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

Full Based

User Manual
Parenteral Nutrition (PN)
Dispensing

Version	**: 7th Edition**
Document ID	**: FB_U. MANUAL_PN_DISPENSING**

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Application reference: PhIS & CPS v1.7.1

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1.0 Introduction

1.1 Overview of Phis

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

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

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

1.2 Purpose and Objectives

This user manual outlines the 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:

- Parenteral Nutritional Verification
- Parenteral Nutritional Preparation
- Parenteral Nutritional Dispensing
- Hold / Resume Order
- Release / Discard Batch
- Outsource

1.3 Organised Sections

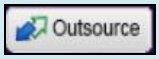
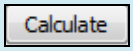
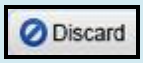
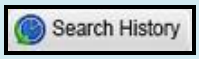
These are the sections within this document:

- Section 1 : Introduction
- Section 2 : Application Standard Features
- Section 3 : Parenteral Nutrition Dispensing
- Section 4 : Acronyms
- Section 5 : Links to Clinical Modules

2.0 Application Standard Features

2.1 PhIS Legend

Standard Legend			
LOGIN	Login to PhIS	Logout	Logout from PhIS
Change Password	Change Login Password		Reset Login Screen
	Expand Menu		Collapse Menu
Home	Display Home Tab		Expand Module
	Collapse Module		Close All Open Tabs
	Refresh Screen	Search	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 to Excel	Export and Open Report in Excel Format
Add Item	Add Item to the list	Delete	Delete Item from the list
Request	Request for Approval	Cancel Request	Cancel the Request
Approve	Approve Transaction	Reject	Reject Transaction
Send for Approval	Send for Approval		Dropdown Box
	Automatically Display/Retrieve Box		Empty Text Box

Parenteral Nutrition Dispensing Module Legend			
	Verification Prescription		Preparation Prescription
	Dispensing		Edit and Print Label
	Outsource Product		Calculate
	Generate Worksheet		Release Batch
	Discard Batch		Search History

Note

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

3.0 Parenteral Nutrition (PN) Dispensing

Overview

The Parenteral Nutrition (PN) Dispensing 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 (subject to user assigned by the facility)

Functional Diagram

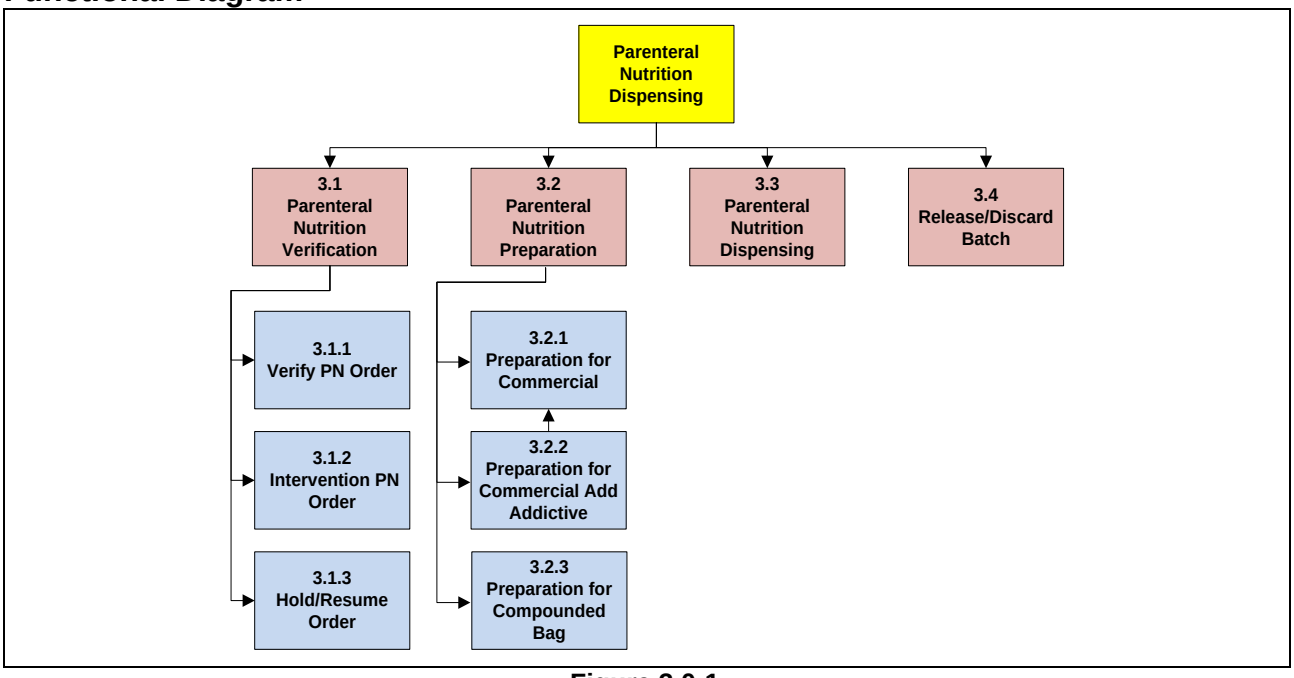


Figure 3.0-1

Functional Description

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

- **Verification**

  Verification is for pharmacist to verify the prescriptions received from order management. This process is mandatory for all prescriptions receive before the user can proceed with dispensing preparation

- **Preparation**

  The prescription and the drug preparation are made in the system that may integrate with inventory system. 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 Parenteral Nutrition (PN) Verification

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.

3.1.1 Verify Parenteral Nutrition (PN) Order

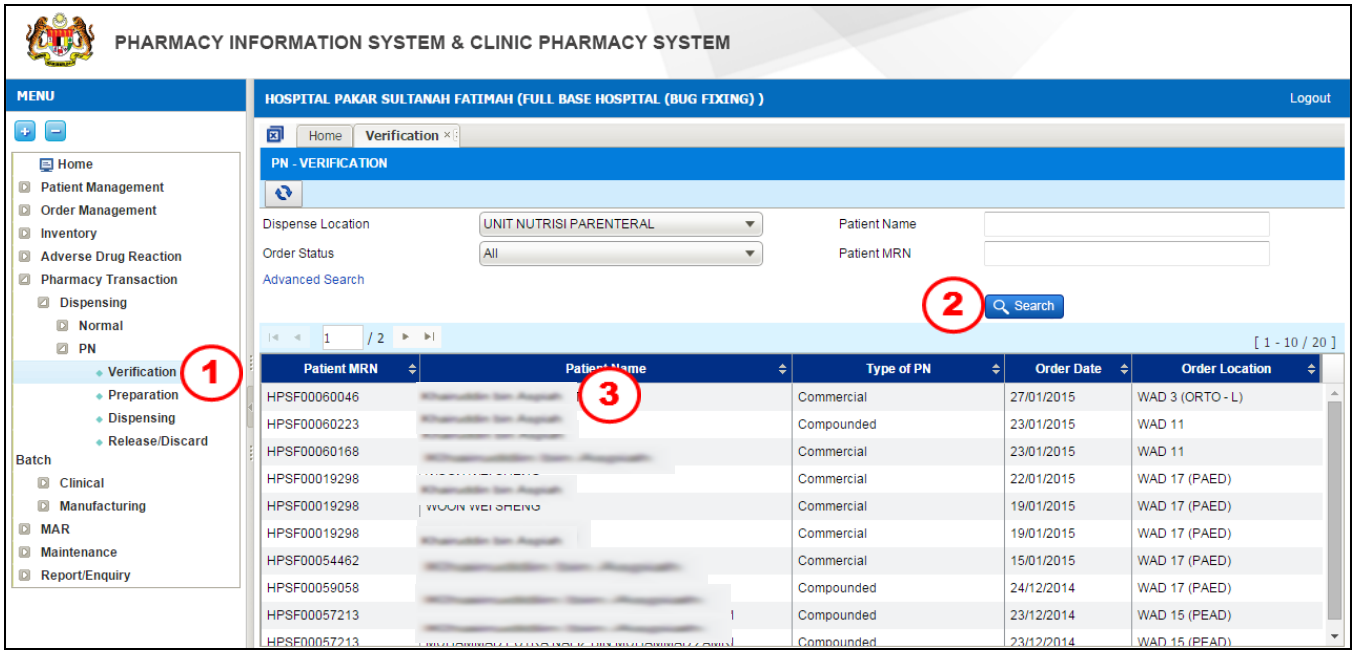


Figure 3.1.1-1 PN Verification Listing Page

STEP 1

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

Note

- *Various search criteria is provided as below:*
  a) Dispense Location
  b) Patient Name
  c) Order Status
  d) Patient MRN

- *Click on the* Advanced Search *hyperlink for advance search.*

STEP 2

Click on the Search button and system will display related order

Note

Search patient record based: -

Basic Search			
No	**Field**	**Description**	**Remark**
a	Dispense Location	Dispensing location. (It will list down all active location)	Able to filter and search patient name by dispensing location
b	Order Status	Search by: All New Orders Outsourced Orders	Able to filter and search patient name by order status
c	Patient Name	Patient Name	Allow to search by full name or partial
d	Patient MRN	Patient Medical Record Number	Search option: Type the MRN either full or partial: *Example: HPSF00001234 or "1234"*
Advance Search			
a	Order Location Type	Search by: - All - Clinic - Day Care - ER - Nursing Unit - Pharmacy	Able to filter and search patient name by order location type
b	Order Location	Current visit Location	Able to filter and search patient name by visit location
c	Order Date From	Order confirmed date	Allow to search by start date of order created
d	Order Date To	Order confirmed date	Allow to search by selected duration of order created

Table 3.1.1-1

STEP 3

Double click on the record and PN Verification screen will be displayed as Figure 3.1.1-2

Note

Search result of patient record list will be displayed:

- *Patient MRN*
- *Patient Name*
- *Type of PN*
- *Order Date*
- *Order Location*

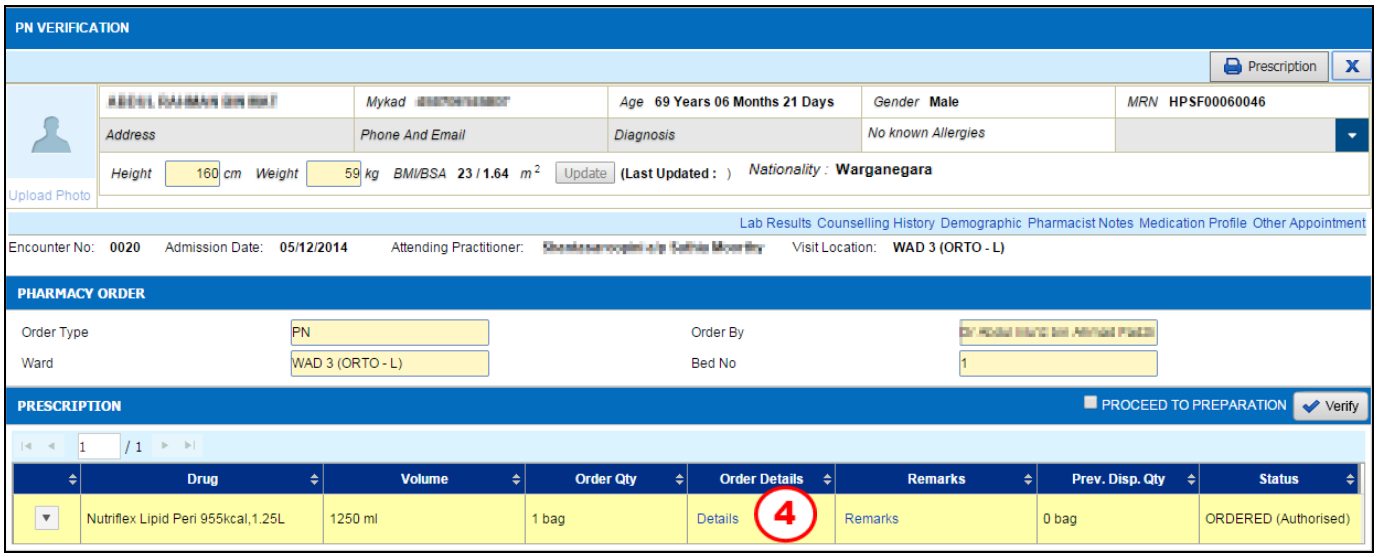


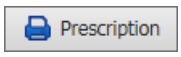
Figure 3.1.1-2 PN Verification

Note

Patient's Banner

- *Patient's Banner display patient's profile as per Figure 3.1.1-3*

.

- *User only can view patient's height and weight.*
- *System will automatically calculate the BMI/BSA in m^2.*
- *Click on the* 

button to view/print PN Prescription.

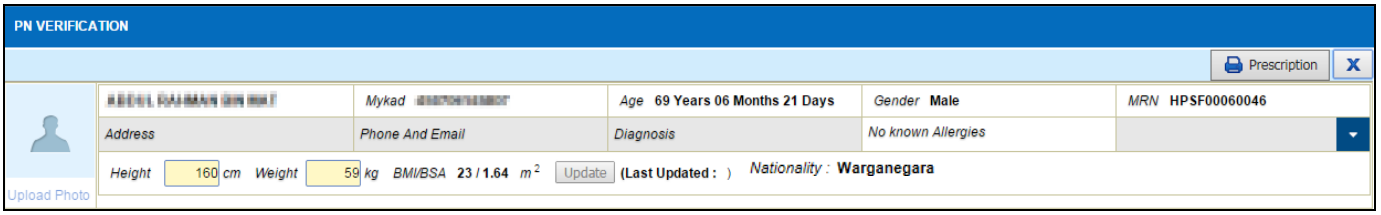


Figure 3.1.1-3 Patient's Banner

Pharmacy Order

*Information of **Order Type, Order by**, **Ward** and **Bed No** will be displayed by the system as per Figure 3.1.1-4.*

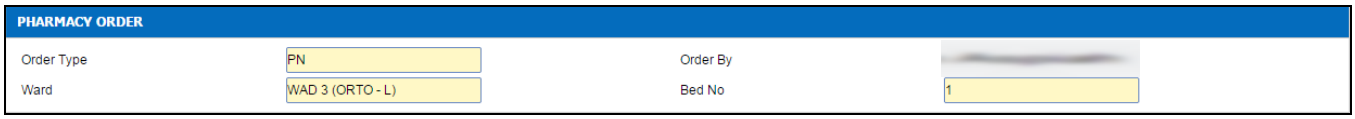
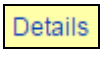


