00g/kg	20g		180kcal
Protein	1g/kg	1.00 - 3.00g/kg	20g		80kcal
L-Glutamin	0ml/kg	0.00 - 0.00ml/kg	ml		0kcal
Carbohydrate:Lipid(kcal)	0 : 100	Nitrogen Content 4g	NPC:NRatio 45 : 1	Total	260kcal
Electrolytes					
Sodium(Natrium),Na+	1mmol/kg	1.00 - 3.00mmol/kg	20mmol		
Potassium(Kalium),K+	2mmol/kg	1.00 - 3.00mmol/kg	40mmol		
Calcium,Ca2+	1mmol/kg	0.50 - 1.25mmol/kg	20mmol		
Magnesium,Mg+	0.15mmol/kg	0.15 - 0.25mmol/kg	3mmol		
Phosphate,(PO4)2-	mmol/kg	0.50 - 1.00mmol/kg	0mmol		
Chloride,Cl+	mmol/kg	2.00 - 5.00mmol/kg	0mmol		
Acetate(CH3COO)	mmol/kg	0.00 - 0.00mmol/kg	0mmol		
Trace elements	ml/kg	0.00 - 15.00ml	ml		
Vitamin					
<input type="radio"/> Single Vitamin <input type="radio"/> Multi Vitamin					

Figure 4.6-2 Medication Order

Note

By default Body weight type show the **Actual** body weight of the patient. Value for **Body Weight (kg)** will be change base on selected **Body weight** type.

PN Component

- Enter value for **Total volume required per day (ml)**.
- Value **By Weight** will automatically calculate and display after enter the **Total volume required per day (ml)**.
- Enter value for **Energy required By Weight (kcal/kg)**.
- Value **Per day** will automatically calculate and display after enter the **Energy required By Weight (kcal/kg)**.

Macronutrient

- Enter value of the **Macronutrient** that applicable for the **PN Component**.
- All entered value must between the **Recommended Range (per kg)**. User can still proceed if value is not within the recommended range.
- All value **Per day** and **Energy(per day)** will automatically calculate and display.

L-Gutamin is an optional function. Value of **By weight** and **Energy(per day)** will automatically display.

- Value of **Carbohydrate:Lipid(kcal) Content, Nitrogen** and **NPC:Ratio** will automatically calculate and display.
- Value of **Carbohydrate:Lipid(kcal) Content, Nitrogen** and **NPC:Ratio** will automatically calculate and display.

Electrolytes

- Enter value of the **Electrolytes** that applicable for the PN Component.
- All entered value must between the **Recommended Range (per kg)**. User can still proceed if value is not within the recommended range.
- **Chloride ,Cl⁻** and **Acetate (CH₃COO)** is optional function.
- All value **Per day** will automatically calculate and display.
- Enter value of the **Trace elements Per day**.
- Value **By Weight** will automatically calculate and display after enter the **Trace elements Per day** value.

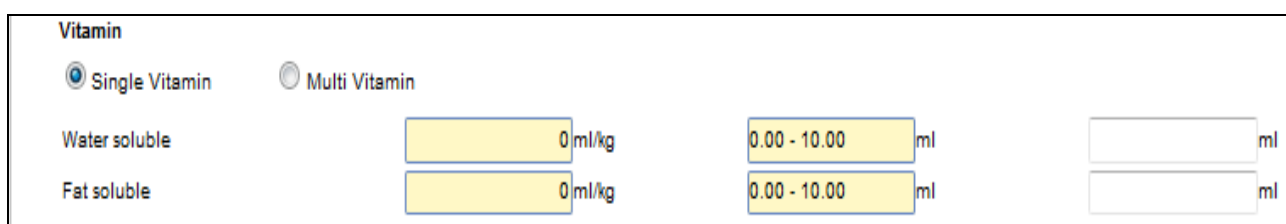


Figure 4.6-3 Single Vitamin

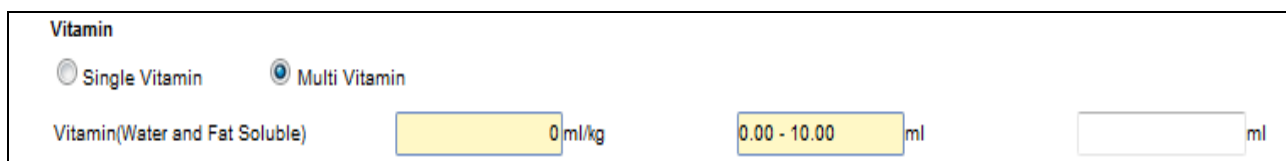


Figure 4.6-4 Multi Vitamin

NOTE

- Select either **Single Vitamin** or **Multivitamin** radio button.
- Vitamin have 2 types vitamin:
 - **Single Vitamin**
 - **Multi Vitamin**

If user select **Single Vitamin** radio button; **Water soluble** and **Fat soluble** field will automatically display by system as per Figure 4.6-3.

- If user select **Multi Vitamin** radio button; **Vitamin(Water and Fat Soluble)** field will automatically display by system as per Figure 4.6-4.

PN ORDER

Calorie Calculator

Type of PN: ☐ Commercial / MOH Pre mix (Std. Soln) ☐ Compounded

PN for: ☐ Adult ☒ Paediatric ☐ Paediatric Infant ☐ Neonate

Body weight type: ☒ Actual ☐ Ideal ☐ Adjusted

Body weight: 20kg

PN COMPONENT

ADMINISTRATION INFO

Volume: 5200 ml

Frequency: OD

Start Date/Time: 19/03/2015 05:00 PM

End Date/Time: 20/03/2015 05:00 PM

Order Quantity: 1 BAG

Remarks:

Indication for PN: Encephalopathy (risk for aspiration)

Infusion Line: Central

Duration: 1 Days

Infusion Over: 24hours

Dispense Location: UNIT NUTRISI PARENTERAL

PRESCRIPTION

Clear Draft Confirm

1 / 1

Drug	Volume	Order Qty	Order Details	Remarks	Status
No Records Found!					

Figure 4.6-5 Administration Info

Note

- **Volume** will be automatically displayed by system and user is not allow to change at this field.
- **Infusion Line** will be automatically default to **Central** but user is allow to change at this field and select type of **Infusion Line** from the dropdown box.
- **Frequency** and **Duration** field will be automatically displayed and user is not allow to change this field.
- Default value for:
 - **Frequency** : OD (daily)
 - **Duration** : 1 day
- **Start Date/Time** will be automatically default to current date but still can be change by the user if applicable.
- **End Date/Time** will be displayed according to duration product given.
- **Infusion Over** will be automatically default to 24 hours but user is allow to change at this field.
- Select **Indication for PN** from the dropdown box.
- **Dispense Location** will be automatically default by system.
- **Enter Remarks if applicable**

PN ORDER

Calorie Calculator

Type of PN: ☐ Commercial / MOH Pre mix(Std. Soln) ☐ Compounded

PN for: ☐ Adult ☐ Paediatric ☐ Paediatric Infant ☐ Neonate

Body weight type: ☐ Actual ☐ Ideal ☐ Adjusted

Body weight: 80kg

PN COMPONENT

ADMINISTRATION INFO

Volume: 3100 ml

Frequency: OD

Start Date/Time: 19/03/2015 05:00 PM

End Date/Time: 20/03/2015 05:00 PM

Order Quantity: 1 BAG

Remarks:

Indication for PN: Encephalopathy (risk for aspiration)

Infusion Line: Central

Duration: 1 Days

Infusion Over: 24 hours

Dispense Location: Dispensary


PRESCRIPTION

Preview Prescription Confirm Delete

Drug	Volume	Order Qty	Order Details	Remarks	Status
PN Compounded Paediatric	5200 ml	1 Bag	Details	Remarks	DRAFT

Figure 4.6-6 Prescription

STEP 4

Click on the  button to confirm record order and alert message will be appeared as per Figure 4.6-7


INFORMATION

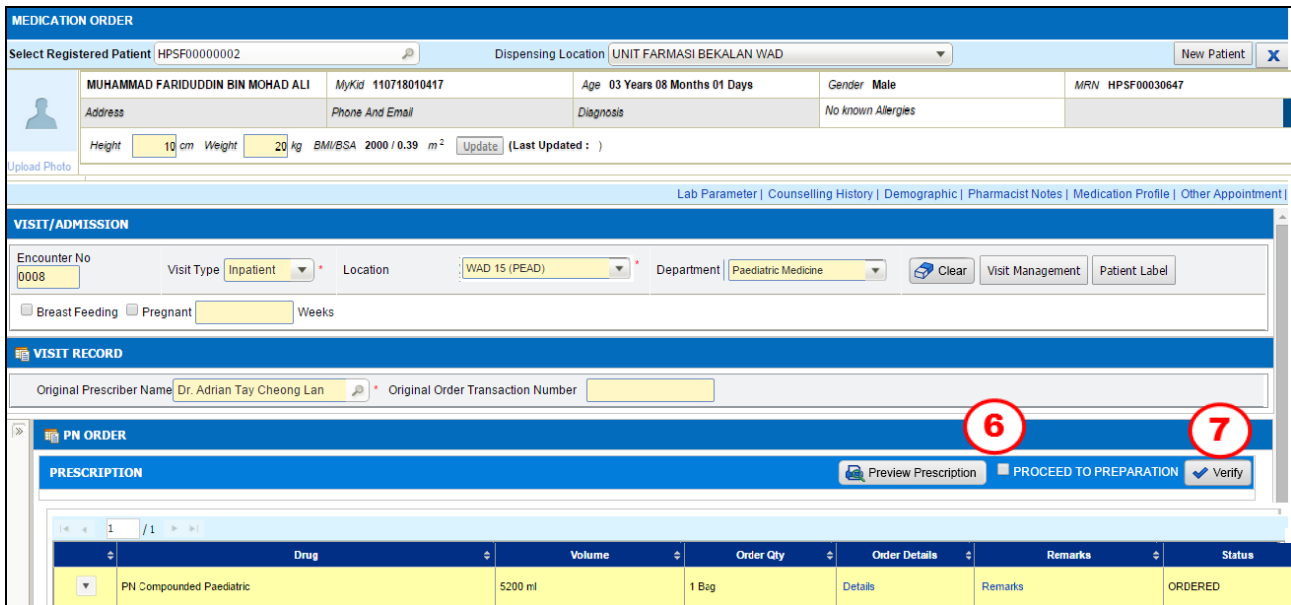
INFO3214: Order saved

OK

Figure 4.6-7 Prescription

STEP 5

Click on the  button to confirm ordered saved and to verify PN Order screen will be appeared as per Figure 4.6-8



Drug	Volume	Order Qty	Order Details	Remarks	Status
PN Compounded Paediatric	5200 ml	1 Bag	Details	Remarks	ORDERED

Figure 4.6-8 Medication Order : Verify

STEP 6

Check the ☒ **PROCEED TO PREPARATION** check box

Note

☒ **PROCEED TO PREPARATION** function will allowed user to go to Preparation screen for each patient record.