Figure 3.1.1-4 Pharmacy Order

STEP 4

Click on the 

hyperlink to view the order details as per Figure 3.1.1-5

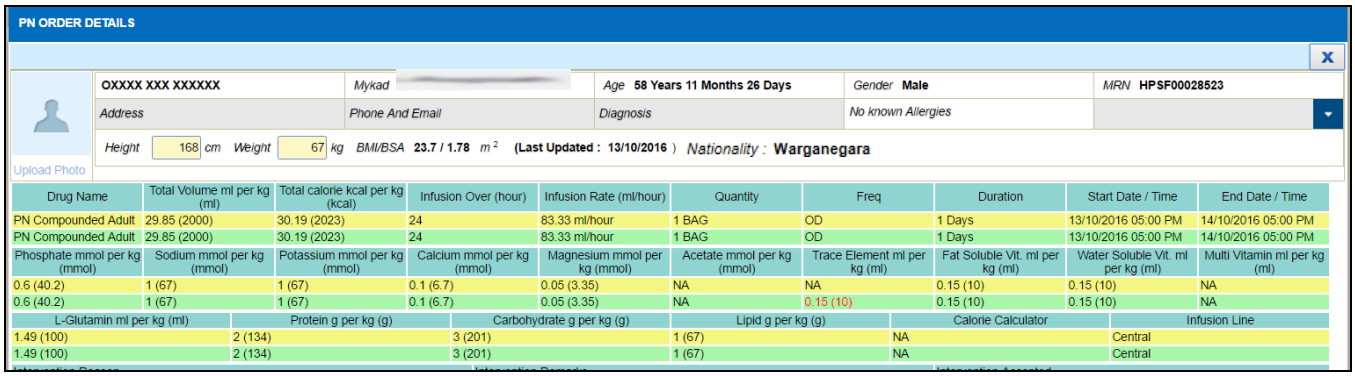


Figure 3.1.1-5 PN Order Details

STEP 5

Click on the Verify button to verify PN order as per Figure 3.1.1-6

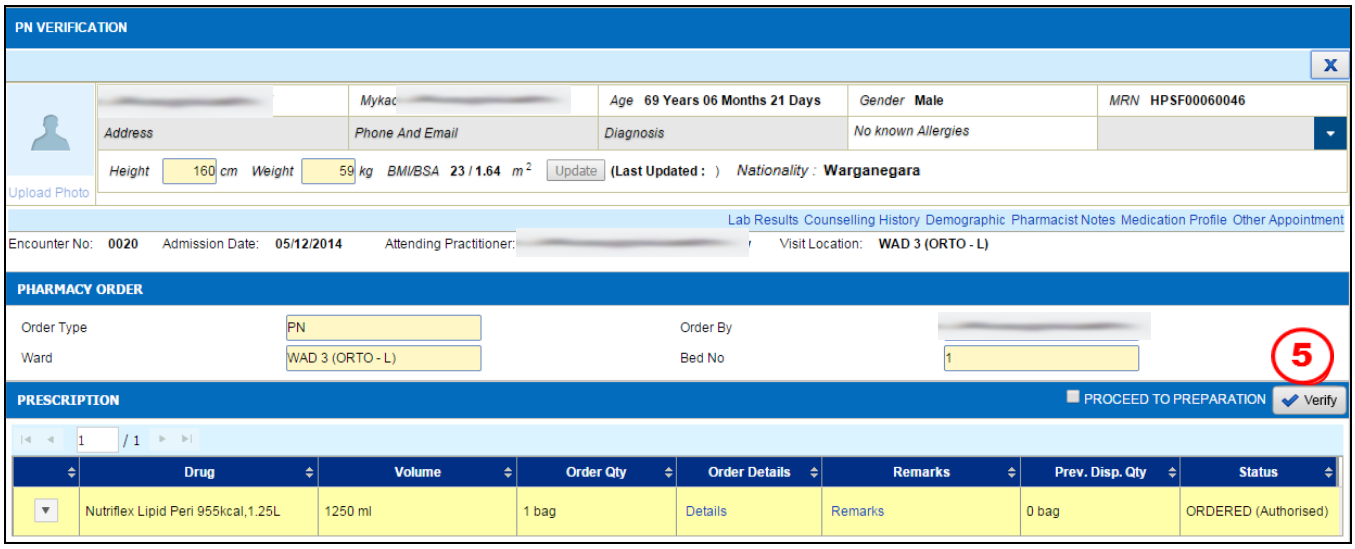


Figure 3.1.1-6 PN Verification

Note

- *User allowed to perform **Intervention** and **Hold/Resume Order** at verification stage.*
- *Upon verifying order status will be changed to Verified.*
- *Proceed to Next Stage function will allows user to advance to the next screen for each patient record.*

3.1.2 Intervention Parenteral Nutrition (PN) Order

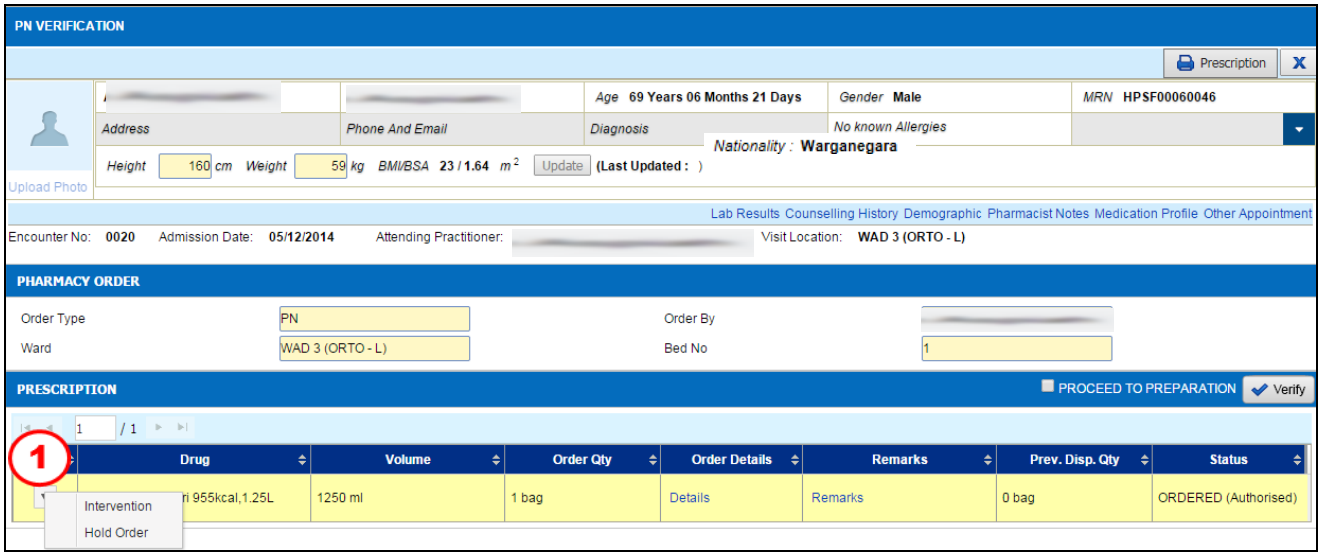


Figure 3.1.2-1 PN Verification

Note

*To proceed with Intervention PN Order, repeat **Step 1** to **4** from section 3.1.1 Verify PN Order.*

STEP 1

Right click on the button and select ***Intervention*** function and Intervention screen will be displayed as Figure 3.1.2-2

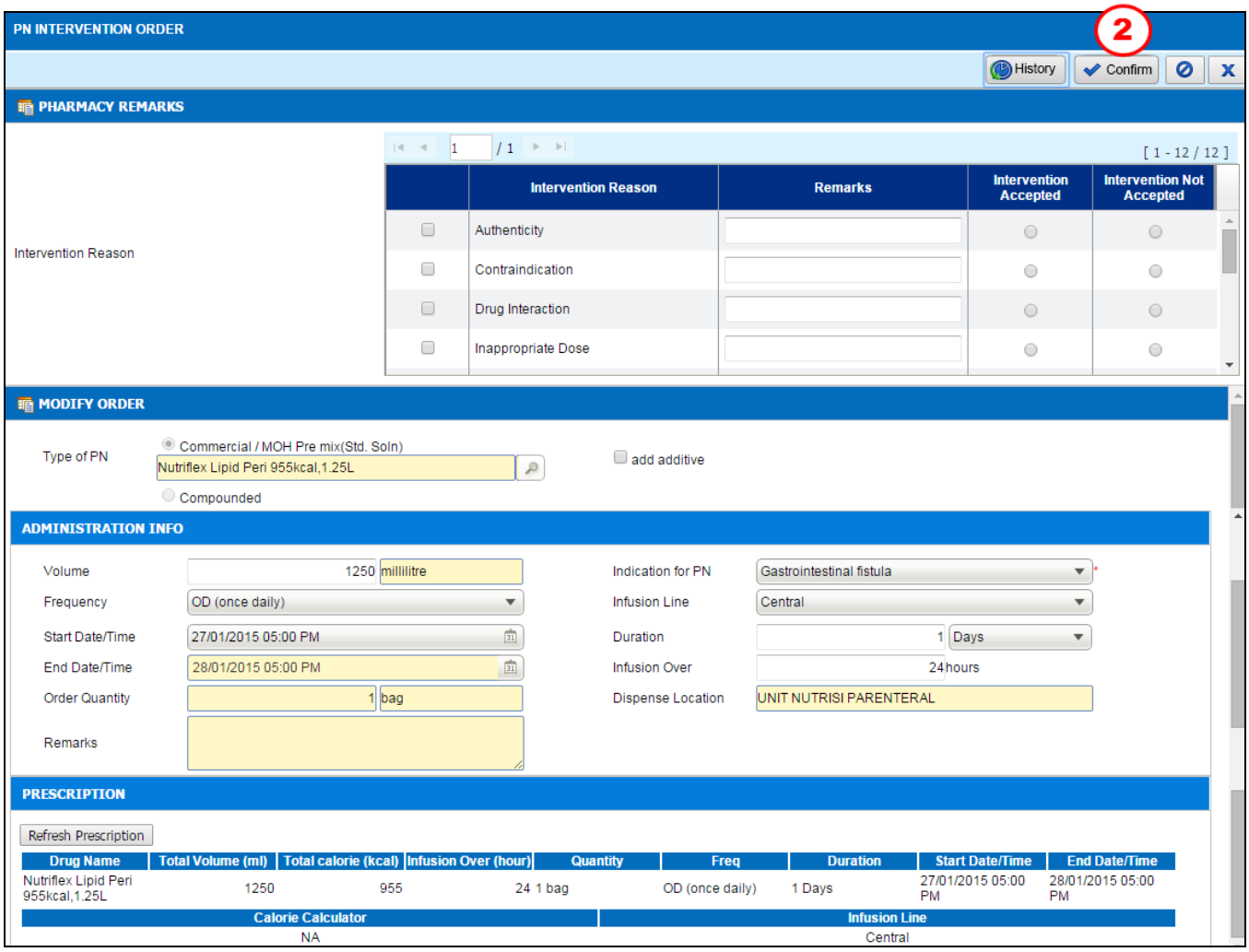


Figure 3.1.2-2 PN Intervention Order

Note

- *PN Intervention Order screen include four sections:*
  - *a) Pharmacy Remarks*
  - *b) Modify Order*
  - *c) Administration Information*
  - *d) Prescription*

- *Click on History button to view Intervention Reason History Listing screen.*
- *Check on the appropriate* ☐ ***Intervention Reason*** *checkbox and enter* ***Remarks*** *field if applicable.*
- *Select* ◯ ***Intervention Status Accepted*** *radio button or* ***Intervention Status Not Accepted*** *radio button.*

STEP 2

Click on the Confirm button to save record as per Figure 3.1.2-2

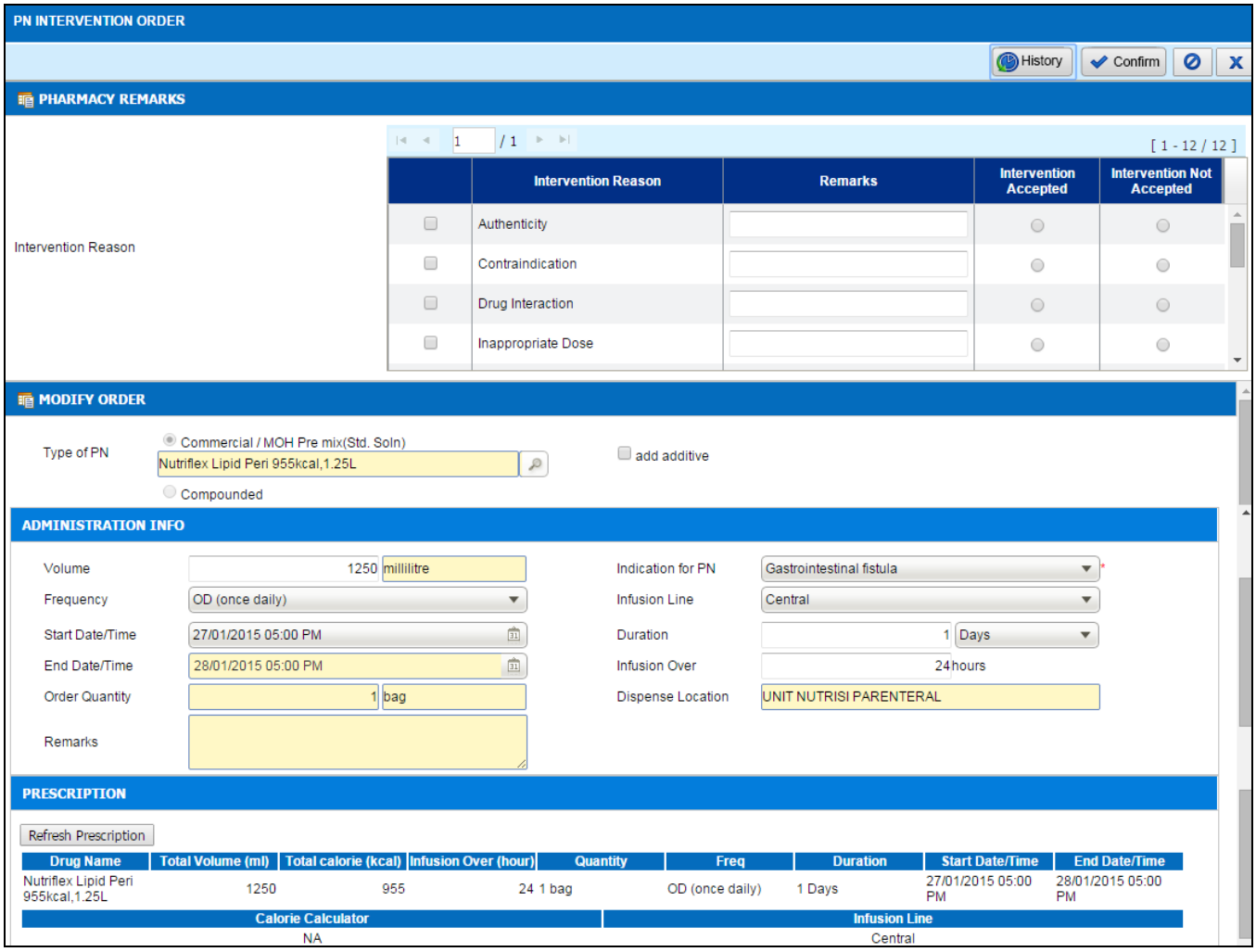
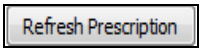


Figure 3.1.2-3 PN Intervention Order

Note

- ***Modify Order, Administration Information*** *and* ***Prescription*** *section will display as per Figure 3.1.2-3.*
- *Field that can be edited in Administration Information as below:*
  - *Volume*
  - *Frequency*
  - *Start Date/Time*
  - *Infusion Line*
  - *Duration*
  - *Infusion Over*

- *Click on the*  *button to update back prescription details.*

3.1.3 Hold/Resume Parenteral Nutrition (PN) Order

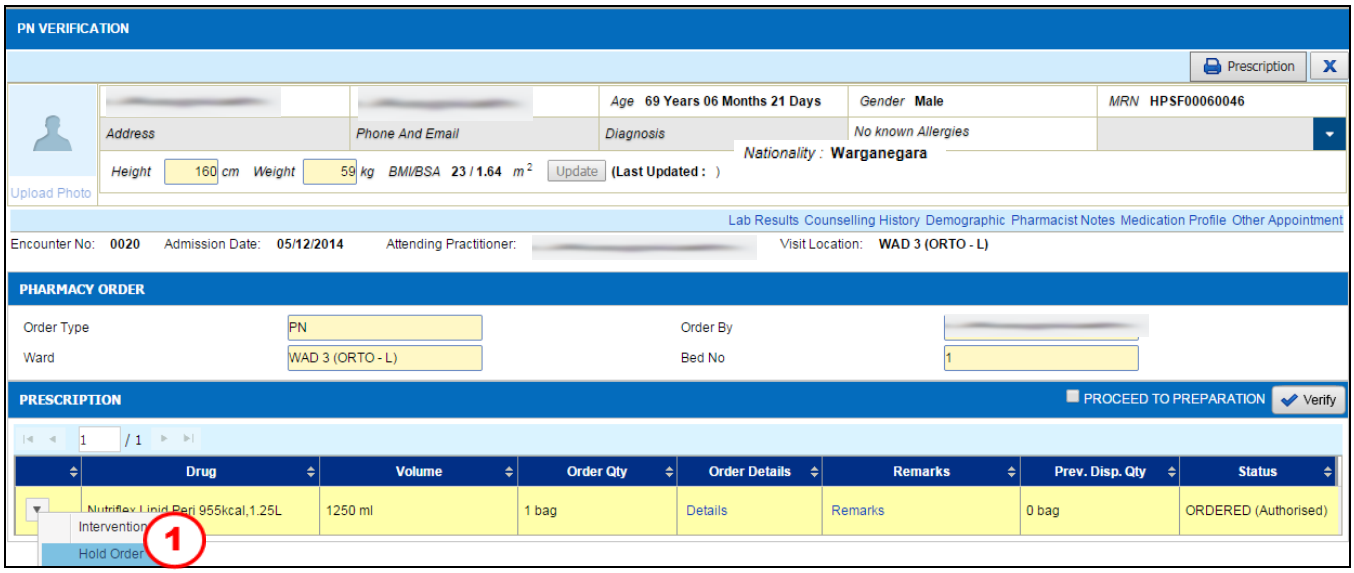


Figure 3.1.3-1 PN Verification Screen

Note

*To proceed with Hold/Resume PN Order, repeat **Step 1** to **4** from section **3.1.1 Verify PN Order.***

Hold Order

STEP 1
Right click on the button and select ***Hold Order*** function and screen will be displayed as Figure 3.1.3-2

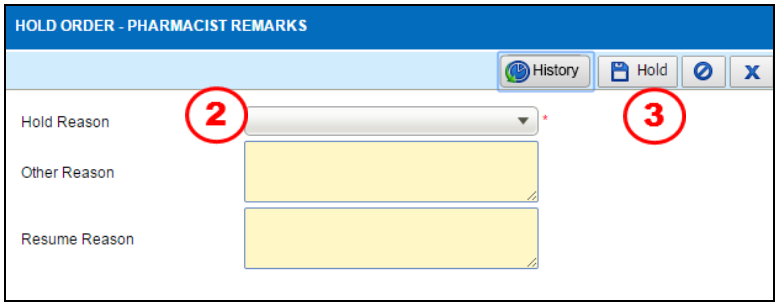


Figure 3.1.3-2 Hold Order – Pharmacist Remarks

STEP 2

Select the ***Hold Reason*** from dropdown box:

- Authenticity
- Contraindication
- Drug Interaction
- Inappropriate Dose
- Inappropriate Duration
- Inappropriate Frequency
- Incompatibility

- Intervention
- Others
- Polypharmacy
- Suggest to Monitor Vital Signs/Lab Result
- Wrong Patient

Note

Other Reason *field will activate if user select hold reason as Others.*

STEP 3

Click on the

button to hold order and alert message will display as Figure 3.1.3-3

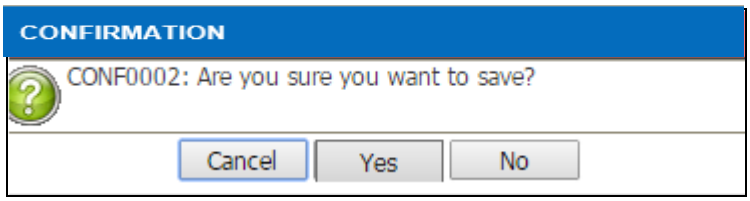
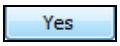


Figure 3.1.3-3 Confirmation Alert Message

Note

- *Click on the* 

button to confirm the hold record as per Figure 3.1.3-3.
- ***Status*** *will change to "Ordered Hold" as per Figure 3.1.3-4.*

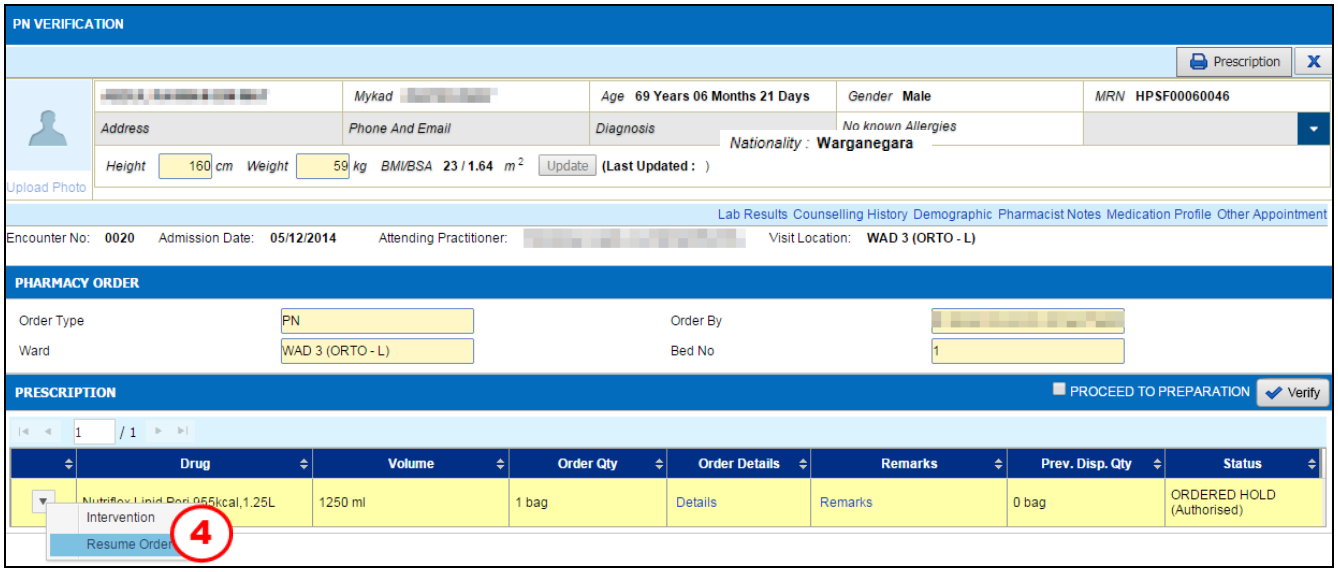


Figure 3.1.3-4 PN Verification

Resume Order

STEP 4

Right click on the ▼ button and select ***Resume Order*** function and screen will be displayed as Figure 3.1.3-5

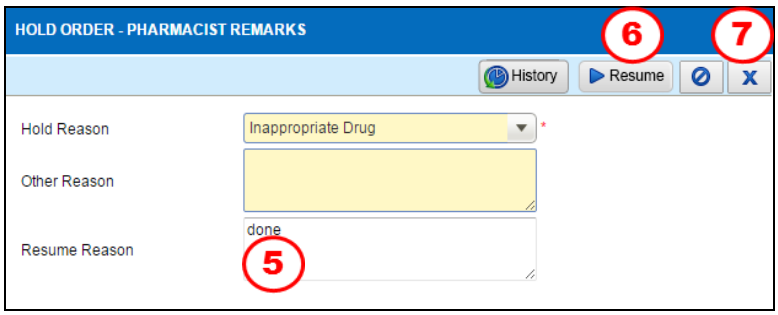


Figure 3.1.3-5 Hold Order – Pharmacist Remarks

Note

*To proceed with Resume PN Order, repeat **Step 2** to **3** from section **3.1.3 Hold/Resume PN Order.***

STEP 5

Enter reason at ***Resume Reason*** field

STEP 6

Click on the Resume button to resume hold order

STEP 7

Click on the X button to close window and alert message will be displayed as per Figure 3.1.3.6

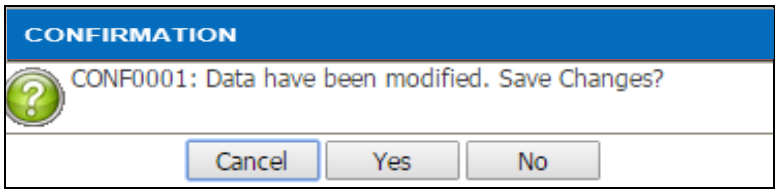


Figure 3.1.3-6 Confirmation Alert Message

Note

- *Click on the Yes button to confirm save record.*
- ***Status** will change to "Ordered".*

History

Note

- *Click on the History button to view history of hold order reason history listing as per Figure 3.1.3-7.*
- *Click on the X button to close Hold Order Reason History listing screen.*

Figure 3.1.3-7 Hold Order – Pharmacist Remarks

3.2 Parenteral Nutrition (PN) Preparation

3.2.1 Preparation for Commercial

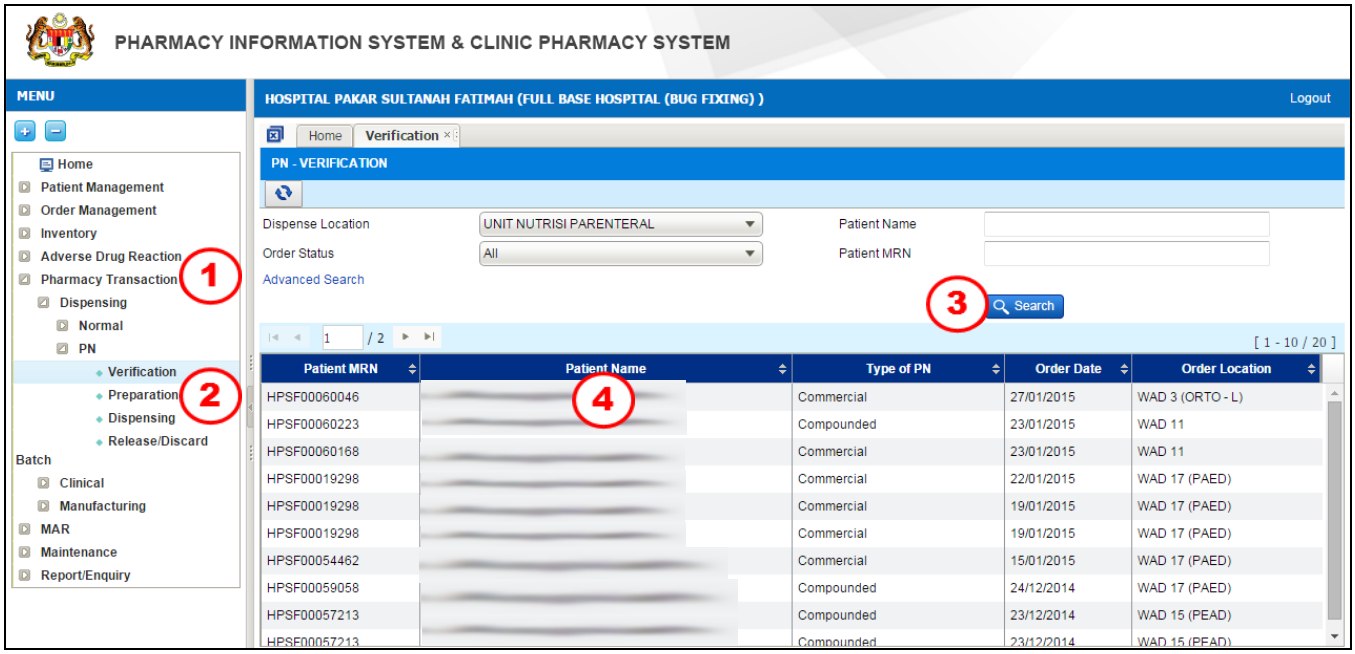


Figure 3.2.1-1 PN Preparation Listing Page

STEP 1

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

STEP 2

Click on ‘Preparation’ function

Note

Search patient record based: -

Basic Search			
No	**Field**	**Description**	**Remark**
a	Dispense Location	Dispensing location. (It will list down all active location)	Able to filter and search patient name by dispensing location
b	Order Status	Search by: All Verified Verified Hold Partial Supply Orders	Able to filter and search patient name by order status
c	Patient Name	Patient Name	Allow to search by full name or partial
d	Patient MRN	Patient Medical Record Number	Search option: Type the MRN either full or partial: *Example: HPSF00001234 or "1234"*
e	Administration Date From	Administration confirmed date	Allow to search by start date of verification order
f	Administration Date To	Administration confirmed date	Allow to search by selected duration of verification order
Advance Search			
a	Order location Type	Current Visit Location Type	Search by: - All - Clinic - Day Care - ER - Nursing Unit - Pharmacy
b	Order Location	Current visit Location	Able to filter and search patient name by visit location
c	Order Date From	Order confirmed date	Allow to search by start date of order created
d	Order Date To	Order confirmed date	Allow to search by selected duration of order created

Table 3.2.1-1: Search Criteria

STEP 3

Click on the

button to search patient

Note

Search result of patient record list will be displayed:

- *Patient MRN*
- *Patient Name*
- *Type of PN*
- *Order Date*
- *Order Location*

STEP 4
Double click on record and PN Preparation screen will be displayed as Figure 3.2.1-2