STEP 7

Click on the ☒ **Verify** button to verify the order and alert message will be displayed as per Figure 4.6-9

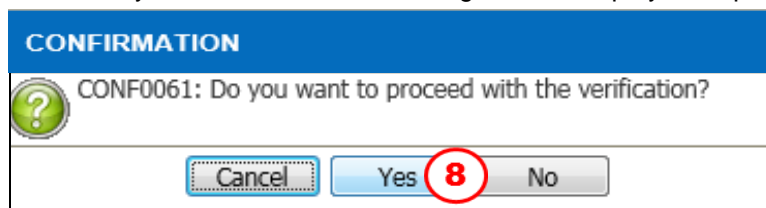


Figure 4.6-9 Confirmation Alert Message

STEP 8

Click on the ☒ **Yes** button to confirm the verification

PN PREPARATION

MUHAMMAD FARIDUDDIN BIN MOHAD ALI MyKid: 110718010417 Age: 03 Years 08 Months 01 Days Gender: Male MRN: HPSF00030647
 Address: Phone And Email: Diagnosis: No known Allergies

Height: 10 cm Weight: 20 kg BMI/BSA: 2000 / 0.39 m² (Last Updated:)

Encounter No: 0743 Admission Date: 14/07/2014 Attending Practitioner: Shantasaropini a/p Sathia Moorthy Visit Location: WAD 15 (PEAD) Rx No: 150000133898 Reference No: K.SOPD-KELAS 3

PHARMACY ORDER

Prepared Date/Time: 19/03/2015 04:01 PM

PRESCRIPTION

Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Prepared	Remarks	Prev Disp	Status
PN Compounded Paediatric	5200 ml	1 Bag	Details	1 Bag	1 Bag	Details	Remarks	0 Bag	VERIFIED

Figure 4.6-10 PN Preparation

STEP 9

Click on the **Prepare Worksheet** [Details](#) button to prepare worksheet as per Figure 4.6-11

PREPARE WORKSHEET

DETAIL

TPN volume: 5200 ml Energy required: 260 kcal Product category: **10** 3 in 1 2 in 1
 Macronutrient: Glucose 0 g Vitamin Solution: 0 ml Trace elements: 0 ml Lipid Syringe: 100 ml
 Lipid: 20 g Water soluble: 0 ml Acetate: 0 mmol Volume Without Lipid: 5100 ml
 Protein: 20 g Fat soluble: 0 ml Overage volume: 0 ml Lipid Overage Volume: 0 ml
 Electrolytes: Sodium (Natrium), Na+: 20 mmol Calcium, Ca2+: 20 mmol Phosphate, (PO4)2-: 0 mmol
 Potassium (Kalium), K+: 40 mmol Magnesium, Mg+: 3 mmol

Item selected	Volume (ml)	Order Quantity	Allocated Quantity	Calorie (kcal)	Osmolarity (mOsmol)	Lipid (g)	
Fat emulsion, Intralipid 20% 250ml IV Soln	100	1 bott	0	180	35	20	Lipid
Total Preparation	100			180	350	20	

11 **12**

PN Bag (Without lipid)

Item selected	Volume (ml)	Order Quantity	Allocated Quantity	Calorie (kcal)	Osmolarity (mOsmol)	Glucose (g)	Protein (g)	Acetate (mmol)	Phosphate (mmol)	Sodium (mmol)	Potassium (mmol)	Calcium (mmol)	Magnesium (mmol)	Chloride (mmol)
Amino acid 6.53% (Vaminolact) 100ml IV Soln	306.28	4 bott	0	80	156.2	0	20	0	0	0	0	0	0	0
Sodium Chloride 3% 500mL IV soln	39.22	1 bott	0	0	40.4	0	0	0	0	20	0	0	0	20
Potassium Chloride 1g/10ml Inj	29.85	3 amp	0	0	80.68	0	0	0	0	0	40	0	0	40
Calcium Gluconate 10% Inj	90.91	10 amp	0	0	60.82	0	0	0	0	0	0	20	0	0
Magnesium Sulphate 50% Inj (49.3%/5mL)	1.5	1 amp	0	0	6	0	0	0	0	0	0	0	3	0
Sterile Water for Inj 500mL	4632.24	10 bott	0	0	0	0	0	0	0	0	0	0	0	0
Total Preparation	5100			80	67.47	0	20	0	0	20	40	20	3	60

13 **14**

Figure 4.6-11 Prepare Worksheet

STEP 10

Select on the ☐ 3 in 1 ☒ 2 in 1 radio button for product category

Note

Section A:

Macronutrient, Vitamin and Electrolytes will be automatically displayed by system based on prescription order.

Section B:

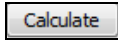
Lipid Syringe table

- Volume (ml), Order Quantity, Calorie (kcal), Osmolarity(mOsmol), Lipid and Total Preparation will be automatically calculated and displayed by system.
- Lipid Overage function provided.

STEP 11

Select the product for lipid preparation

STEP 12

Click on the  button to calculate PN content value

Note

All column in Section B will be updated.

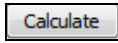
PN Bag (Without Lipid)table

Volume (ml), Order Quantity, Content and **Total Preparation** will be automatically calculated and displayed by system. **Overage** bag function provided.

STEP 13

Select the product for PN bag preparation

STEP 14

Click on the  button to calculate PN content value

Note

Volume Calorie and **Osmolarity** will be calculated.

Section C:

Overage Volume

- Enter the excess amount for PN bag preparation.

Eg:

Ordered volume for PN bag = 5200ml.

Pharmacy to prepare = 5200ml.

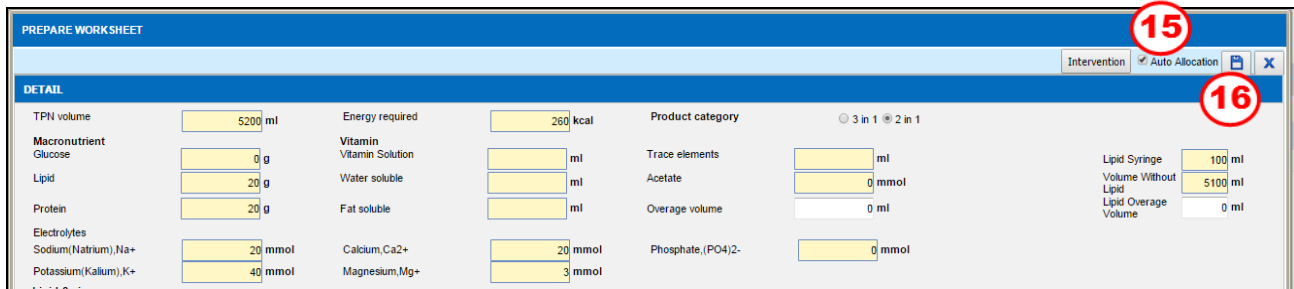
Overage volume PN bag = 20ml.

- Click on the  button on PN Bag table


Lipid Overage Volume

- Enter excess amount for Lipid Syringe preparation.

Click on the  button on Lipid Syringe table.



PREPARE WORKSHEET

Intervention ☒ Auto Allocation 

DETAIL

TPN volume: 5200 ml Energy required: 260 kcal Product category: 3 in 1 2 in 1

Macronutrient: Glucose 0 g Vitamin: Vitamin Solution 0 ml Trace elements: 0 ml Lipid Syringe: 100 ml

Lipid: 20 g Water soluble: 0 ml Acetate: 0 mmol Volume Without Lipid: 5100 ml


Protein: 20 g Fat soluble: 0 ml Overage volume: 0 ml Lipid Overage Volume: 0 ml

Electrolytes: Sodium (Natrium), Na+: 20 mmol Calcium, Ca2+: 20 mmol Phosphate, (PO4)2-: 0 mmol

Potassium (Kalium), K+: 40 mmol Magnesium, Mg+: 3 mmol

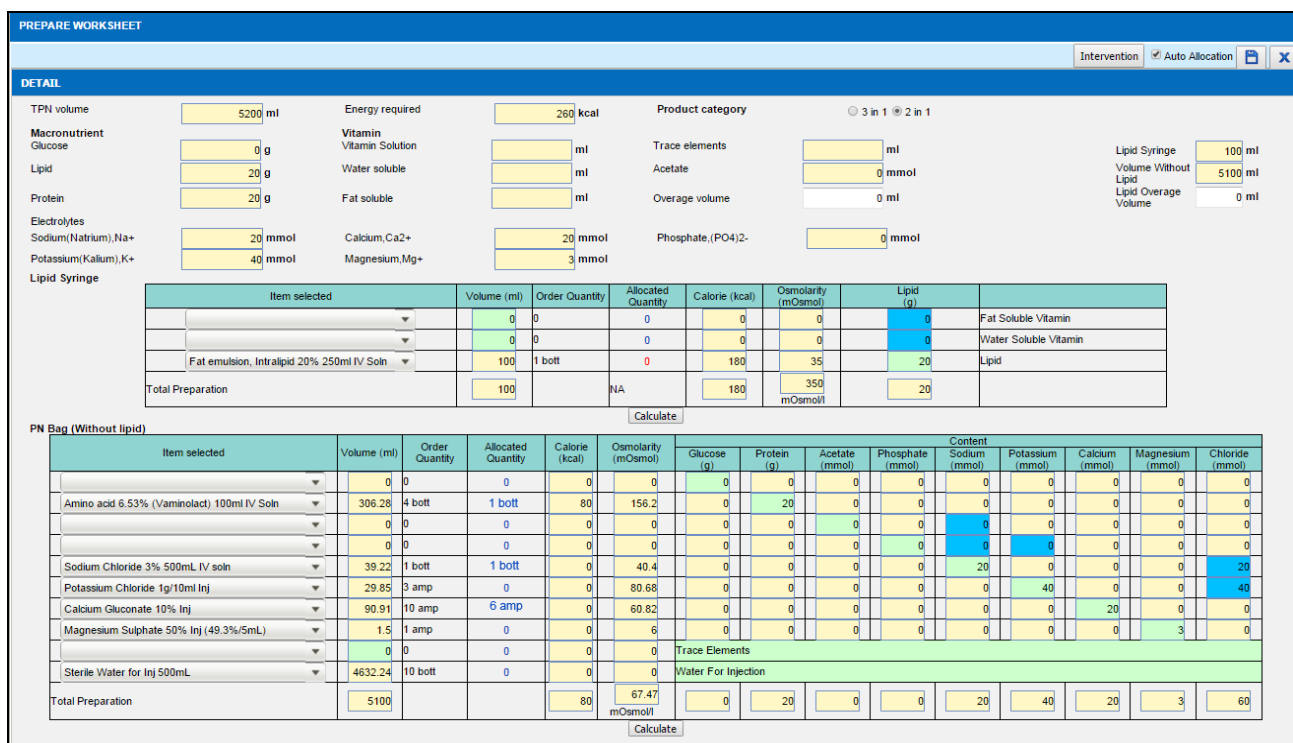
Figure 4.6-12 Prepare Worksheet

STEP 15


Check on the  checkbox

STEP 16

Click on the  button to save record



PREPARE WORKSHEET

Intervention ☒ Auto Allocation 

DETAIL

TPN volume: 5200 ml Energy required: 260 kcal Product category: 3 in 1 2 in 1

Macronutrient: Glucose 0 g Vitamin: Vitamin Solution 0 ml Trace elements: 0 ml Lipid Syringe: 100 ml

Lipid: 20 g Water soluble: 0 ml Acetate: 0 mmol Volume Without Lipid: 5100 ml

Protein: 20 g Fat soluble: 0 ml Overage volume: 0 ml Lipid Overage Volume: 0 ml

Electrolytes: Sodium (Natrium), Na+: 20 mmol Calcium, Ca2+: 20 mmol Phosphate, (PO4)2-: 0 mmol