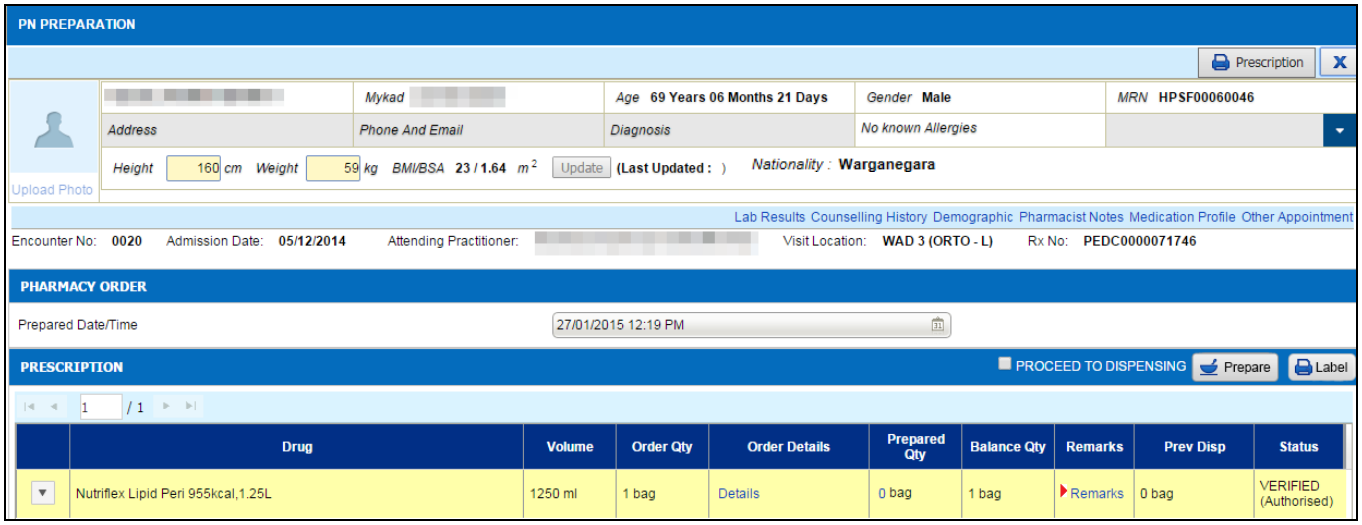


Figure 3.2.1-2 PN Preparation

Note

Order Details

- *Click on the* Details *hyperlink to view order details as per Figure 3.2.1-3.*

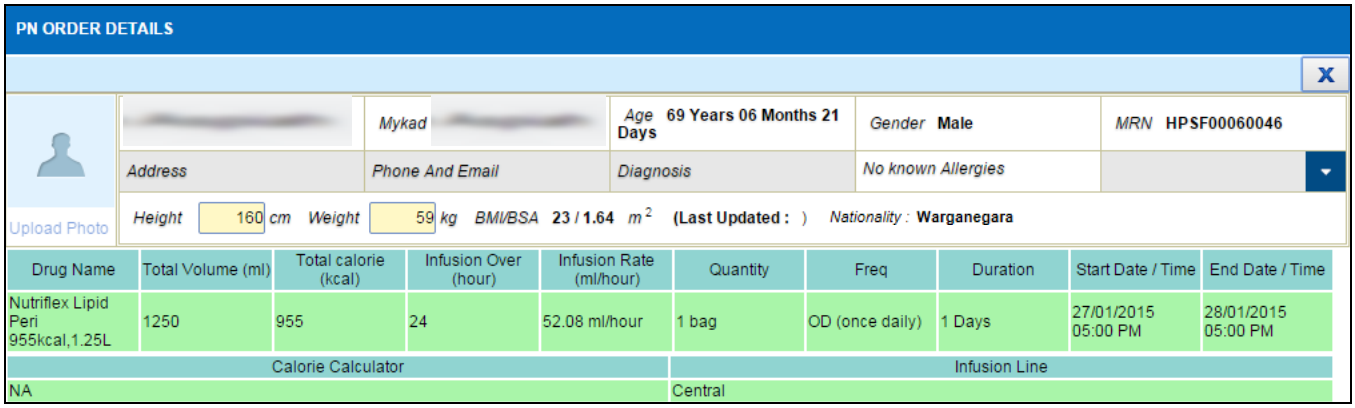


Figure 3.2.1-3 PN Order Details

Note

Remarks

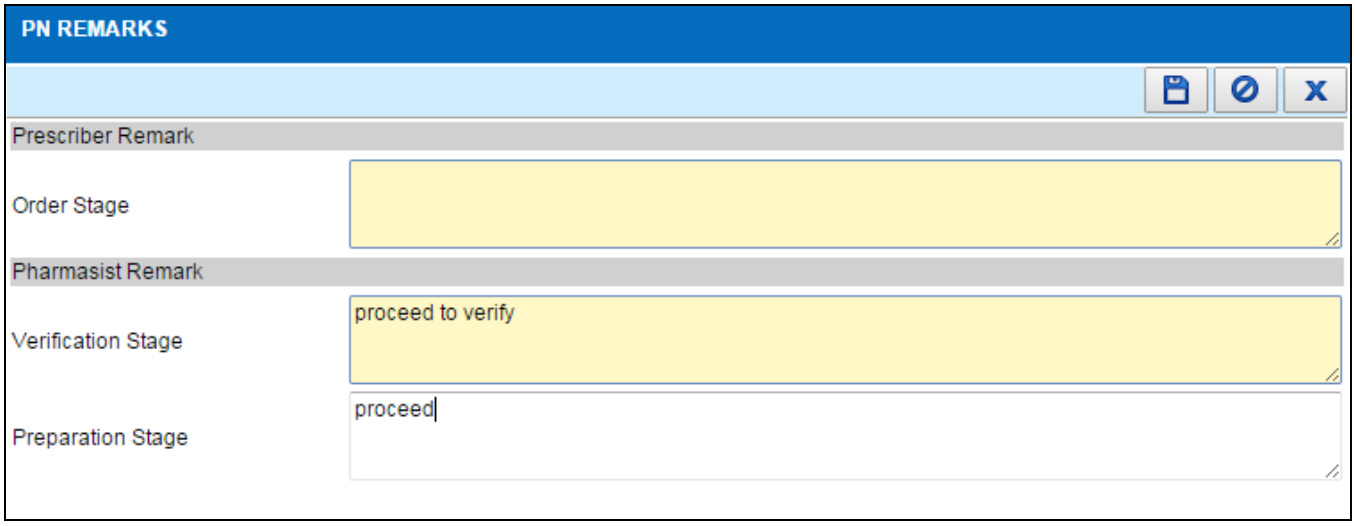


Figure 3.2.1-4 PN Remarks

- *Click on the* Remarks *hyperlink to display PN Remark as per Figure 3.2.1-4.*

  a) Prescriber Remark

  *- **Order Stage** to be retrived upon ordering.*

  b) Pharmacist Remark

  *- **Verification Stage** to be retrieved during verification.*

  *- **Preparation Stage** to be retrieved during preparation.*

- *The* *button to save record.*
- *The* *button to close PN Remarks screen.*
- *The* *button to cancel remark record.*

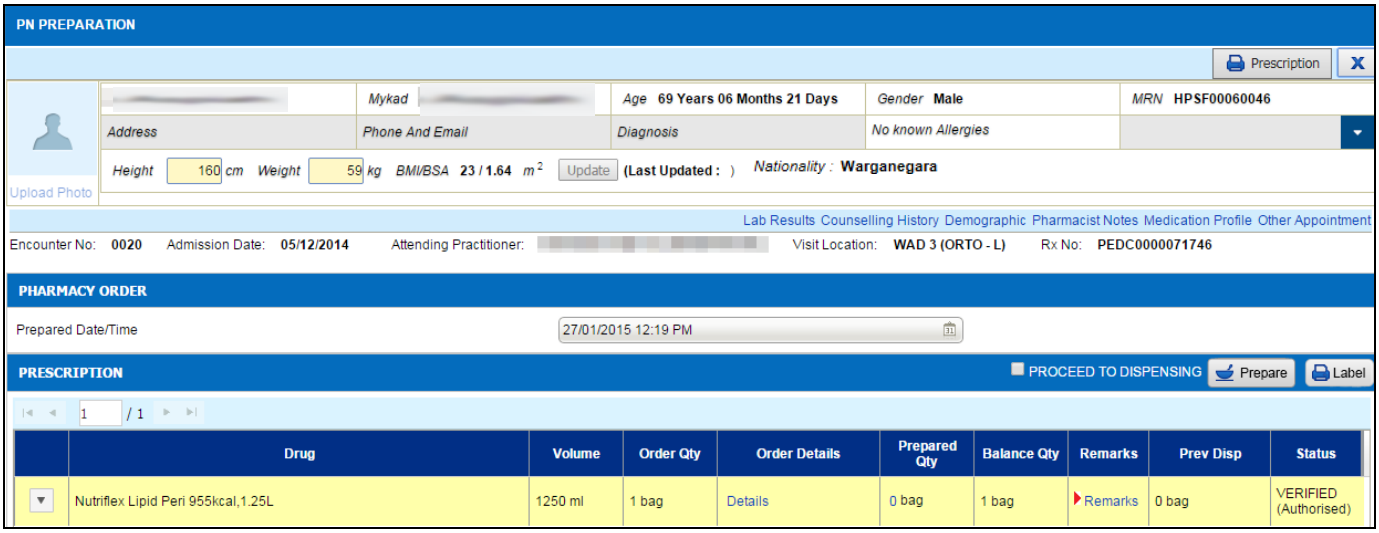


Figure 3.2.1-5 PN Preparation

Note

Edit Label

- *Click on the* Label *button to edit label and PN Edit Label window will display as per Figure 3.2.1-6.*
- *Select the* Select for print *radio button to print label.*
- *User allows to edit* ***Infusion Over, Date Prepared*** *and* ***Shelf Life*** *field.*
- ***Expiry Date*** *field will automatically display after filling the* ***Shelf Life*** *field.*
- ***Drug Name, Total Volume, Infusion Rate*** *and* ***Batch No*** *field will be displayed automatically by system.*
- *The* *button to print label as per Figure 3.2.1-7.*
- *The* *button to close PN Edit Label window.*
- *The* *button to cancel print label.*

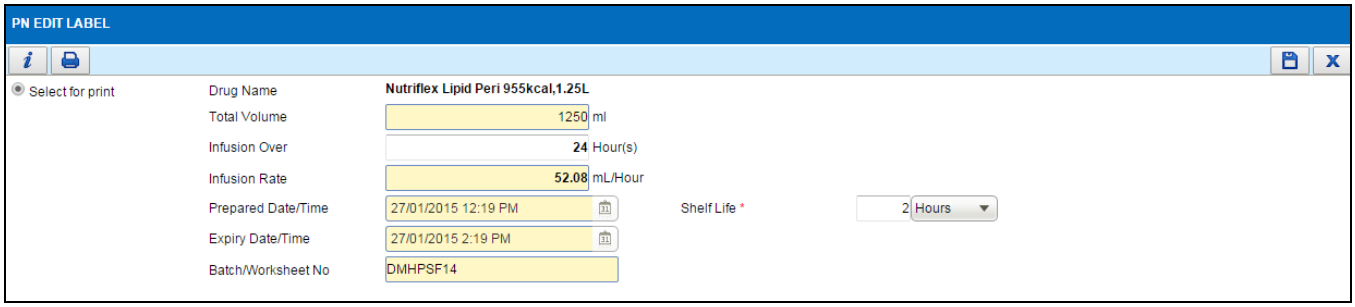


Figure 3.2.1-6 PN Edit Label

HOSPITAL PAKAR SULTANAH FATIMAH, MUAR

PARENTERAL NUTRITION (Adult)

NAME : [redacted]

AGE : 56 Years 10 Months 04 Days

MRN : HPSF00191617	WARD/BED NO: WAD 9 (MED - P)

Total Volume 3260 ml/bag

Content		/ kg	/ bag
Protein	(g)	2	176
Dextrose	(g)	3	264
Lipid	(g)	0	0
Sodium	(mmol	1	88
Potassium	(mmol	0	0
Calcium	(mmol	0	0
Magnesium	(mmol	0	0
Phosphate	(mmol	0	0
Chloride	(mmol	1	87.99
Acetate	(mmol	0	0
Trace	(mL)	0	0
Vitamins	(mL)	0	0
Calories	(kcal)	20	1760
Osmolarity	(mOs	10.53	926.91
L-Glutamin	(ml)	0	0

Date and Time of Administration :

Infusion Rate 135.83 ml/Hrs

Worksheet ID A011-280917	Expiry Date 29/09/2017 9:35 AM	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 24 Hours)
Ensure PN Solution is at room temperature before infusion

TO BE INFUSED : CENTRAL LINE

Figure 3.2.1-7 Sample Label

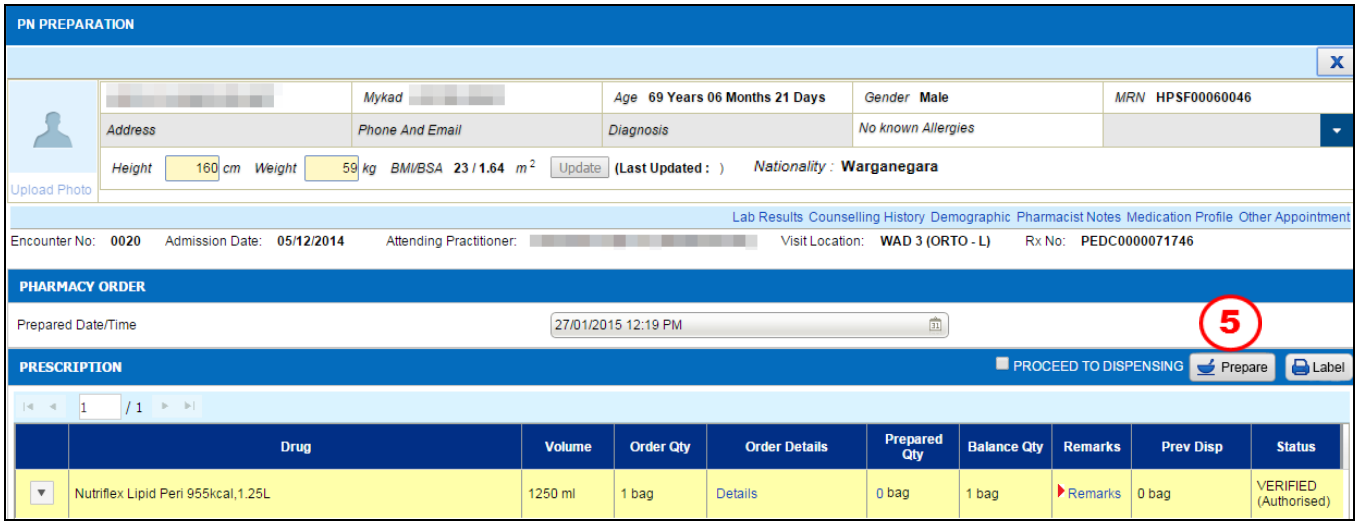


Figure 3.2.1-8 PN Preparation

STEP 5

Click on the Prepare button to prepare PN order and alert message will be displayed as per Figure 3.2.1-9

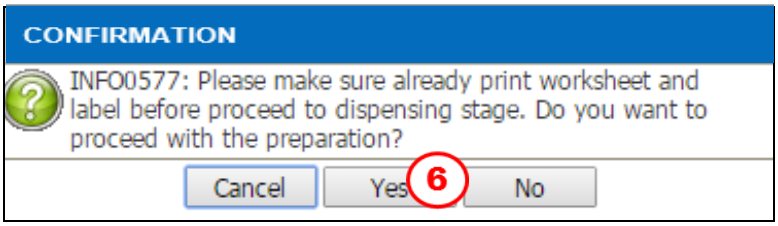


Figure 3.2.1-9 Prepare Order Alert Message

STEP 6

Click on the Yes button to confirm prepare order

Note

Proceed to Next Stage function will allow user advance to the next screen for each patient record.

3.2.1.1 Alternate Drug

Note

- *Preparation for Commercial screen allows user to dispense different drug from existing ordered drug with conditionation, alternate drug should contains same active ingredient and same administration route.*
- *To proceed with Alternate Drug PN Order, repeat **Step 1** to **4** from section 3.2.1 Preparation for Commercial.*
- *All these field will be displayed automatically by system as below:*
  - *Location*
  - *Ordered Drug Code*
  - *Dosage Form*
  - *Ordered Drug Description*

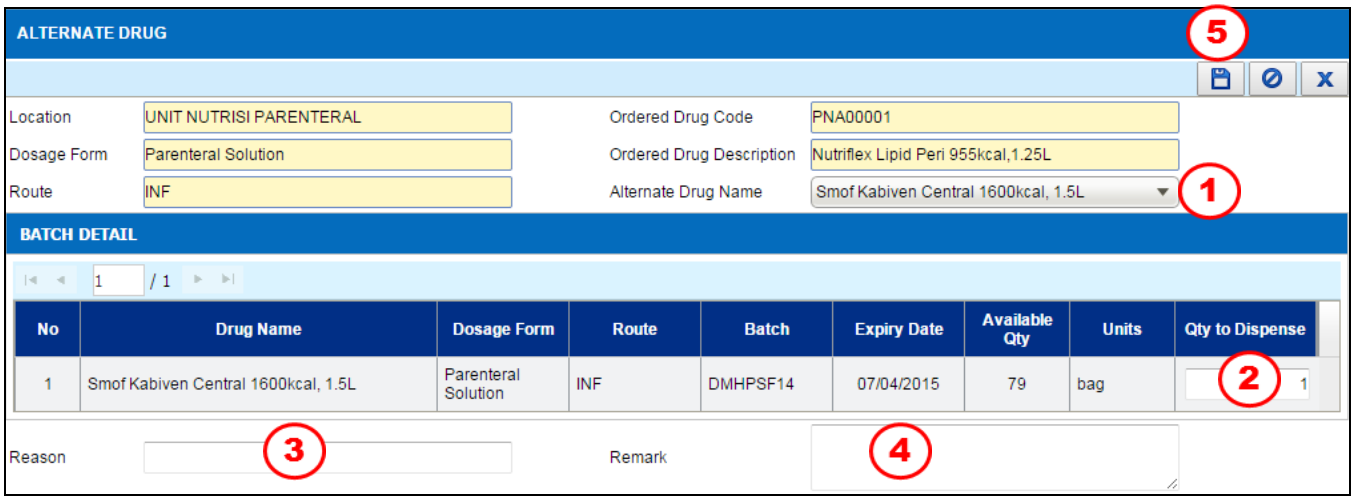


Figure 3.2.1.1-1 Alternate Drug

STEP 1

Select the ***Alternate Drug Name*** from dropdown box, example:

- Kabiven Periferal 1400kcal, 2.0L
- Kabiven Periferal 1000kcal, 1.5L
- PN Paed Soln 2 (72kcal, Dext 14%)
- PN Paed Soln 3 (48kcal, Dext 10%)
- Smof Kabiven Central 800kcal, 1.2L
- Kabiven Central 1900kcal, 2.0L
- Smof Kabiven Central 1100kcal, 1.0L
- Nutriflex Lipid Peri 1910kcal, 2.5L
- Nutriflex Lipid Peri 1435kcal, 1.875L
- Kabiven Central 900kcal, 1.0L
- Smof Kabiven Central 1600kcal, 1.5L
- PN Paed Soln 1 (72kcal, Dext 14%, K nil)

STEP 2

Enter ***Allocate Qty*** field as per Figure 3.2.1.1-1

STEP 3

Enter ***Reason*** field if applicable

STEP 4

Enter ***Remark*** field if applicable

STEP 5

Ckick on the button to confirm save record and alert message will be displayed as per Figure 3.2.1.1-2

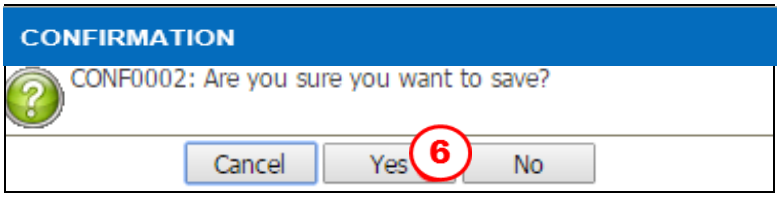


Figure 3.2.1.1-2 Confirmation Alert Message

STEP 6

Click on the button to confirm save record

Note

- *System will display the alternate drug in green row as per Figure 3.2.1.1-3.*
- *Intervention and Hold/Resume Order still can be done in preparation stage.*
- *Steps of Intervention can be referred at 3.1.1 sections.*
- *Steps of Hold/Resume Order can be referred at 3.1.2 sections.*

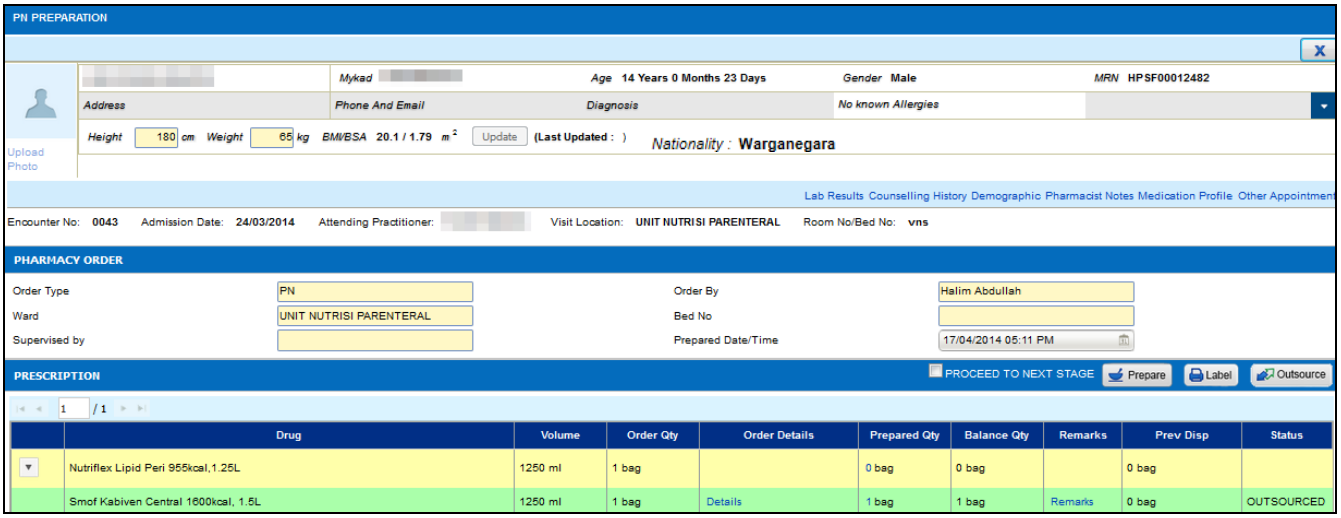


Figure 3.2.1.1-3 PN Preparation

3.2.2 Preparation for Commercial Add Addictive

Note

- *Preparation (commercial add additive) allows user to add additional component in existing commercial bag.*
- *To proceed with Preparation for Commercial Add Addictive, repeat **Step 1** to **4** from section **3.2.1 Preparation for Commercial.***

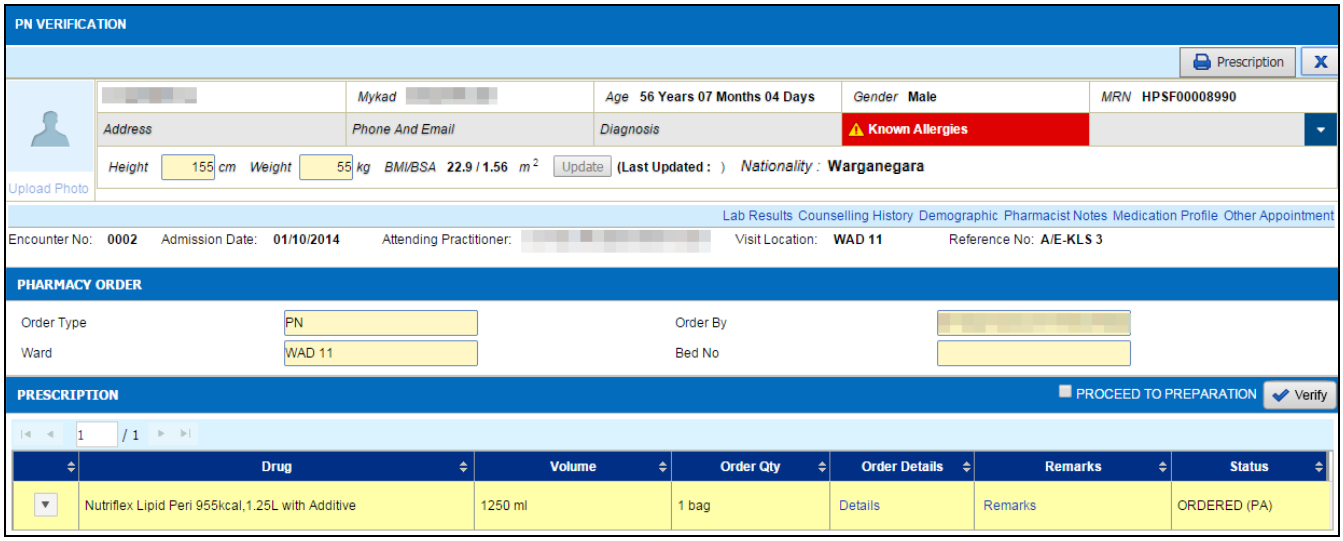


Figure 3.2.2-1 PN Preparation

Note

Order Details

- *Click on the* Details *hyperlink to view order details as per Figure 3.2.2-2.*

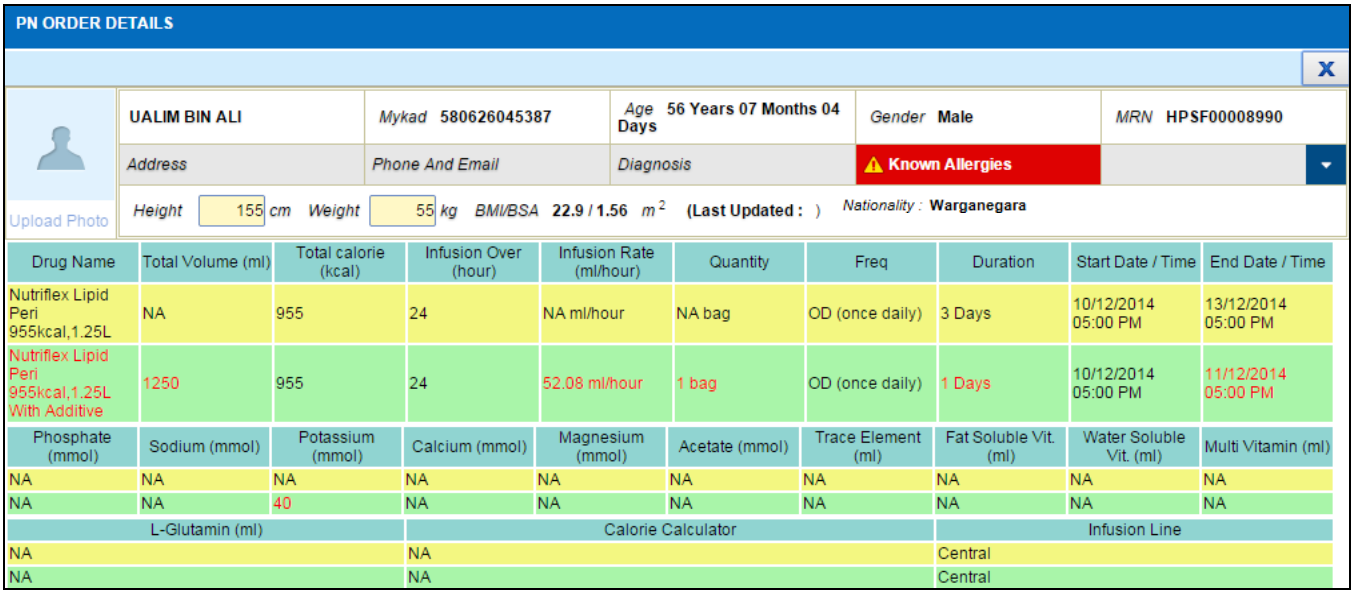


Figure 3.2.2-2 PN Order Details

Remarks

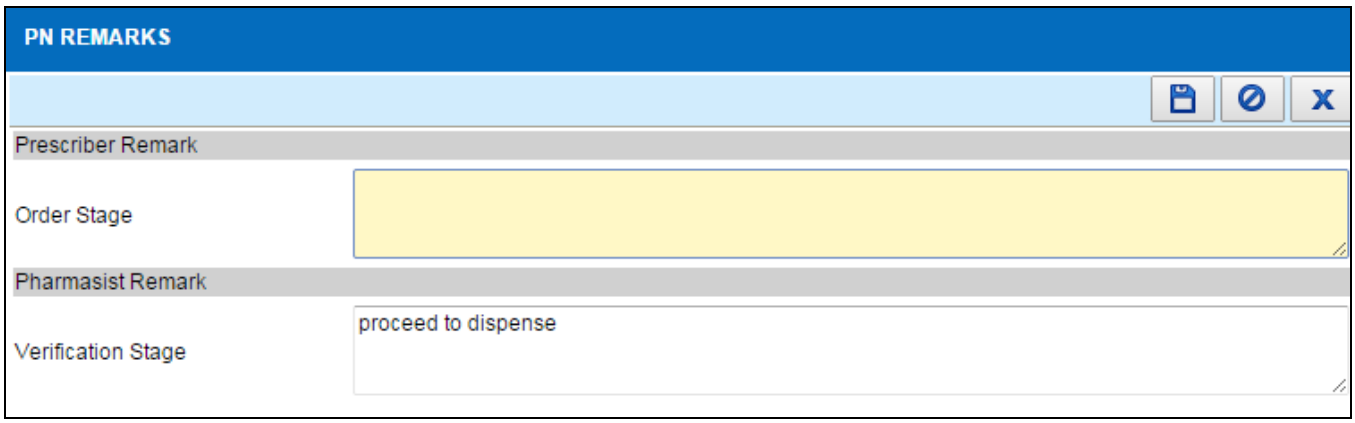


Figure 3.2.2-3 PN Order Details

- *Click on the* Remarks *hyperlink to display PN Remark as per Figure 3.2.2-3.*

  a) Prescriber Remark

  *- **Order Stage** to be retrieved upon ordering..*

  b) Pharmacist Remark

  *- **Verification Stage** to be retrievd during verification.*

  *- **Preparation Stage** to be retrieve during preparation.*

- *The* *button to save record alert message will be displayed as per Figure 3.2.2-3.*

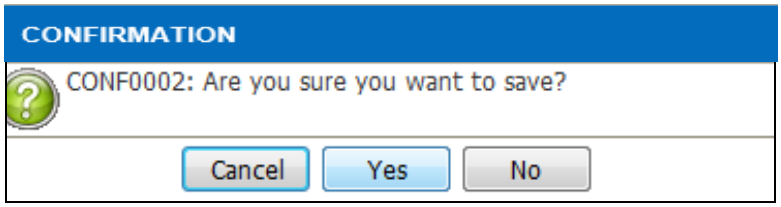
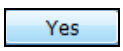