Potassium (Kalium), K+: 40 mmol Magnesium, Mg+: 3 mmol

Item selected	Volume (ml)	Order Quantity	Allocated Quantity	Calorie (kcal)	Osmolarity (mOsmol)	Lipid (g)
Fat emulsion, Intralipid 20% 250ml IV Soln	100	1 bott	0	180	35	20
Total Preparation	100		NA	180	350	20

Calculate



PN Bag (Without lipid)

Item selected	Volume (ml)	Order Quantity	Allocated Quantity	Calorie (kcal)	Osmolarity (mOsmol)	Glucose (g)	Protein (g)	Acetate (mmol)	Phosphate (mmol)	Sodium (mmol)	Potassium (mmol)	Calcium (mmol)	Magnesium (mmol)	Chloride (mmol)
Amino acid 6.53% (Vaminolact) 100ml IV Soln	306.28	4 bott	1 bott	80	156.2	0	20	0	0	0	0	0	0	0
Sodium Chloride 3% 500mL IV soln	39.22	1 bott	1 bott	0	40.4	0	0	0	0	20	0	0	0	20
Potassium Chloride 1g/10ml Inj	29.85	3 amp	0	0	80.68	0	0	0	0	0	40	0	0	40
Calcium Gluconate 10% Inj	90.91	10 amp	6 amp	0	60.82	0	0	0	0	0	0	20	0	0
Magnesium Sulphate 50% Inj (49.3%/5mL)	1.5	1 amp	0	0	6	0	0	0	0	0	0	0	3	0
Sterile Water for Inj 500mL	4632.24	10 bott	0	0	0	0	0	0	0	0	0	0	0	0
Total Preparation	5100			80	67.47	0	20	0	0	20	40	20	3	60

Calculate

Figure 4.6-13 Prepare Worksheet

Note

- Allocated Quantity** column will be automatically calculated and displayed by system as per Figure 4.6-13.
- Click on the  and  button to generate worksheet and label as in Compounded Adult

PN PREPARATION

MUHAMMAD FARIDUDDIN BIN MOHAD ALI MyKid 110718010417 Age 03 Years 08 Months 01 Days Gender Male MRN HPSF00030647

Address Phone And Email Diagnosis No known Allergies

Height 10 cm Weight 20 kg BMI/BSA 2000 / 0.39 m² [Update](#) (Last Updated :)

Encounter No: 0743 Admission Date: 14/07/2014 Attending Practitioner: Shantasaropini a/p Sathia Moorthy Visit Location: WAD 15 (PEAD) Rx No: 150000133898 Reference No: K.SOPD-KELAS 3

PHARMACY ORDER

Prepared Date/Time 19/03/2015 04:53 PM

PRESCRIPTION [PROCEED TO DISPENSING](#) [Prepare](#) [Worksheet](#) [Label](#) [Outsource](#)

Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Prepare Worksheet	Remarks	Prev Disp	Status
PN Compounded Paediatric	5200 ml	1 Bag	Details	1 Bag	1 Bag	Details	Remarks	0 Bag	VERIFIED

Figure 4.6-14 PN Preparation

STEP 17

Click on the [Prepare](#) button to prepare PN order

CONFIRMATION

INFO0577: Please make sure already print worksheet and label before proceed to dispensing stage. Do you want to proceed with the preparation?

[Cancel](#) [Yes](#) [No](#)

Figure 4.6-15 Confirmation Alert Message

STEP 18

Click on the [Yes](#) button to confirm prepare order

Note

Proceed to Dispensing function will allowed user to go next stage screen for each patient record.

PN DISPENSING

MUHAMMAD FARIDUDDIN BIN MOHAD ALI MyKid 110718010417 Age 03 Years 08 Months 01 Days Gender Male MRN HPSF00030647

Address Phone And Email Diagnosis No known Allergies

Height 10 cm Weight 20 kg BMI/BSA 2000 / 0.39 m² [Update](#) (Last Updated :)

Encounter No: 0008 Admission Date: 13/03/2015 Attending Practitioner: Koh Chia Yan Visit Location: WAD 9 (MED - P) Rx No: 90000133807

PHARMACY ORDER

Dispensed To ZAINAB BINTI HASSAN Dispensed Date and Time 18/03/2015 06:04:07 PM Remarks

Dispensed At Pharmacy Counter Collected By

PRESCRIPTION [Release/Discard](#) [Worksheet](#) [Label](#) [Dispense](#)

Drug	Volume	Order Qty	Order Details	Prepared Qty	Prev Disp	Balance Qty	Remarks	Status	Complete
PN Compounded Paediatric	5200 ml	1 Bag	Details	1 Bag	0 Bag	1 Bag	Remarks	PREPARED	<input type="checkbox"/>

Figure 4.6-16 PN Dispensing

STEP 19

Click on the [Dispense](#) button and alert message will be displayed as per Figure 4.6-17

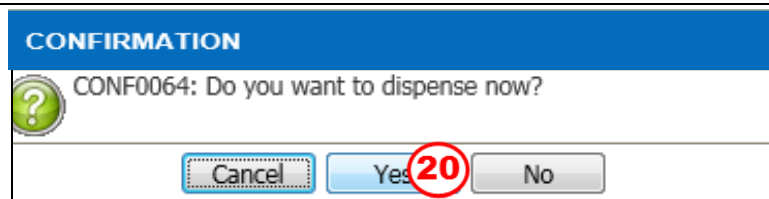


Figure 4.6-17 Confirmation Alert Message

STEP 20

Click on the  button to confirm prepare order

Note

- User only can do **Hold/Resume** Order at dispensing activity.
- When release batch, drug and PN bag quantity will be returned back to inventory. When discard batch, drug and PN bag quantity will be deducted from inventory.
- Once drug already released or discarded, drug will be displayed back in Preparation screen for re-allocation of new batch qty.

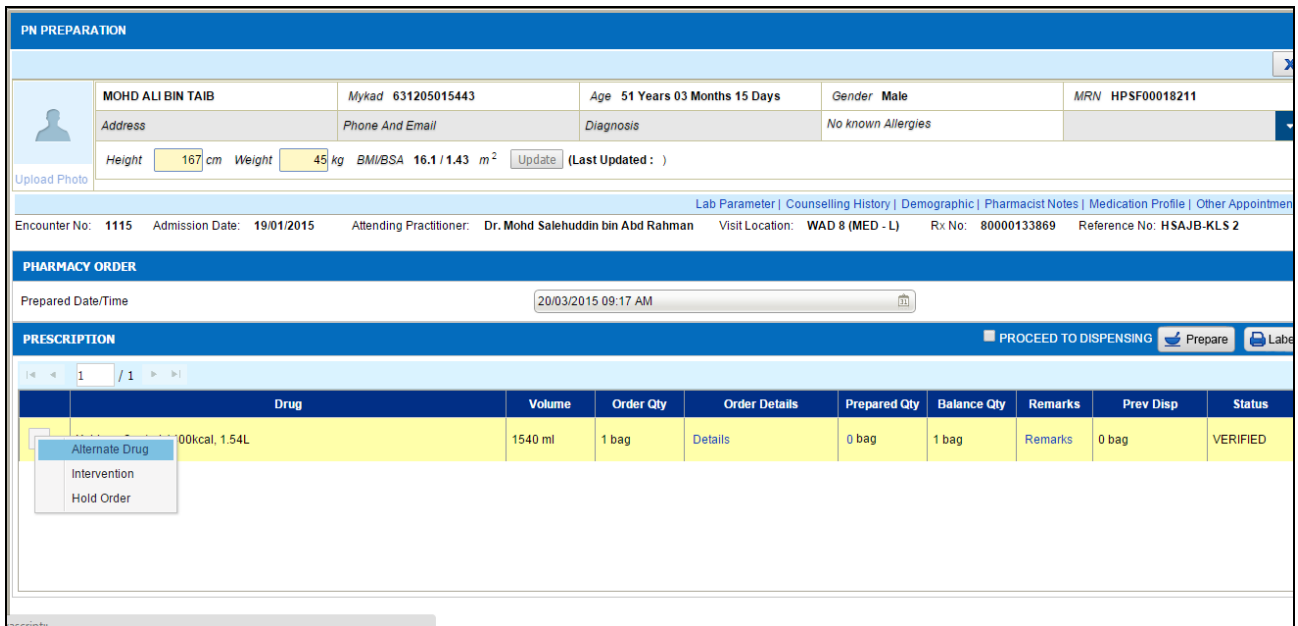
Note

- PN Compounded (Paediatric Infant) allow user to order Parenteral Nutrition for patient between 31 days old to 2 years old.
- PN Compounded (Neonate) allow user to order Parenteral Nutrition for patient between 1 day old to 30 days old.
- If PN order is for paediatric, paediatric infant or neonate, product category will default to 2 in 1.

Pediatric Infant or Neonate

Please repeat section 4.6 from **STEP 1** until **STEP 23** for medication order, verify, preparation and dispensing process.

4.7 Alternate Drug



PN PREPARATION

MOHD ALI BIN TAIB Mykad 631205015443 Age 51 Years 03 Months 15 Days Gender Male MRN HPSF00018211

Address Phone And Email Diagnosis No known Allergies

Height 167 cm Weight 45 kg BMI/BSA 16.1 / 1.43 m² Update (Last Updated :)

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

Encounter No: 1115 Admission Date: 19/01/2015 Attending Practitioner: Dr. Mohd Salehuddin bin Abd Rahman Visit Location: WAD 8 (MED - L) Rx No: 80000133869 Reference No: HSAJB-KLS 2

PHARMACY ORDER

Prepared Date/Time 20/03/2015 09:17 AM

PRESCRIPTION PROCEED TO DISPENSING Prepare Label



Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Remarks	Prev Disp	Status
100kcal, 1.54L	1540 ml	1 bag	Details	0 bag	1 bag	Remarks	0 bag	VERIFIED

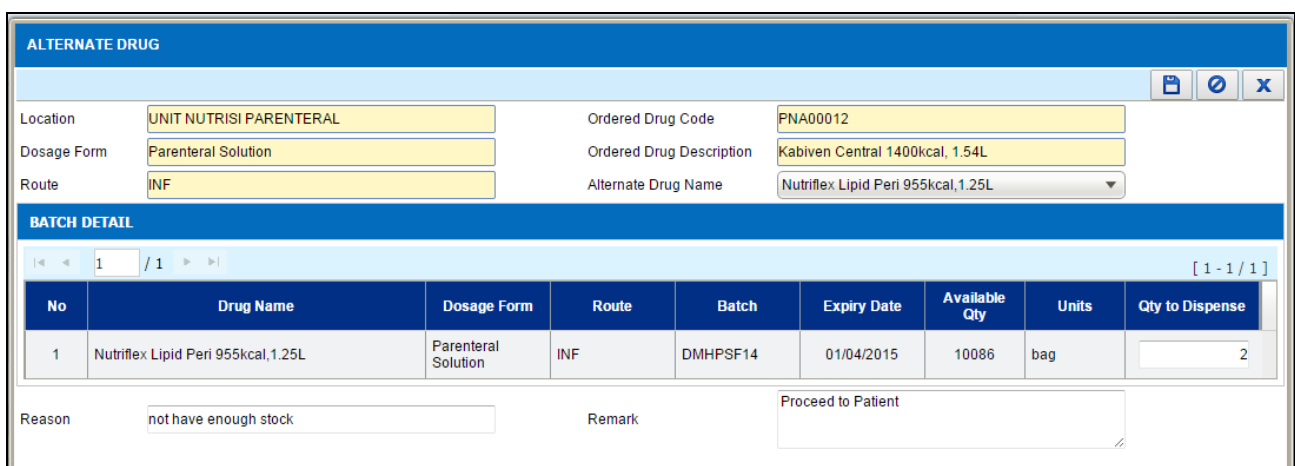
Alternate Drug
Intervention
Hold Order

Figure 4.7-1 PN Preparation

Note

Alternate Drug:

- Click on the  button to select **Alternate Drug** as per Figure 4.7-1.
- Alternate Drug** function only can be used in Commercial preparation stage of the drug.
- Select the **Alternate Drug Name** from dropdown box as per Figure 4.7-2.
- List of drug are from unit catalog list.
- Enter **Qty to Dispense** field as per Figure 4.7-2.
- Enter **Reason** field if applicable as per Figure 4.7-2.
- Enter **Remark** field if applicable as per Figure 4.7-2.
- Click on the  button to save record and alert message will be appeared as per Figure 4.7-3.



ALTERNATE DRUG

Location UNIT NUTRISI PARENTERAL Ordered Drug Code PNA00012

Dosage Form Parenteral Solution Ordered Drug Description Kabiven Central 1400kcal, 1.54L

Route INF Alternate Drug Name Nutriflex Lipid Peri 955kcal, 1.25L

BATCH DETAIL

No	Drug Name	Dosage Form	Route	Batch	Expiry Date	Available Qty	Units	Qty to Dispense
1	Nutriflex Lipid Peri 955kcal, 1.25L	Parenteral Solution	INF	DMHPSF14	01/04/2015	10086	bag	2

Reason not have enough stock Remark Proceed to Patient

Figure 4.7-2 Alternate Drug

Note

Click on the  button to confirm save record.

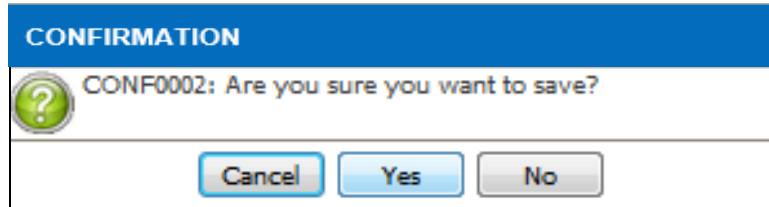
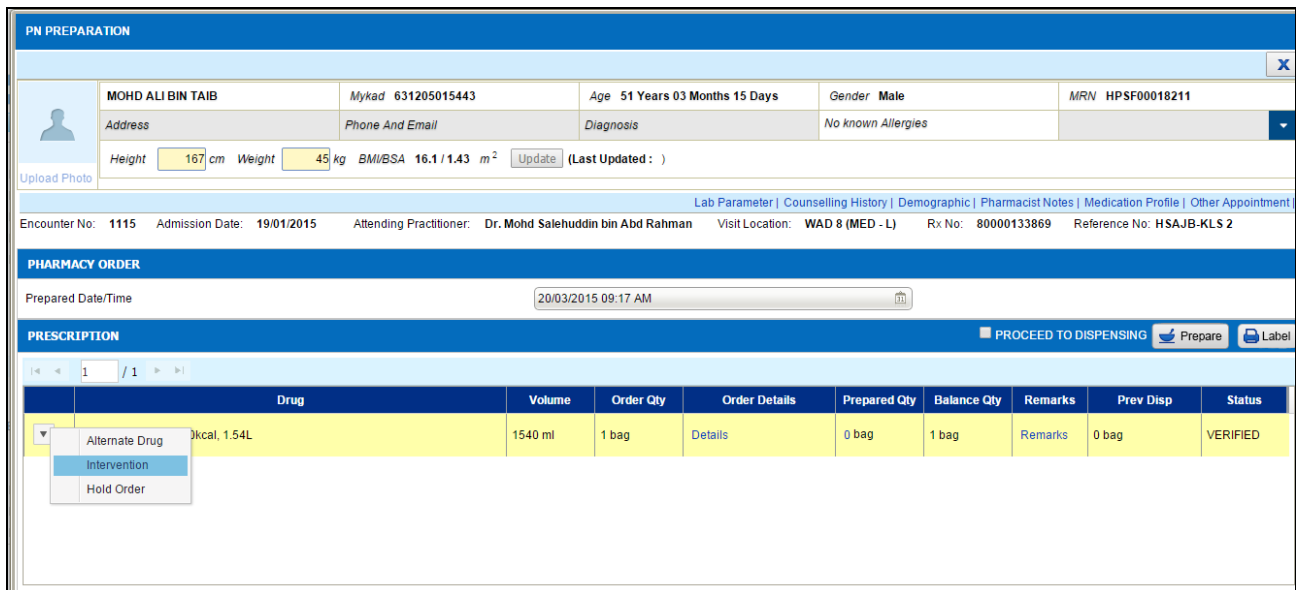


Figure 4.7-3 Confirmation Alert Message

4.8 Intervention



PN PREPARATION

MOHD ALI BIN TAIB | Mykad 631205015443 | Age 51 Years 03 Months 15 Days | Gender Male | MRN HPSF00018211

Address | Phone And Email | Diagnosis | No known Allergies

Height 167 cm | Weight 45 kg | BMI/BSA 16.1 / 1.43 m² | Update (Last Updated :)

Upload Photo

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

Encounter No: 1115 | Admission Date: 19/01/2015 | Attending Practitioner: Dr. Mohd Salehuddin bin Abd Rahman | Visit Location: WAD 8 (MED - L) | Rx No: 80000133869 | Reference No: HSAJB-KLS 2

PHARMACY ORDER

Prepared Date/Time: 20/03/2015 09:17 AM

PRESCRIPTION | PROCEED TO DISPENSING | Prepare | Label


Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Remarks	Prev Disp	Status
Alternate Drug kcal, 1.54L	1540 ml	1 bag	Details	0 bag	1 bag	Remarks	0 bag	VERIFIED

Intervention

Figure 4.8-1 PN Preparation

Note

Intervention:

- Click on the  button to select **Intervention** as per Figure 4.8-1 to modify drug details as per Figure 4.8-2.
- PN Intervention Order screen include three sections:
 - Pharmacy Remarks
 - Administration Information
 - Prescription

PN INTERVENTION ORDER

History Confirm

PHARMACY REMARKS

1 / 1 [1 - 12 / 12]

Intervention Reason	Remarks	Intervention Accepted	Intervention Not Accepted
<input type="checkbox"/> Inappropriate Frequency		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Incompatibility		<input type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/> Others	change volume	<input checked="" type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Polypharmacy		<input type="radio"/>	<input type="radio"/>

MODIFY ORDER

Type of PN ☒ Commercial / MOH Pre mix(Std. Soln) ☐ Add Additive
Kabiven Central 1400kcal, 1.54L ☐ Compounded

ADMINISTRATION INFO

Volume 1540 millilitre Indication for PN Intestinal obstruction
Frequency OD (once daily) Infusion Line Central
Start Date/Time 19/03/2015 05:00 PM Duration 1 Days
End Date/Time 20/03/2015 05:00 PM Infusion Over 24 hours
Order Quantity 1 bag Dispense Location UNIT NUTRISI PARENTERAL

Figure 4.8-2 PN Preparation Intervention

NOTE

- Check on the ☐ **Intervention Reason** checkbox as appropriate and enter **Remarks** field if applicable.
- Select ☐ **Intervention Accepted** radio button or **Intervention Not Accepted** radio button.
- Administration Information** section user is allowed to modify **Volume**, **Frequency**, **Duration** and **Infusion Over** field.
- Click on the **Refresh Prescription** button to update back prescription details.

PN INTERVENTION ORDER

History Confirm

PHARMACY REMARKS

1 / 1 [1 - 12 / 12]

Intervention Reason	Remarks	Intervention Accepted	Intervention Not Accepted
<input type="checkbox"/> Inappropriate Frequency		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Incompatibility		<input type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/> Others	change volume	<input checked="" type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Polypharmacy		<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Suggest to Monitor Vital Signs/Lab Result		<input type="radio"/>	<input type="radio"/>

Figure 4.8-3 PN Intervention Order

NOTE

- Click on the **Confirm** button to save record as per Figure 4.8-3 and alert message will be displayed as per Figure 4.8-4. Click on the **Yes** button to save record.

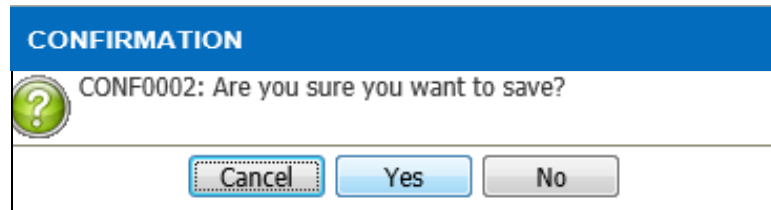


Figure 4.8-4 Confirmation Alert Message



NOTE

- Click on the  button to save record.

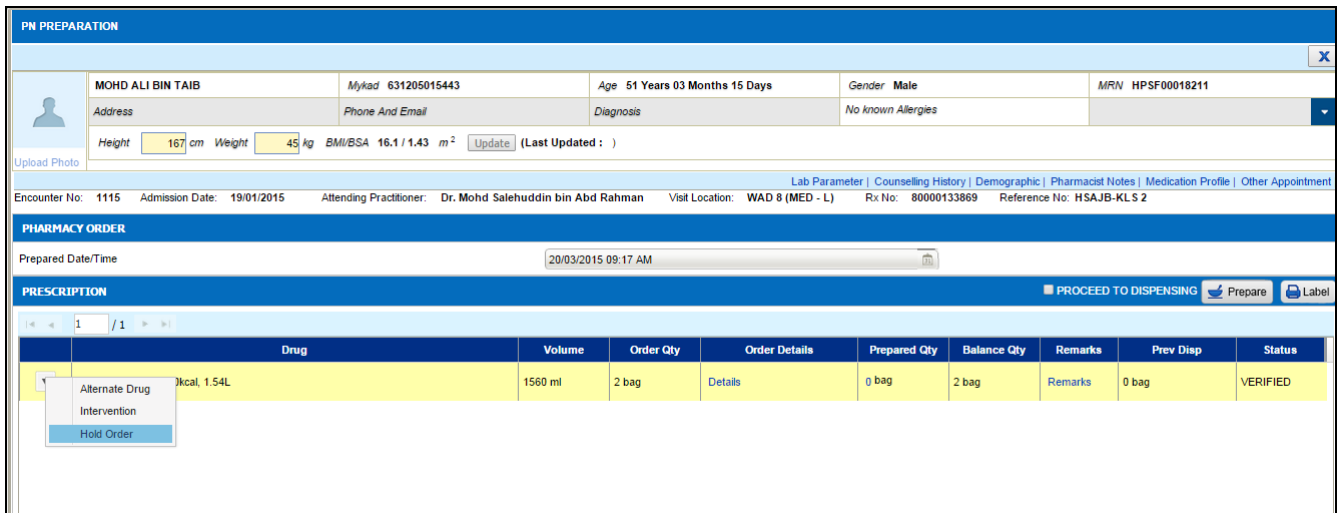
INTERVENTION REASON HISTORY LISTING			
<div> <div><< 1 / 1 >></div> <div>[1 - 1 / 1]</div> </div>			
Date/Time	Intervention Reason	Remarks	Updated By
20/03/2015 09:33 AM	Others	change volume	Shantasaroopini a/p Sathia Moorthy

Figure 4.8-5 Intervention Reason history

NOTE

- Click on the  button to view history of Intervention reason history listing as per Figure 4.8-5.
- Click on the  button to close Intervention Reason History Listing screen.