Figure 3.2.2-4 Confirmation Alert Message

- *The*  *button to confirm save.*
- *The* *button to close PN Remarks screen.*
- *The* *button to cancel remark record.*

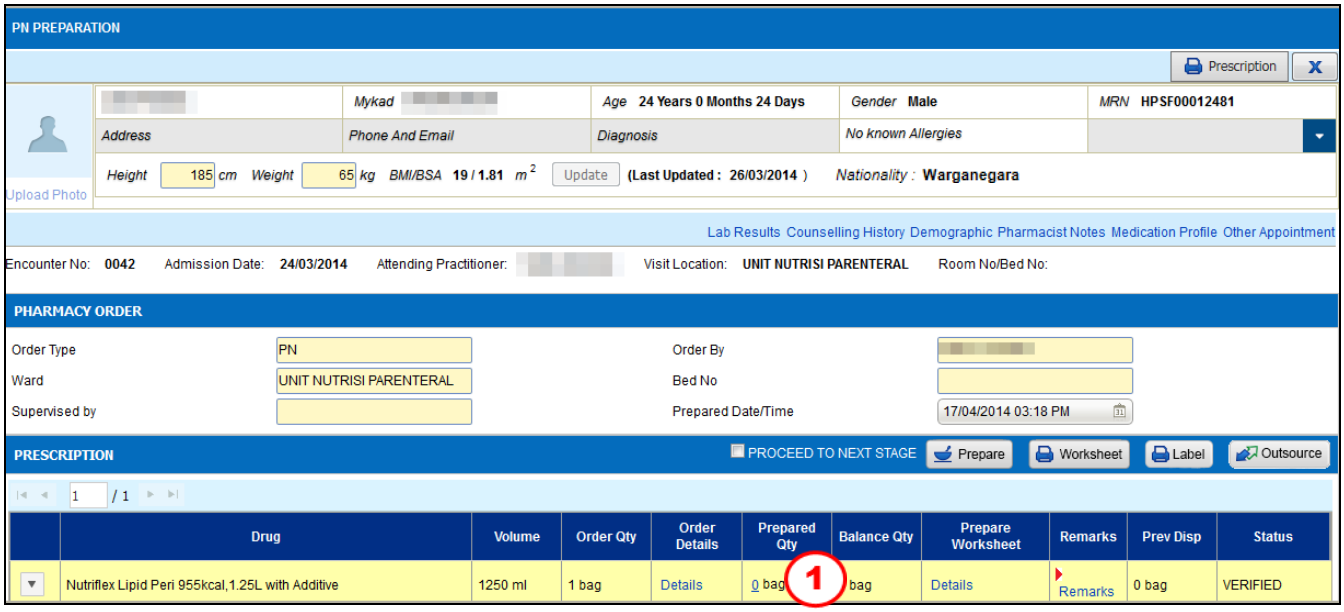


Figure 3.2.2-5 PN Preparation

STEP 1

Click on the 0 bag link to allocate quantity and Item Batch Details screen will display as per Figure 3.2.2-6

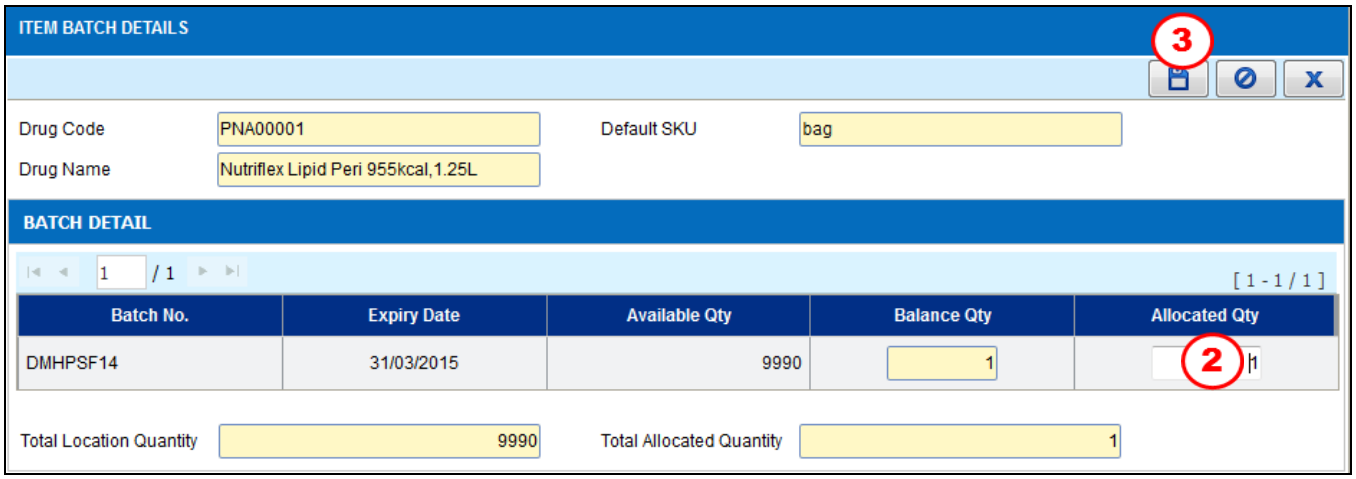


Figure 3.2.2-6 Item Batch Details

STEP 2

Enter ***Allocated Qty*** field

STEP 3

Click on the button to save record

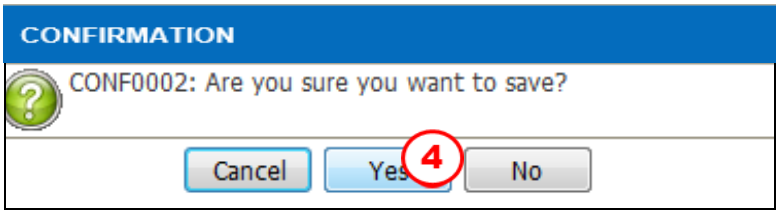


Figure 3.2.2-7 Confirmation Alert Message

STEP 4

Click on the Yes button to confirm save

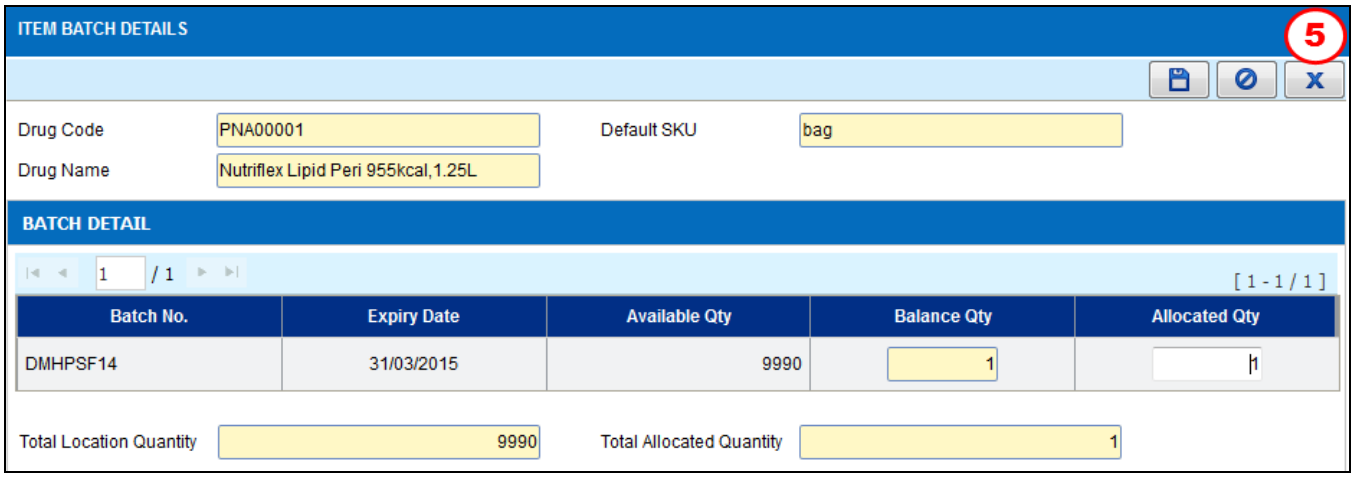


Figure 3.2.2-8 Item Batch Details

STEP 5

Click on the X button to close Item Batch Details window

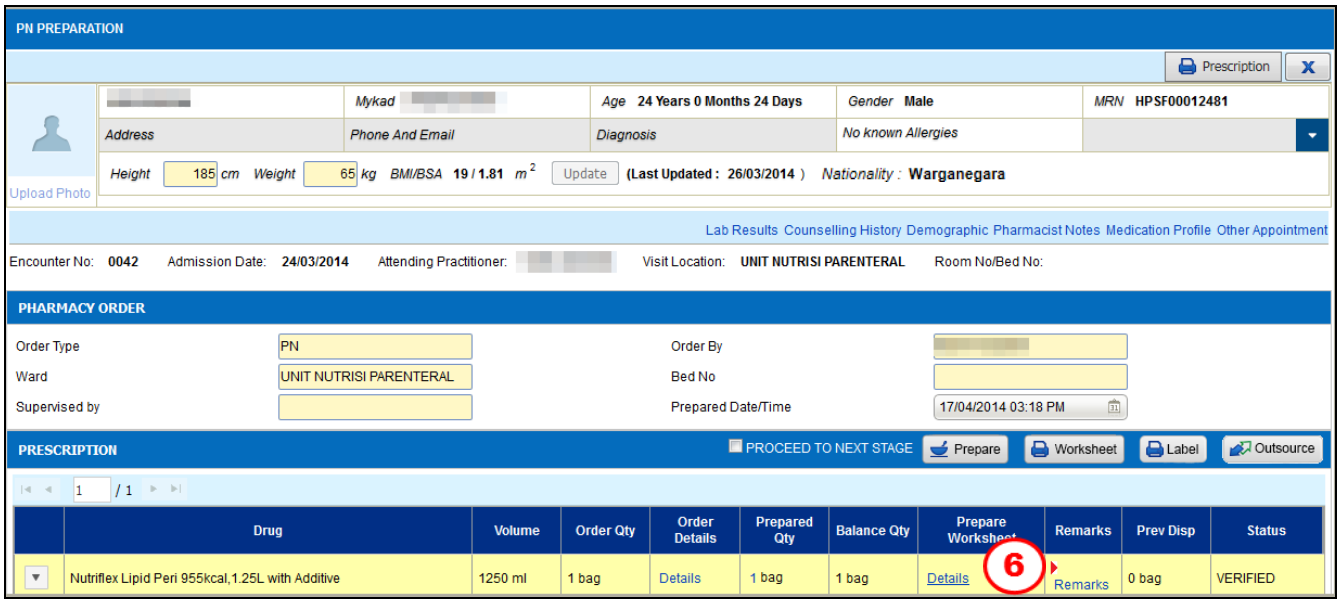


Figure 3.2.2-9 PN Preparation

STEP 6

Click on the Details button to prepare worksheet as per Figure 3.2.2-9

Note

- ***Macronutrient, Vitamin*** *and* ***Electrolytes*** *field will automatically display by system.*

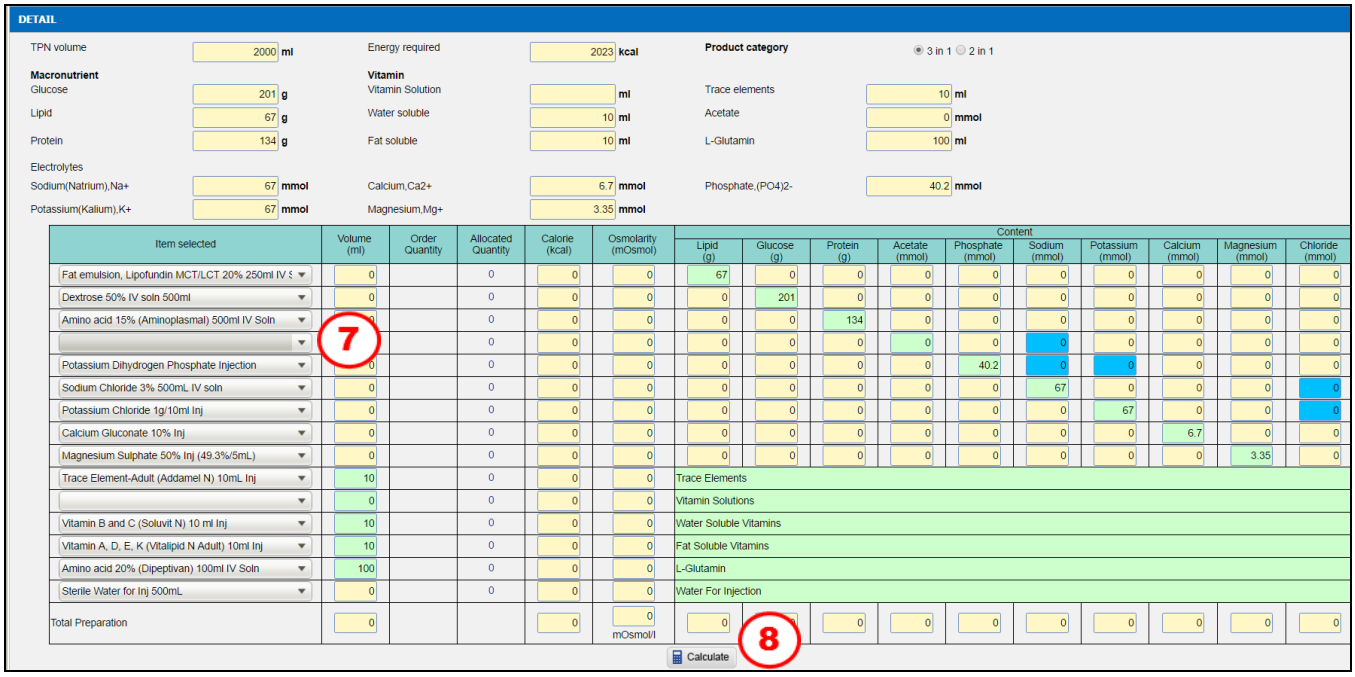


Figure 3.2.2-10 Prepare Worksheet

STEP 7

Click on the item dropdown to select the item before allocate

Note

- Able to set default drug in Maintenance - Pharmacy - PN Source Content screen.
- Drug listed should exists in dispense location unit catalogue.