4.9 Hold/Resume PN Order



PN PREPARATION

MOHD ALI BIN TAIB Mykad 631205015443 Age 51 Years 03 Months 15 Days Gender Male MRN HPSF00018211

Address Phone And Email Diagnosis No known Allergies

Height 167 cm Weight 45 kg BMI/BSA 16.1 / 1.43 m² [Update] (Last Updated :)

Upload Photo

Encounter No: 1115 Admission Date: 19/01/2015 Attending Practitioner: Dr. Mohd Salehuddin bin Abd Rahman Visit Location: WAD 8 (MED - L) Rx No: 80000133869 Reference No: HSAJB-KLS 2

PHARMACY ORDER

Prepared Date/Time: 20/03/2015 09:17 AM

PRESCRIPTION [PROCEED TO DISPENSING] [Prepare] [Label]


Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Remarks	Prev Disp	Status
1 / 1	1560 ml	2 bag	Details	0 bag	2 bag	Remarks	0 bag	VERIFIED

Alternate Drug Intervention Hold Order

Figure 4.9-1 PN Preparation

Note

Hold/Resume PN Order:

- Click on the  button to select **Hold Order** and **Hold Order** screen will be appeared as per Figure 4.9-1.
- Select the **Hold Reason** from dropdown box:
 - Authenticity
 - Contraindication
 - Drug Interaction
 - Inappropriate Dose
 - Inappropriate Drug
 - Inappropriate Duration
 - Inappropriate Frequency
 - Incompatibility
 - Intervention
 - Others
 - Polypharmacy
 - Suggest to Monitor Vital Signs/Lab Result
 - Wrong Patient
- Other Reason** field will activate if user select hold reason as **Others**.

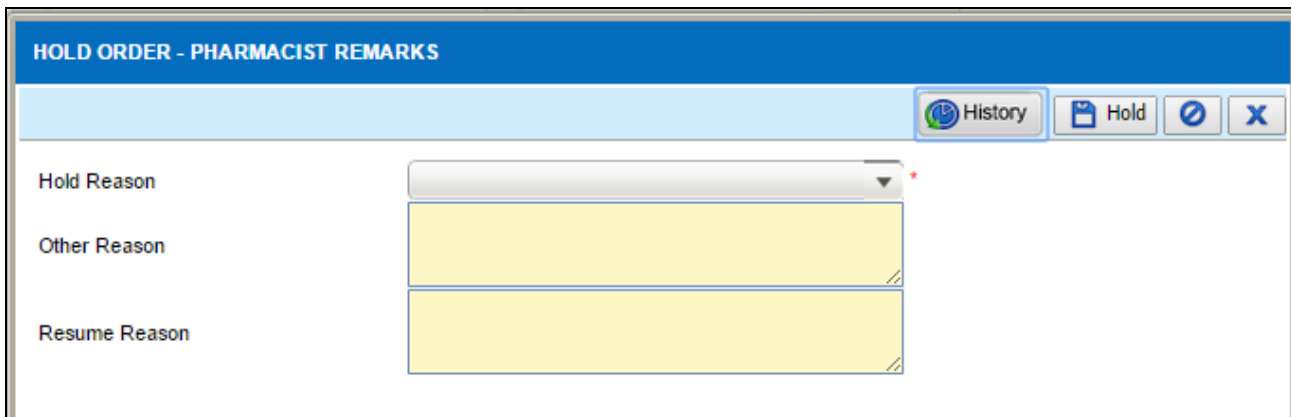


Figure 4.9-2 Hold Order-Pharmacy Remarks

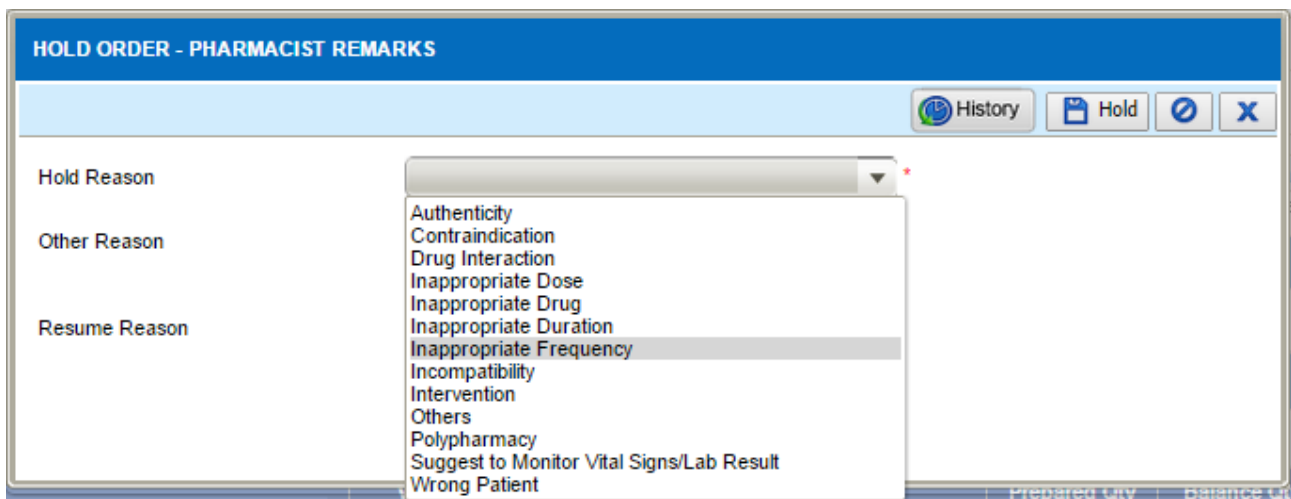




Figure 4.9-3 Hold Order-Pharmacy Remarks

Note

- Click on the  button to hold order.
- Click on the  button to confirm save record.

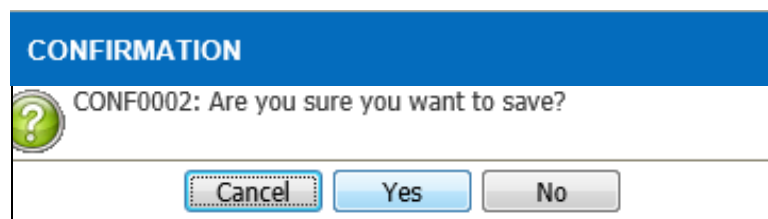
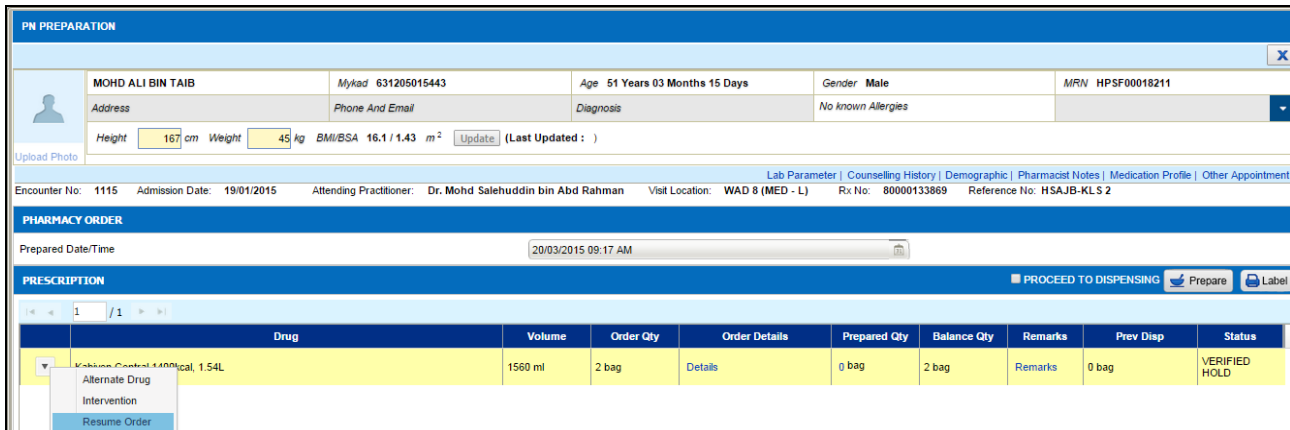


Figure 4.9-4 Confirmation Alert Message



PN PREPARATION

MOHD ALI BIN TAIB Mykad: 631205015443 Age: 51 Years 03 Months 15 Days Gender: Male MRN: HPSF00018211

Address: Phone And Email: Diagnosis: No known Allergies

Height: 167 cm Weight: 45 kg BMI/BSA: 16.1 / 1.43 m² [Update] (Last Updated:)

Upload Photo

Encounter No: 1115 Admission Date: 19/01/2015 Attending Practitioner: Dr. Mohd Salehuddin bin Abd Rahman Visit Location: WAD 8 (MED - L) Rx No: 80000133869 Reference No: HSAJB-KLS 2

PHARMACY ORDER

Prepared Date/Time: 20/03/2015 09:17 AM

PRESCRIPTION [PROCEED TO DISPENSING] [Prepare] [Label]

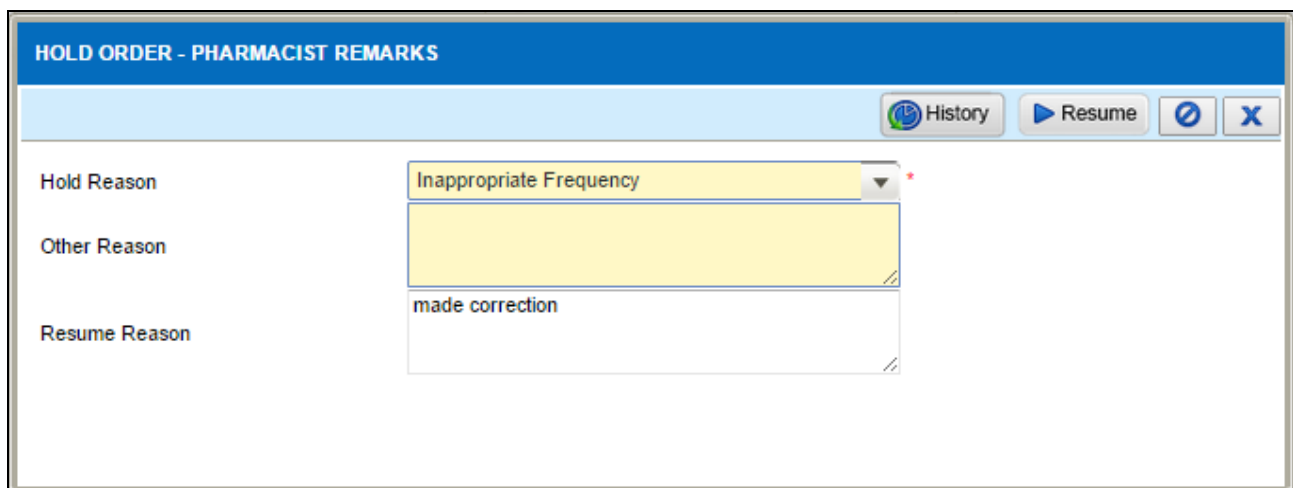
Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Remarks	Prev Disp	Status
Ketone Control 1000cal 1.54L	1560 ml	2 bag	Details	0 bag	2 bag	Remarks	0 bag	VERIFIED HOLD

Alternate Drug
Intervention
Resume Order

Figure 4.9-5 PN Preparation

Note

- Click on the  button to select 'Resume Order' as per Figure 4.9-5.



HOLD ORDER - PHARMACIST REMARKS



[History] [Resume] [Close] [X]

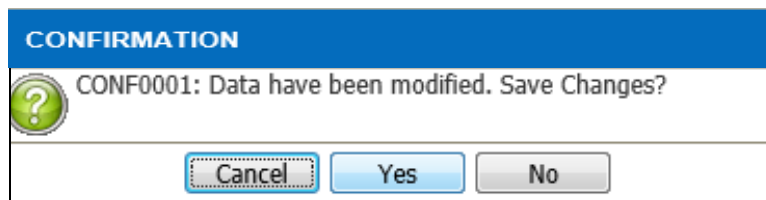
Hold Reason: Inappropriate Frequency

Other Reason: [Text Area]

Resume Reason: made correction

Figure 4.9-6 Hold Order-Pharmacist Remarks

- Click on the  button to resume hold order as per Figure 4.9-6.
- Click on the  button to close window and alert message will be displayed as per Figure 4.9-7.



CONFIRMATION

CONF0001: Data have been modified. Save Changes?

[Cancel] [Yes] [No]

Figure 4.9-7 Confirmation Alert Message

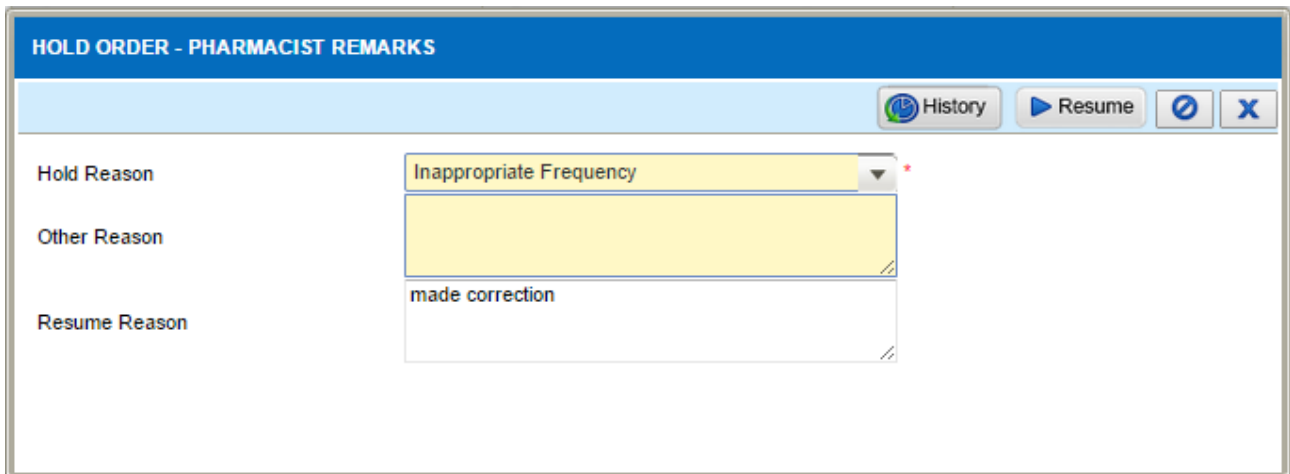




Figure 4.9-8 Hold Order-Pharmacist Remarks

Note

- Click on the  button to confirm save record.
- Click on the  button as per Figure 4.9-8 to view history of hold order reason history listing 4.9-9.

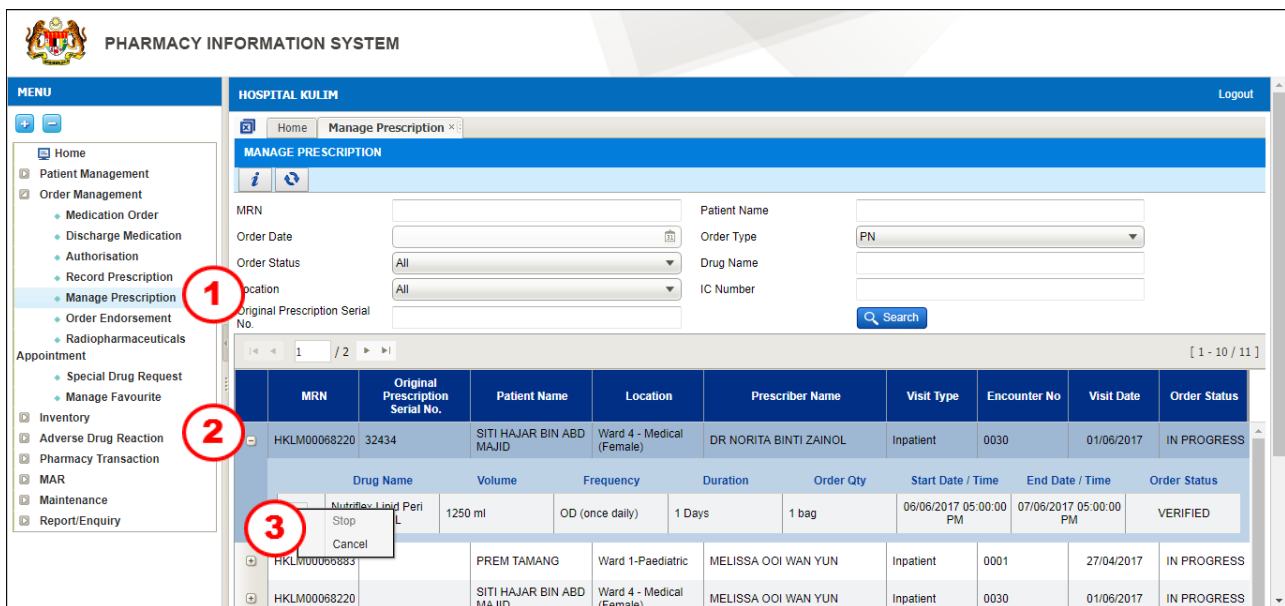


Date/Time	Screen	Hold Reason	Remarks	Resume Remarks	Updated By
20/03/2015 09:42 AM	Preparation	Inappropriate Frequency			Shantasaroopini a/p Sathia Moorthy

Figure 4.9-9 Hold Order Reason History Listing

5.0 Manage Prescription

5.1 Cancel/Stop Order



PHARMACY INFORMATION SYSTEM

HOSPITAL KULIM Logout

Home Manage Prescription x

MANAGE PRESCRIPTION

MRN: Patient Name:
 Order Date: Order Type: PN
 Order Status: All Drug Name:
 Location: All IC Number:
 Original Prescription Serial No.: Search

[1 - 10 / 11]

MRN	Original Prescription Serial No.	Patient Name	Location	Prescriber Name	Visit Type	Encounter No	Visit Date	Order Status																
HKLM00068220	32434	SITI HAJAR BIN ABD MAJID	Ward 4 - Medical (Female)	DR NORITA BINTI ZAINOL	Inpatient	0030	01/06/2017	IN PROGRESS																
<table border="1"> <thead> <tr> <th>Drug Name</th> <th>Volume</th> <th>Frequency</th> <th>Duration</th> <th>Order Qty</th> <th>Start Date / Time</th> <th>End Date / Time</th> <th>Order Status</th> </tr> </thead> <tbody> <tr> <td>Nutriflex Liquid Peri</td> <td>1250 ml</td> <td>OD (once daily)</td> <td>1 Days</td> <td>1 bag</td> <td>06/06/2017 05:00:00 PM</td> <td>07/06/2017 05:00:00 PM</td> <td>VERIFIED</td> </tr> </tbody> </table>									Drug Name	Volume	Frequency	Duration	Order Qty	Start Date / Time	End Date / Time	Order Status	Nutriflex Liquid Peri	1250 ml	OD (once daily)	1 Days	1 bag	06/06/2017 05:00:00 PM	07/06/2017 05:00:00 PM	VERIFIED
Drug Name	Volume	Frequency	Duration	Order Qty	Start Date / Time	End Date / Time	Order Status																	
Nutriflex Liquid Peri	1250 ml	OD (once daily)	1 Days	1 bag	06/06/2017 05:00:00 PM	07/06/2017 05:00:00 PM	VERIFIED																	
HKLM00068853		PREM TAMANG	Ward 1-Paediatric	MELISSA OOI WAN YUN	Inpatient	0001	27/04/2017	IN PROGRESS																
HKLM00068220		SITI HAJAR BIN ABD MAJID	Ward 4 - Medical (Female)	MELISSA OOI WAN YUN	Inpatient	0030	01/06/2017	IN PROGRESS																

Figure 5.1-1 Manage Prescription - stop/cancel order

Cancel and Stop Order screen allow user to cancel and stop prescription which is wrongly prescribe or need to stop the medication

STEP 1

Click on 'Order Management' menu and click on 'Manage Prescription' sub-menu


Note

- Prescriber have the options to view patient by click the check box :-
 - Show All
- By default list of patient will be displayed according to prescriber location access.
- Various search criteria is provided as below:
 - MRN
 - Patient Name
 - Order Date
 - Order Type
 - Order Status
 - Drug name
 - Location


STEP 2

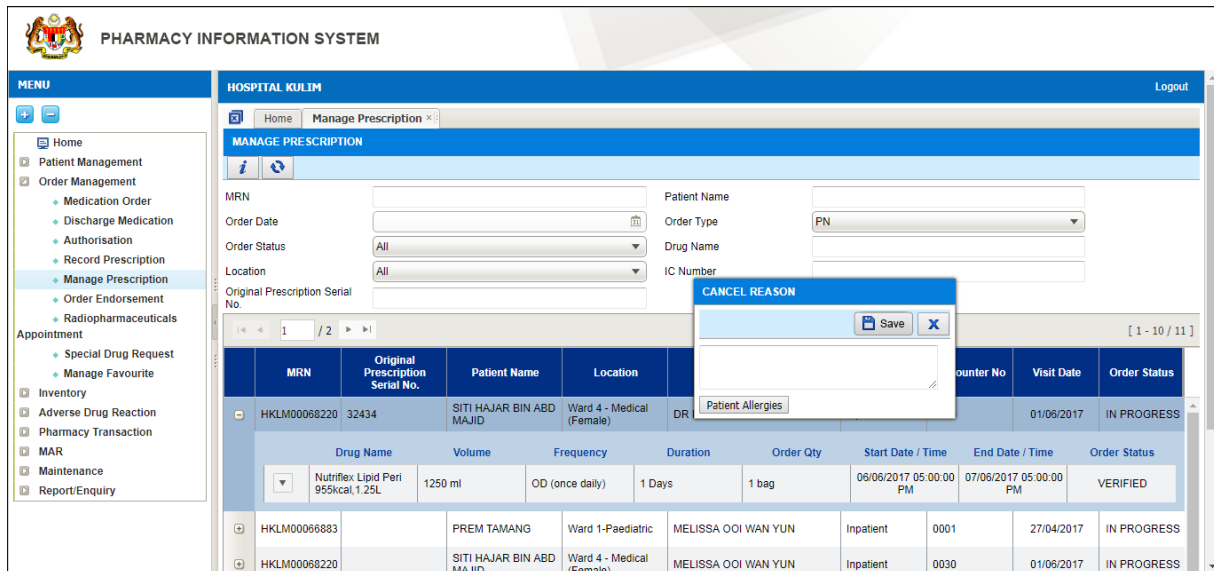
Click on the  expand button to display order details as per Figure 5.1-1

STEP 3

Right click mouse on the  button and select 'Cancel' as per Figure 5.1-1

Note

- Select 'Cancel' function to cancel order that have not yet been dispensed to patient and system will display 'Cancel Reason' screen as per Figure 5.1-2.
- Enter reason for cancel order and click on the  button to save record.
- Select 'Stop' function to stop order that has dispensed to patient as per Figure 5.1-1.