STEP 8

Click on the Calculate button to calculate the item volume and order quantity as per Figure 3.2.2-11

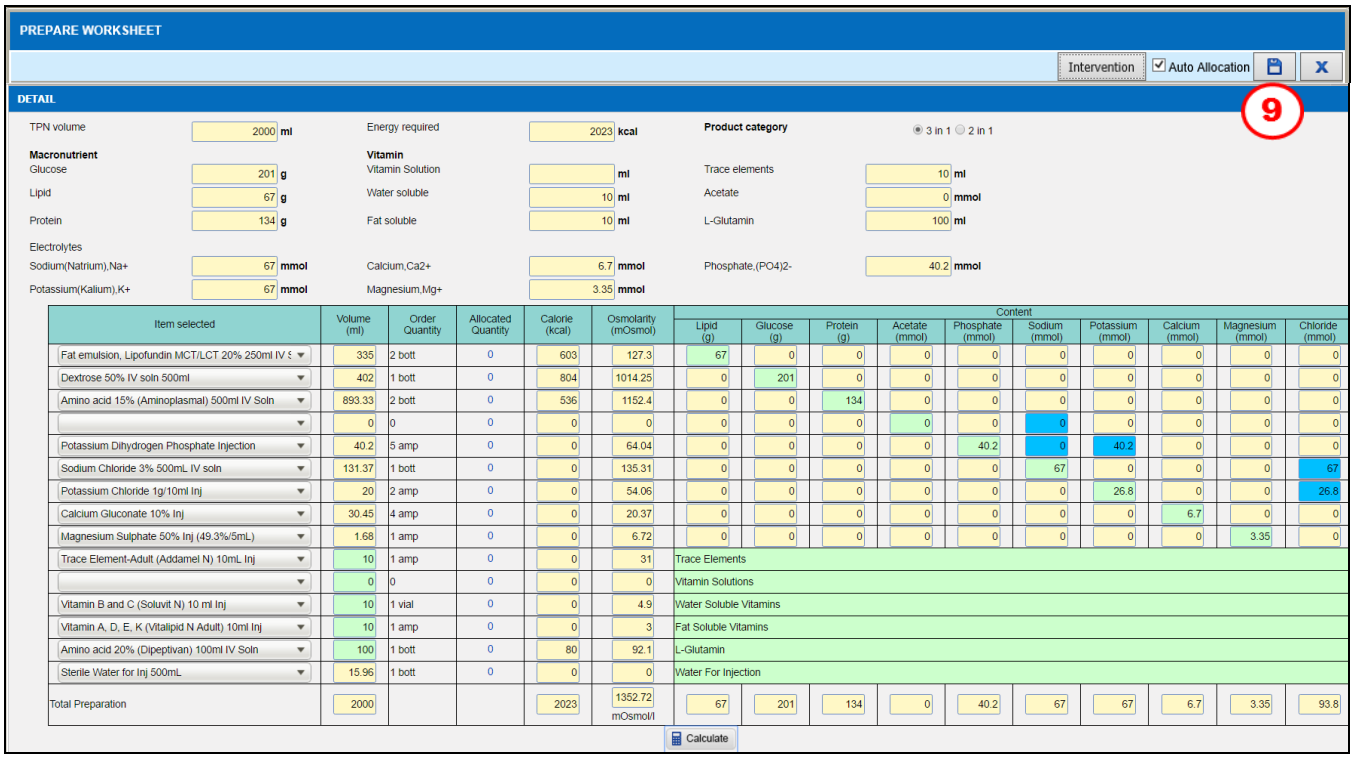


Figure 3.2.2-11 Prepare Worksheet

STEP 9

Click on the button to save record and the system will display as per Figure 3.2.2-12

Note

- Once user click on the button, system will reset the allocated qty to '0', user able to do intervention and re-calculate the worksheet and do allocation again

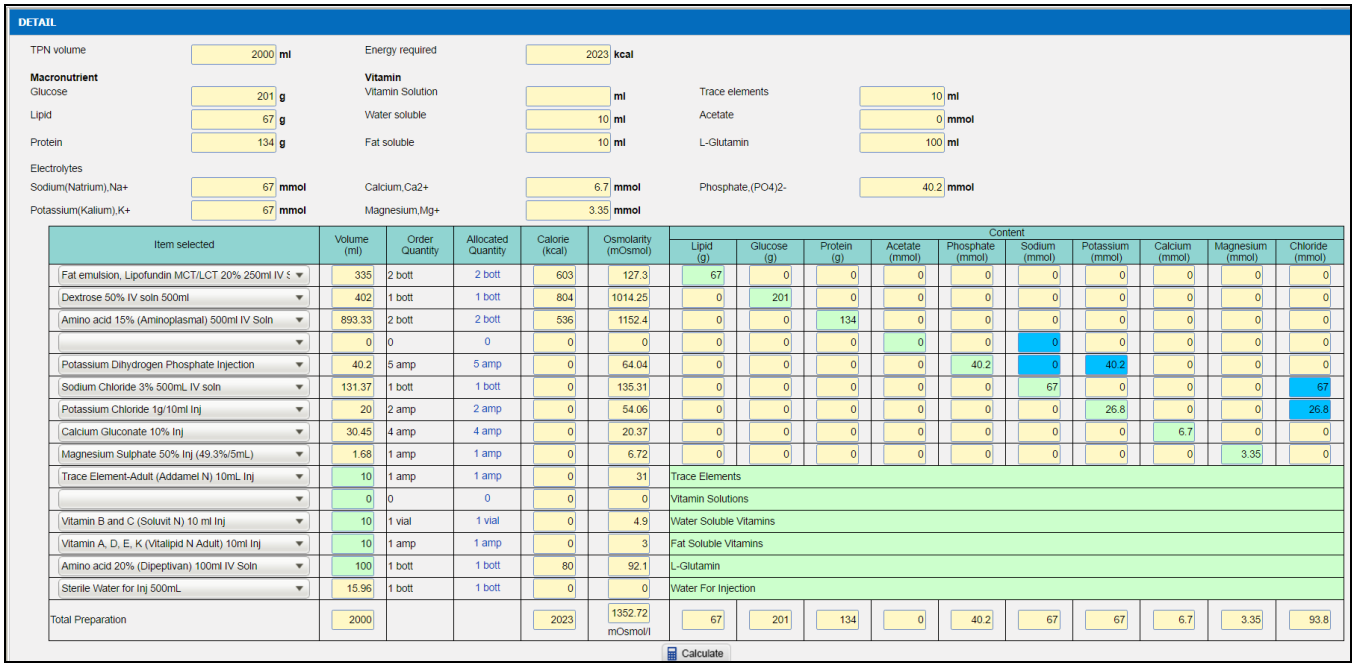


Figure 3.2.2-12 Prepare Worksheet

Note

- ***Calorie (kcal), Osmolarity(mOsmol), Content*** *and* ***Total Preparation*** *will be calculated and displayed automatically by system as per Figure 3.2.2-12.*

Untick the Auto Allocation *to allocate manually.*

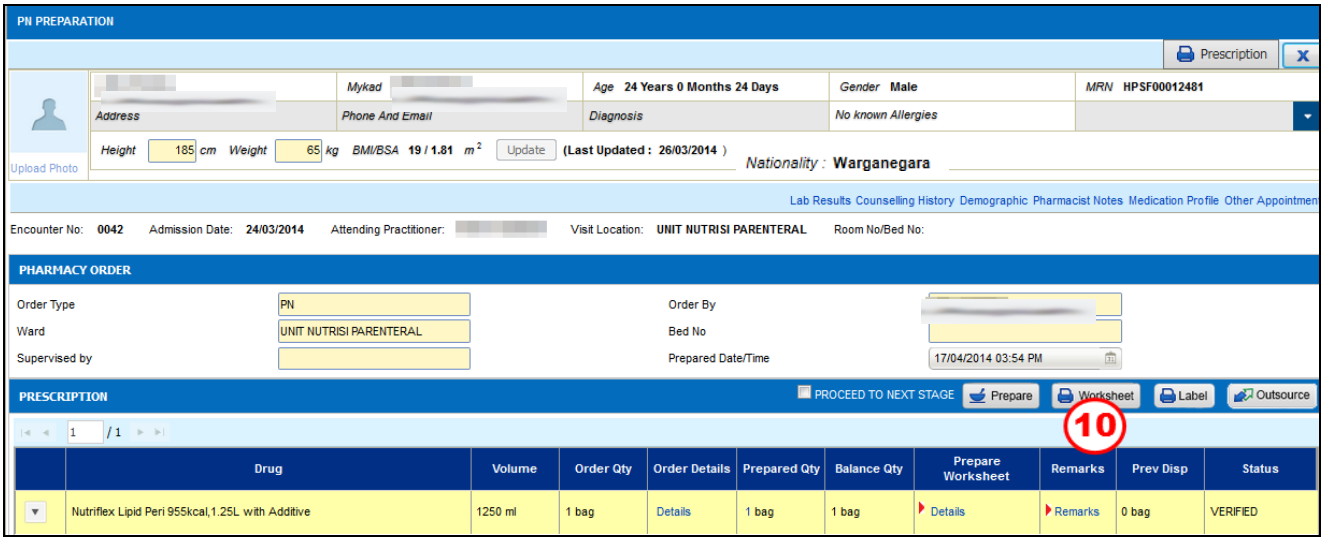


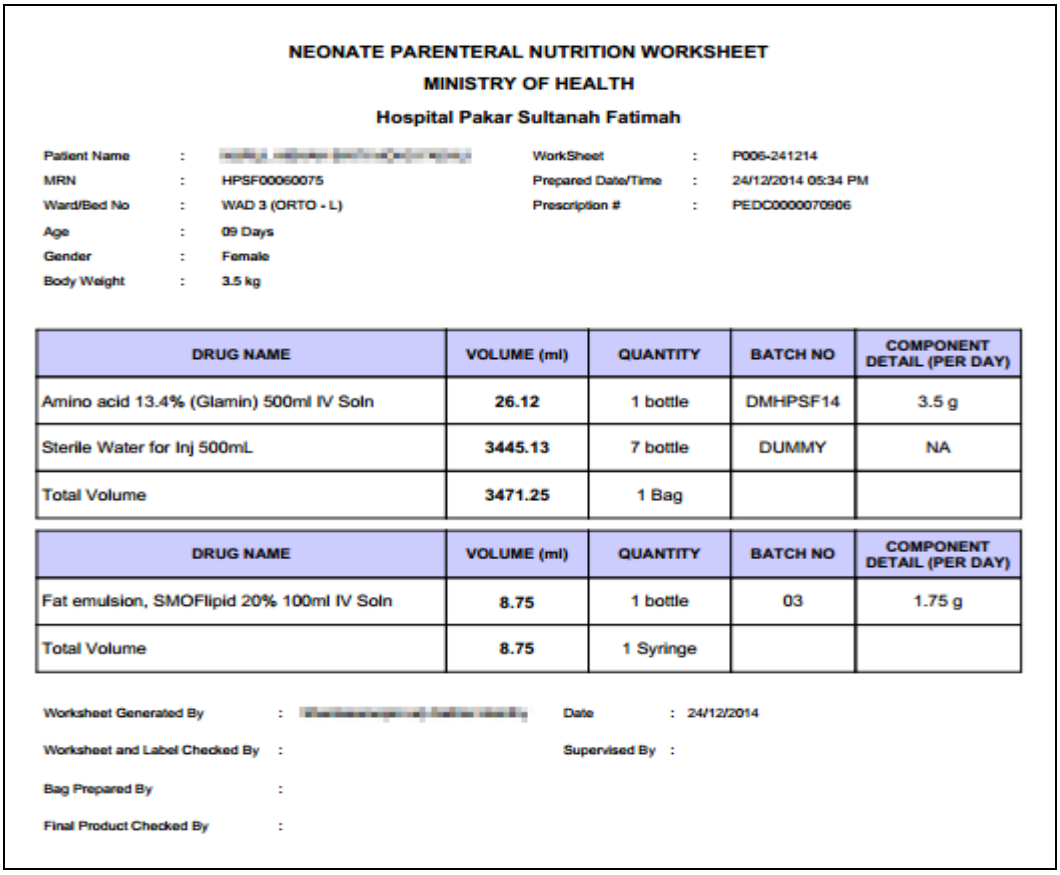
Figure 3.2.2-13 Prepare Preparation

STEP 10

Click on the Worksheet button to print the worksheet

Note

- *Worksheet will display as per Figure 3.2.2-14.*
- ***Allocated Quantity*** *column will be calculated and displayed automatically by system after click on the save button as per Figure 3.2.2-12.*



NEONATE PARENTERAL NUTRITION WORKSHEET

MINISTRY OF HEALTH

Hospital Pakar Sultanah Fatimah

Patient Name	:	[redacted]	WorkSheet	:	P006-241214
MRN	:	HPSF00060075	Prepared Date/Time	:	24/12/2014 05:34 PM
Ward/Bed No	:	WAD 3 (ORTO - L)	Prescription #	:	PEDC0000070906
Age	:	09 Days			
Gender	:	Female			
Body Weight	:	3.5 kg			

DRUG NAME	VOLUME (ml)	QUANTITY	BATCH NO	COMPONENT DETAIL (PER DAY)
Amino acid 13.4% (Glamin) 500ml IV Soln	26.12	1 bottle	DMHPSF14	3.5 g
Sterile Water for Inj 500mL	3445.13	7 bottle	DUMMY	NA
Total Volume	3471.25	1 Bag		

DRUG NAME	VOLUME (ml)	QUANTITY	BATCH NO	COMPONENT DETAIL (PER DAY)
Fat emulsion, SMOFlipid 20% 100ml IV Soln	8.75	1 bottle	03	1.75 g
Total Volume	8.75	1 Syringe		

Worksheet Generated By : [redacted] Date : 24/12/2014

Worksheet and Label Checked By : Supervised By :

Bag Prepared By :

Final Product Checked By :

Figure 3.2.2-14 Sample of PN Worksheet

Note

Sample of PN Worksheet as per Figure 3.2.2-13.