PHARMACY INFORMATION SYSTEM

HOSPITAL KULIM Logout

Home Manage Prescription

MANAGE PRESCRIPTION

MRN: Patient Name:
 Order Date: Order Type:
 Order Status: Drug Name:
 Location: IC Number:
 Original Prescription Serial No.:

CANCEL REASON  

MRN	Original Prescription Serial No.	Patient Name	Location	DR	Counter No	Visit Date	Order Status
HKLM00068220	32434	SITI HAJAR BIN ABD MAJID	Ward 4 - Medical (Female)	DR		01/06/2017	IN PROGRESS

Drug Name	Volume	Frequency	Duration	Order Qty	Start Date / Time	End Date / Time	Order Status
Nutriflex Lipid Peri 955kcal, 1.25L	1250 ml	OD (once daily)	1 Days	1 bag	06/06/2017 05:00:00 PM	07/06/2017 05:00:00 PM	VERIFIED

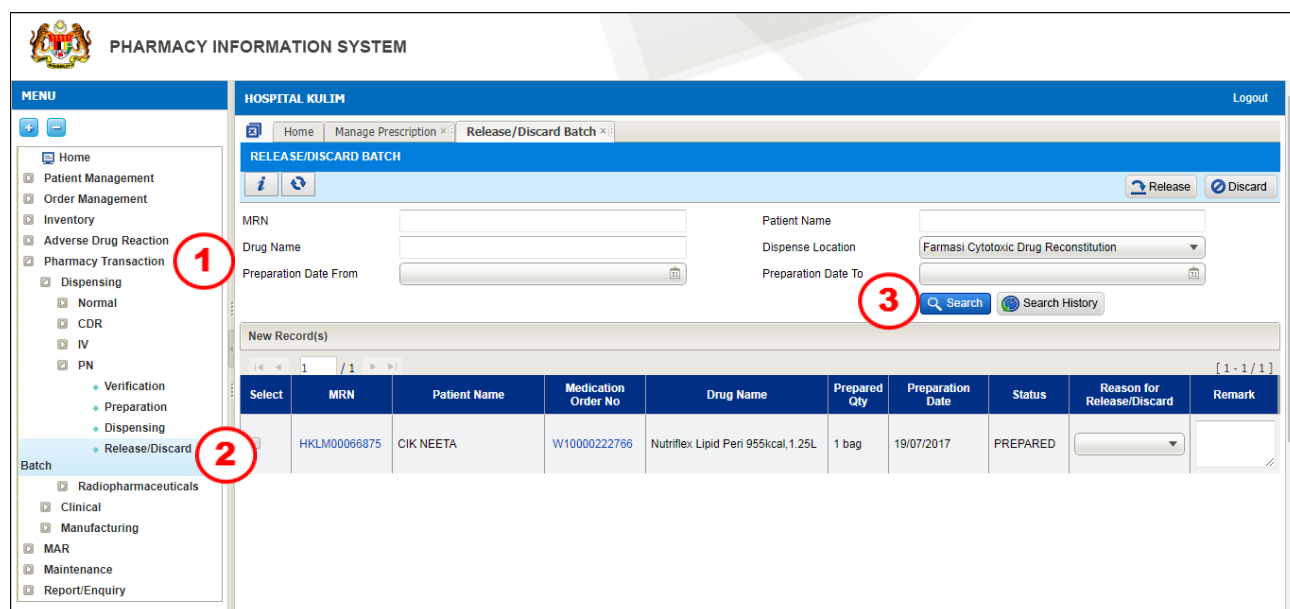
MRN	Patient Name	Location	Order Status
HKLM00068883	PREM TAMANG	Ward 1-Paediatric	IN PROGRESS
HKLM00068220	SITI HAJAR BIN ABD MAJID	Ward 4 - Medical (Female)	IN PROGRESS

Figure 5.1-2 Cancel reason

6.0 Release/Discard Batch

Note

- Release function is to release and update back stock into inventory.
- Discard function is to discard stock from inventory even not doing dispensing.



PHARMACY INFORMATION SYSTEM

HOSPITAL KULIM

Home | Manage Prescription | Release/Discard Batch

RELEASE/DISCARD BATCH

MRN: Patient Name:
 Drug Name: Dispense Location:
 Preparation Date From: Preparation Date To:

New Record(s)

Select	MRN	Patient Name	Medication Order No	Drug Name	Prepared Qty	Preparation Date	Status	Reason for Release/Discard	Remark
<input type="checkbox"/>	HKLM00066875	CIK NEETA	W10000222766	Nutriflex Lipid Peri 955kcal, 1.25L	1 bag	19/07/2017	PREPARED		

Figure 6.0-1 Release/Discard Batch Listing Page

STEP 1

Click on 'Pharmacy Transaction' menu follow by 'Dispensing' sub menu and select 'PN'

STEP 2

Click on 'Release/Discard Batch' function

Note

Search patient record based :-

No	Field	Description	Remark
a	MRN	Patient Medical Record Number	Search option: • Type the MRN either full or partial: <i>Example: HPSF00001234 or "1234"</i>
b	Patient Name	Patient Name	Allow to search by full name or partial
c	Drug Name	Drug Name	Allow to search by full name or partial drug name
d	Dispense Location	Dispensing location. (It will list down all active location)	Able to filter and search patient name by dispensing location

Patient Record Search

STEP 3

Click on the button to search patient

Note

- Search result of patient record list will be displayed:
 - MRN
 - Patient Name
 - Drug Name
 - Medication Order No
 - Preparation Date
 - Prepared Qty

- Status
- Reason for Discard

HOSPITAL PAKAR SULTANAH FATIMAH (FULL BASE HOSPITAL (BUG FIXING)) Logout

Home Release/Discard Batch x

RELEASE/DISCARD BATCH

Release Discard

MRN Patient Name

Drug Name Dispense Location UNIT NUTRISI PARENTERAL

Search Search History

New Record(s)

1 / 1 [1 - 5 / 5]

Select	MRN	Patient Name	Drug Name	Medication Order No	Preparation Date	Prepared Qty	Status	Reason for Release/Discard
<input checked="" type="checkbox"/>	HPSF00060228	ZARA	Smof Kabiven Central 1600kcal, 1.5L	WAD 110000071626	23/01/2015	1 bag	PREPARED	Change of Regimen Faulty Product Intervention Patient Refused Uncollected Wrong Allocation
<input type="checkbox"/>	HPSF00059058	MUHAMMAD AMIR BIN NORIZAM	Nutriflex Lipid Peri 955kcal, 1.25L	WAD 170000071143	12/01/2015	1 bag	PREPARED	
<input type="checkbox"/>	HPSF00015521	GAN AH BEE @ GAN GEOK CHEUAN	Nutriflex Lipid Peri 955kcal, 1.25L	WAD 90000071136	12/01/2015	1 bag	PREPARED	
<input type="checkbox"/>	HPSF00060224	SIN CHAN	Smof Kabiven Central 1600kcal, 1.5L	WAD 70000071637	23/01/2015	1 bag	PREPARED	
<input type="checkbox"/>	HPSF00060224	SIN CHAN	Smof Kabiven Central 1600kcal, 1.5L	WAD 70000071639	23/01/2015	1 bag	PREPARED	

Figure 6.0-2 Release/Discard Batch

STEP 4


Select and check the ☒ checkbox to select order at the **Select** column

STEP 5

Select the **Reason for Release and Discard** from dropdown box:

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

STEP 6

Click on the  button to release batch and inventory stock will be updated

INFORMATION

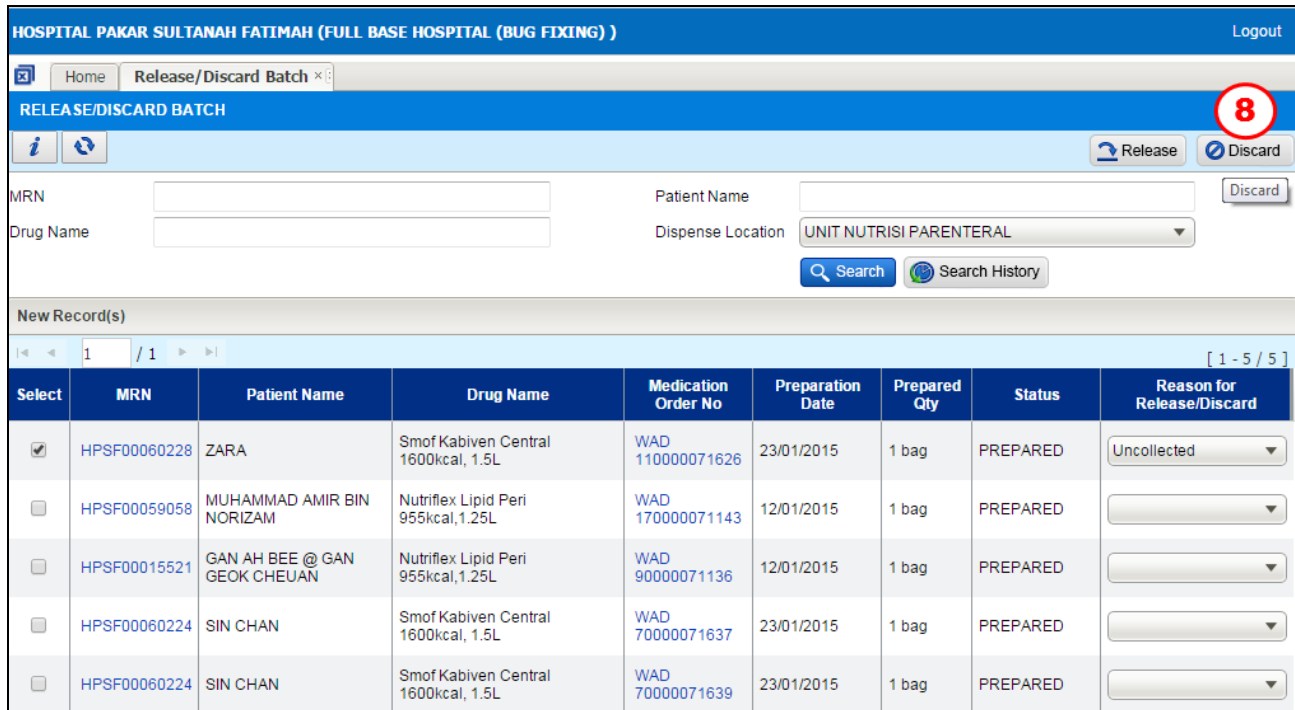
INFO3057: Selected items had been released

OK

Figure 6.0-3 Alert Message

STEP 7


Click on the  button to release order batch



Select	MRN	Patient Name	Drug Name	Medication Order No	Preparation Date	Prepared Qty	Status	Reason for Release/Discard
<input checked="" type="checkbox"/>	HPSF00060228	ZARA	Smof Kabiven Central 1600kcal, 1.5L	WAD 110000071626	23/01/2015	1 bag	PREPARED	Uncollected
<input type="checkbox"/>	HPSF00059058	MUHAMMAD AMIR BIN NORIZAM	Nutriflex Lipid Peri 955kcal, 1.25L	WAD 170000071143	12/01/2015	1 bag	PREPARED	
<input type="checkbox"/>	HPSF00015521	GAN AH BEE @ GAN GEOK CHEUAN	Nutriflex Lipid Peri 955kcal, 1.25L	WAD 90000071136	12/01/2015	1 bag	PREPARED	
<input type="checkbox"/>	HPSF00060224	SIN CHAN	Smof Kabiven Central 1600kcal, 1.5L	WAD 70000071637	23/01/2015	1 bag	PREPARED	
<input type="checkbox"/>	HPSF00060224	SIN CHAN	Smof Kabiven Central 1600kcal, 1.5L	WAD 70000071639	23/01/2015	1 bag	PREPARED	

Figure 6.0-4 Release / Discard Batch

STEP 8

Click on the  button to discard batch and inventory stock will be updated

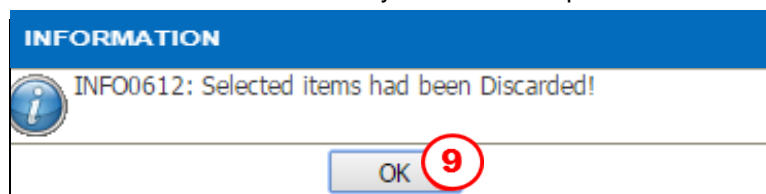




Figure 6.0-5 Information Alert Message

STEP 9

Click on the  button to discard batch

Note

Click on the  button to view release/discard history as Figure 6.0-6.

HOSPITAL PAKAR SULTANAH FATIMAH, MUAR Change Password Logout

Home **Release/Discard Batch**

RELEASE/DISCARD BATCH

Release Discard

MRN Patient Name

Drug Name Dispense Location **UNIT NUTRISI PARENTERAL**

Search Search History

History Record(s) Search History

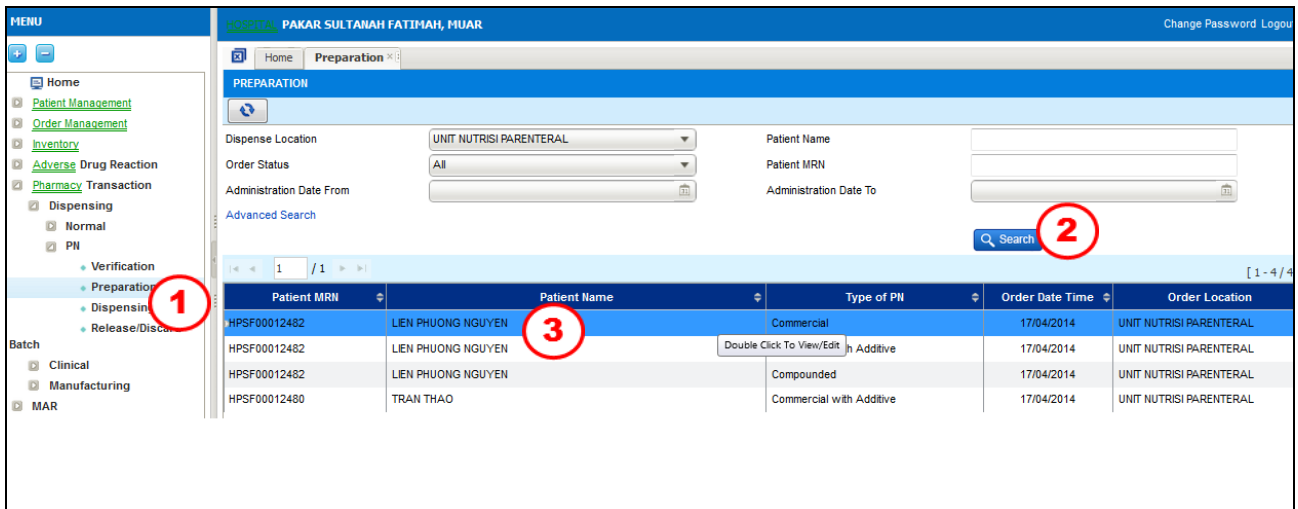
<< 1 / 1 >> [1 - 4 / 4]

MRN	Patient Name	Drug Name	Medication Order No	Preparation Date	Status	Reason for Release/Discard
HPSF00000395	NUR HANINAH BINTI MOHD YASIN	Smof Kabiven Central 1600kcal, 1.5L	TPN00000000696	17/54/2014	VERIFIED	Uncollected
HPSF00000001	KHOO ER HERN	Nutriflex Lipid Plus 1265kcal, 1.25L	TPN00000000836	17/54/2014	VERIFIED	Uncollected
HPSF00007996	INTAN NUR SHAFIQA BINTI SUHARDI	Smof Kabiven Central 1600kcal, 1.5L	WAD 90000000475	17/54/2014	VERIFIED	Patient Refused
HPSF00007994	NURFARAH HADA BINTI MOHD MAJURI	Smof Kabiven Central 1600kcal, 1.5L	WAD 90000000142	17/54/2014		Change of Regimen

Figure 6.0-6 Release/Discard Batch

7.0 Outsource

Outsource allow user to send preparation request to another facility through PhIS



Patient MRN	Patient Name	Type of PN	Order Date Time	Order Location
HPSF00012482	LIEN PHUONG NGUYEN	Commercial	17/04/2014	UNIT NUTRISI PARENTERAL
HPSF00012482	LIEN PHUONG NGUYEN	Commercial with Additive	17/04/2014	UNIT NUTRISI PARENTERAL
HPSF00012482	LIEN PHUONG NGUYEN	Compounded	17/04/2014	UNIT NUTRISI PARENTERAL
HPSF00012480	TRAN THAO	Commercial with Additive	17/04/2014	UNIT NUTRISI PARENTERAL

Figure 7.0-1 PN Preparation Listing Page


STEP 1

Click on 'Pharmacy Transaction' menu follow by 'Dispensing' and click on 'PN Dispensing' sub-menu

Note

- Various search criteria is provided as below:
 - Dispense Location
 - Patient Name
 - Order Status
 - Patient MRN
- Click on the [Advanced Search](#) hyperlink for advance search.

STEP 2

Click on the  button and system will display related order

STEP 3

Double click on the selected patient record and system will display PN Dispensing screen as per Figure 7.0-2

PH PREPARATION

LIEN PHUONG NGUYEN Mykad 789078905634 Age 14 Years 0 Months 23 Days Gender Male MRN HPSF00012482

Address Phone And Email Diagnosis No known Allergies

Height 180 cm Weight 65 kg BMI/BSA 20.1 / 1.79 m² Update (Last Updated :)

Upload Photo

Lab Results Counseling History Demographic Pharmacist Notes Medication Profile Other Appointment

Encounter No: 0043 Admission Date: 24/03/2014 Attending Practitioner: Halim Abdullah Visit Location: UNIT NUTRISI PARENTERAL Room No/Bed No: vns

PHARMACY ORDER

Order Type PN Order By Halim Abdullah

Ward UNIT NUTRISI PARENTERAL Bed No

Supervised by Prepared Date/Time 17/04/2014 04:30 PM

PRESCRIPTION PROCEED TO NEXT STAGE Prepare Label Outsource

Drug	Volume	Order Qty	Order Details	Prepared Qty	Balance Qty	Remarks	Prev Disp	Status
Nutriflex Lipid Peri 955kcal, 1.25L	1250 ml	1 bag	Details	1 bag	1 bag	Remarks	0 bag	VERIFIED

Figure 7.0-2 PN Preparation

STEP 4

Click on the  button to prepare outsource product

OUTSOURCE DETAILS Send Outsource Request

LIEN PHUONG NGUYEN Mykad 789078905634 Age 14 Years 0 Months 23 Days Gender Male MRN HPSF00012482

Address Phone And Email Diagnosis No known Allergies

Height 180 cm Weight 65 kg BMI/BSA 20.1 / 1.79 m² Update (Last Updated :)

Upload Photo

PHARMACY ORDER

Outsource No

Referred From Hospital Pakar Sultanah Fatimah, Muar Referred To KK Greentown

Contact Person / Office Halim Abdullah Contact Person / Office Mohd Zubir

Contact no / Ext No 0173692581 Contact no / Ext No 055622114

Request Date/Time 17/04/2014 4:31 PM Tentative Receipt Date 17/04/2014

Remarks

Rx No	Rx Date	Drug Name	Order Detail	Order Qty	Remarks
TPN0000000943	17/04/2014 12:05:34 PM	Nutriflex Lipid Peri 955kcal, 1.25L	Details	1	Remarks

Figure 7.0-3 Outsource Details

STEP 5

Enter **Contact Person/office, Contact No/Ext/No., Request Date/Time** and **Remarks**

STEP 6

Enter **Referred To** by click on the search button

Note

Enter **Contact Person/office, Contact No/Ext/No.** and **Tentative Receipt Date.**

OUTSOURCE DETAILS 7

Send Outsource Request

LIEN PHUONG NGUYEN Mykad 789078905634 Age 14 Years 0 Months 23 Days Gender Male MRN Send Order 2482

Address Phone And Email Diagnosis No known Allergies

Height 180 cm Weight 65 kg BMI/BSA 20.1 / 1.79 m² Update (Last Updated :)

Upload Photo

PHARMACY ORDER

Outsource No Referred From Hospital Pakar Sultanah Fatimah, Muar Referred To KK Greentown

Contact Person / Office Halim Abdullah Contact Person / Office Mohd Zubir

Contact no / Ext No 0173692581 Contact no / Ext No 055622114

Request Date/Time 17/04/2014 4:31 PM Tentative Receipt Date 17/04/2014

Remarks

Rx No	Rx Date	Drug Name	Order Detail	Order Qty	Remarks
TPN0000000943	17/04/2014 12:05:34 PM	Nutriflex Lipid Peri 95Kcal, 1.25L	Details	1	Remarks

Figure 7.0-4 Outsource Details

STEP 7

Click on the **Send Outsource Request** button to send outsource request

CONFIRMATION

CONF0110: Are you sure you want to send Outsource Request?

Cancel Yes 8 No

Figure 7.0-5 Send Request Alert Message

STEP 8

Click on the **Yes** button to send outsource request

OUTSOURCE DETAILS 9

LIEN PHUONG NGUYEN Mykad 789078905634 Age 14 Years 0 Months 23 Days Gender Male MRN HPSF00012482

Address Phone And Email Diagnosis No known Allergies

Height 180 cm Weight 65 kg BMI/BSA 20.1 / 1.79 m² Update (Last Updated :)

Upload Photo

PHARMACY ORDER

Outsource No PN-11-01060015170414-017 Referred From Hospital Pakar Sultanah Fatimah, Muar Referred To KK Greentown

Contact Person / Office Halim Abdullah Contact Person / Office Mohd Zubir

Contact no / Ext No 0173692581 Contact no / Ext No 055622114

Request Date/Time 17/04/2014 4:31 PM Tentative Receipt Date 17/04/2014

Remarks

Rx No	Rx Date	Drug Name	Order Detail	Order Qty	Remarks
TPN0000000943	17/04/2014 12:05:34 PM	Nutriflex Lipid Peri 95Kcal, 1.25L	Details	1	Remarks

Figure 7.0-6 Outsource Details

STEP 9

Click on the **X** button to close outsource screen as per Figure 7.0-6

8. Acronyms

Abbreviation	Definition
PhIS	Pharmacy Information System
CPS	Clinical Pharmacy System
MOH	Ministry Of Health
HQ	Headquarters
PN	Parenteral Nutrition