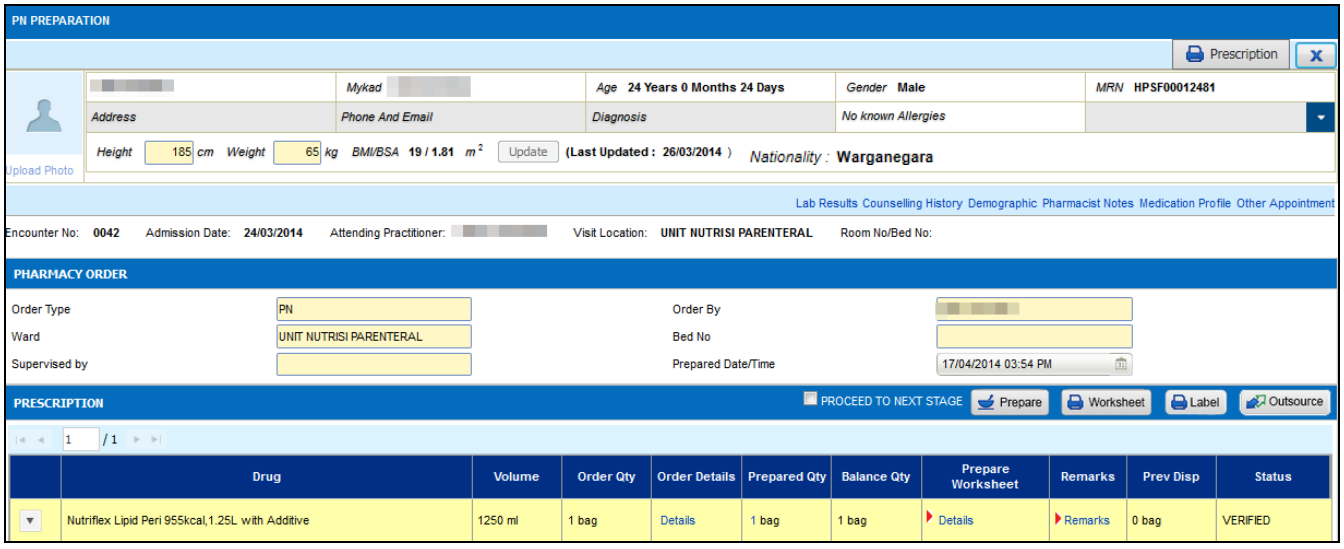
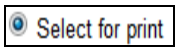


Figure 3.2.2-15 PN Preparation

Note

Edit Label

- *Click on the* *button to edit label as per Figure 3.2.2.15 and PN Edit Label window will display as per Figure 3.2.2-16.*
- *Select the*  *radio button to print label.*
- *User allowed to edit* ***Infusion Over, Date Prepared*** *and* ***Shelf Life*** *field.*
- ***Expiry Date*** *field will automatically display after filling the* ***Shelf Life*** *field.*
- ***Drug Name, Total Volume, Infusion Rate*** *and* ***Batch No*** *field will be displayed automatically by system.*
- *The* *button to print label.*
- *The* *button to close PN Edit Label window.*

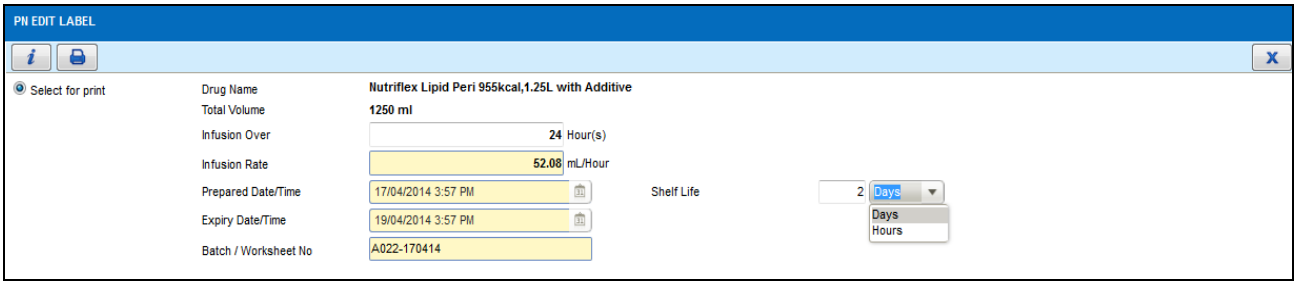


Figure 3.2.2-16 PN Edit Label

Note

- *PN Label will display as per figure 3.2.2-17.*
- *Additional content will be bolded description and value.*

HOSPITAL PAKAR SULTANAH FATIMAH, MUAR

PARENTERAL NUTRITION (Adult)

NAME : [redacted]

AGE : 56 Years 10 Months 04 Days

MRN : HPSF00191617	WARD/BED NO: WAD 9 (MED - P)

Total Volume 3260 ml/bag

Content		/ kg	/ bag
Protein	(g)	2	176
Dextrose	(g)	3	264
Lipid	(g)	0	0
Sodium	(mmol	1	88
Potassium	(mmol	0	0
Calcium	(mmol	0	0
Magnesium	(mmol	0	0
Phosphate	(mmol	0	0
Chloride	(mmol	1	87.99
Acetate	(mmol	0	0
Trace	(mL)	0	0
Vitamins	(mL)	0	0
Calories	(kcal)	20	1760
Osmolarity	(mOs	10.53	926.91
L-Glutamin	(ml)	0	0

Date and Time of Administration :

Infusion Rate 135.83 ml/Hrs

Worksheet ID A011-280917	Expiry Date 29/09/2017 9:35 AM	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 24 Hours)
Ensure PN Solution is at room temperature before infusion

TO BE INFUSED : CENTRAL LINE

Figure 3.2.2-17 Sample of PN Label

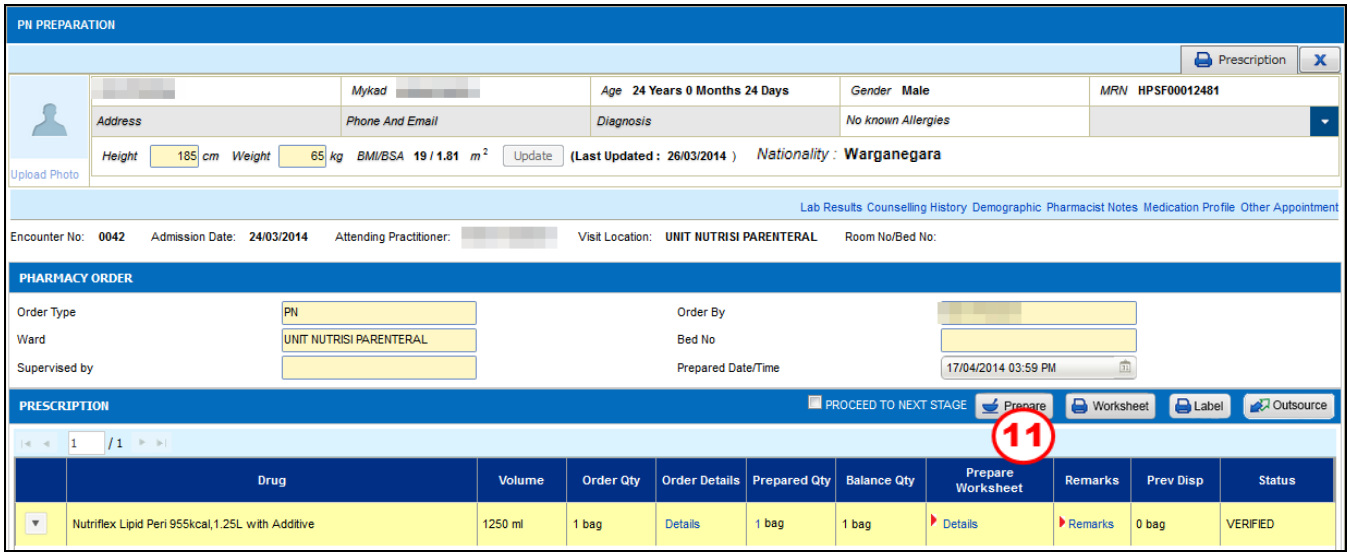


Figure 3.2.2-18 PN Preparation

STEP 11

Click on the Prepare button to prepare PN order and alert message will be displayed as per Figure 3.2.2-19

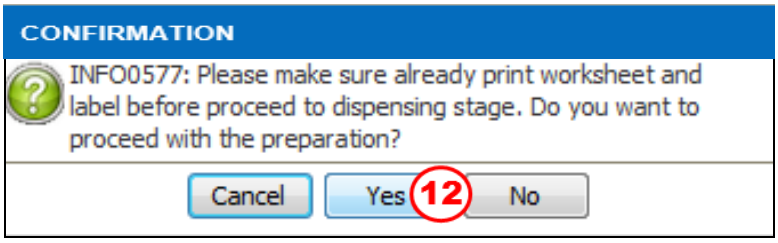


Figure 3.2.2-19 Preparation Confirmation Alert Message

STEP 12

Click on the Yes button to confirm prepare order

Note

Proceed to Next Stage function will allow user to advance to the next stage screen for each patient record.

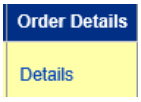
3.2.3 Preparation for Compounded Bag

3.2.3.1 Preparation Compounded 3 in 1 Bag

Note

- *Preparation (compounded) will allow user to prepare compounded bag. Worksheet and label can be printed after completing final calculation in preparation.*
- *Preparation for compounded have two product category as 3 in 1 bag and 2 in 1 bag.*
- *To proceed with Preparation for Compounded, repeat **Step 1** to **4** from section **3.2.1 Preparation for Commercial.***

Order Details

- *Click on the* 

Details hyperlink (Order Details column) to view order details as per Figure 3.2.3.1-2.

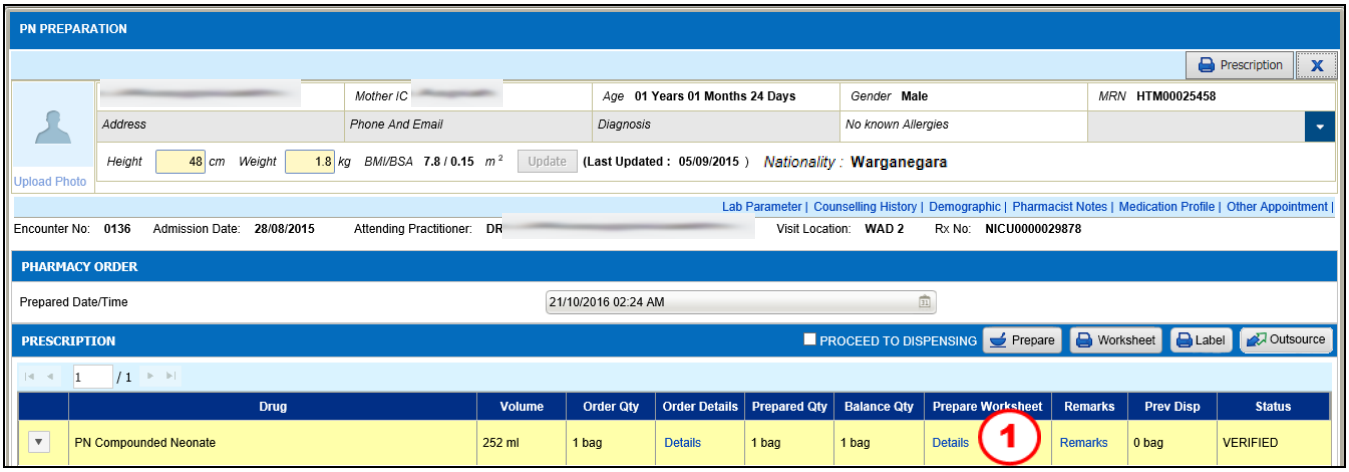


Figure 3.2.3.1-1 PN Preparation

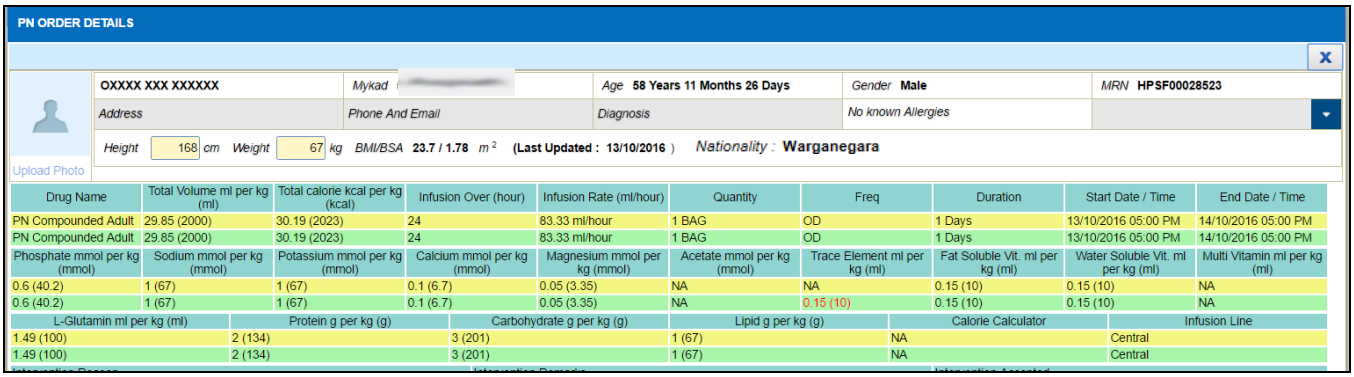
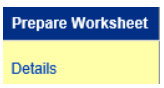


Figure 3.2.3.1-2 PN Order Details

STEP 1

Click on the 

Details hyperlink (Prepare Worksheet column) to prepare worksheet as per Figure 3.2.3.1-3

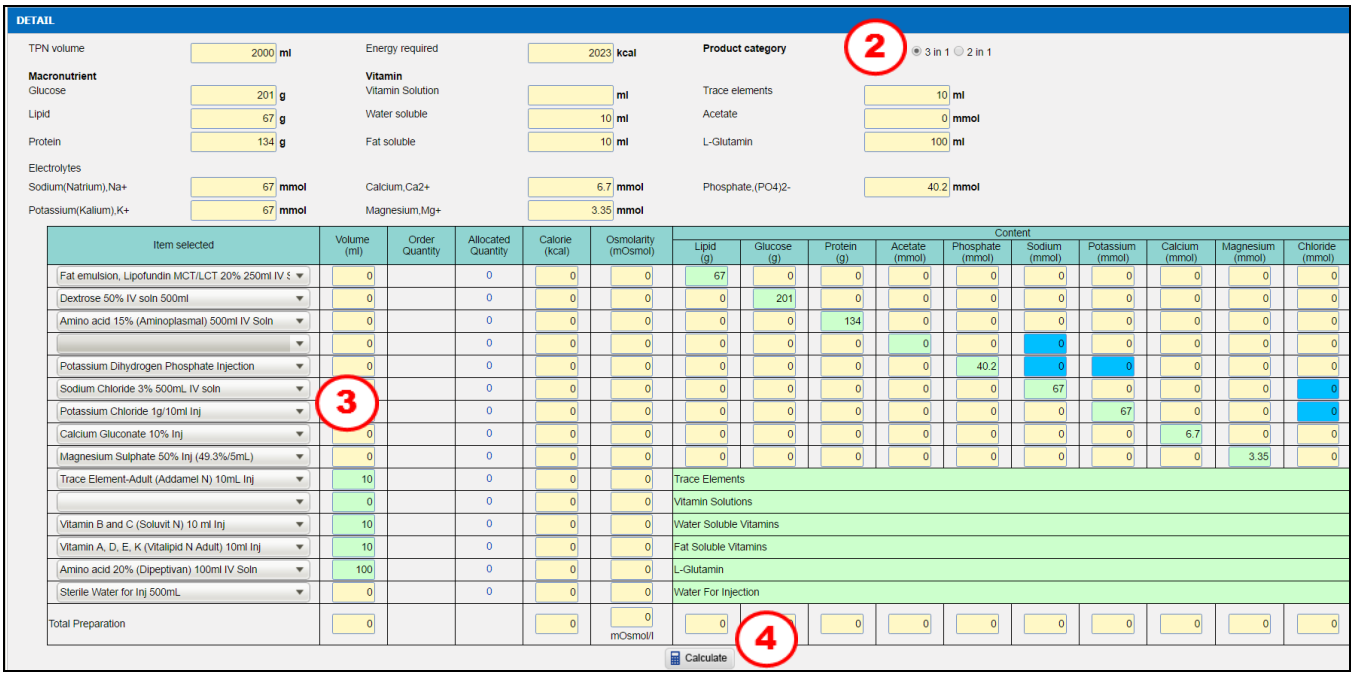


Figure 3.2.3.1-3 Prepare Worksheet

STEP 2

Select on the radio button for product category

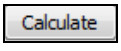
Note

- *Value at top section will be displayed based on value to be prepared by pharmacist based on formula.*
- ***Macronutrient, Vitamin** and **Electrolytes** field will be displayed automatically by system.*
- ***Item selected, Volume (ml)** and **Content** column will be displayed automatically by system.*

STEP 3

Select the item from the drop down box

STEP 4

Click on the  button to calculate PN content value

Note

***Volume (ml), Order Quantity, Calorie (kcal), Osmolrity (mOsmol), Content** and **Total Preparation** will be automatically calculated and displayed by system as per figure 3.2.3.1-4.*

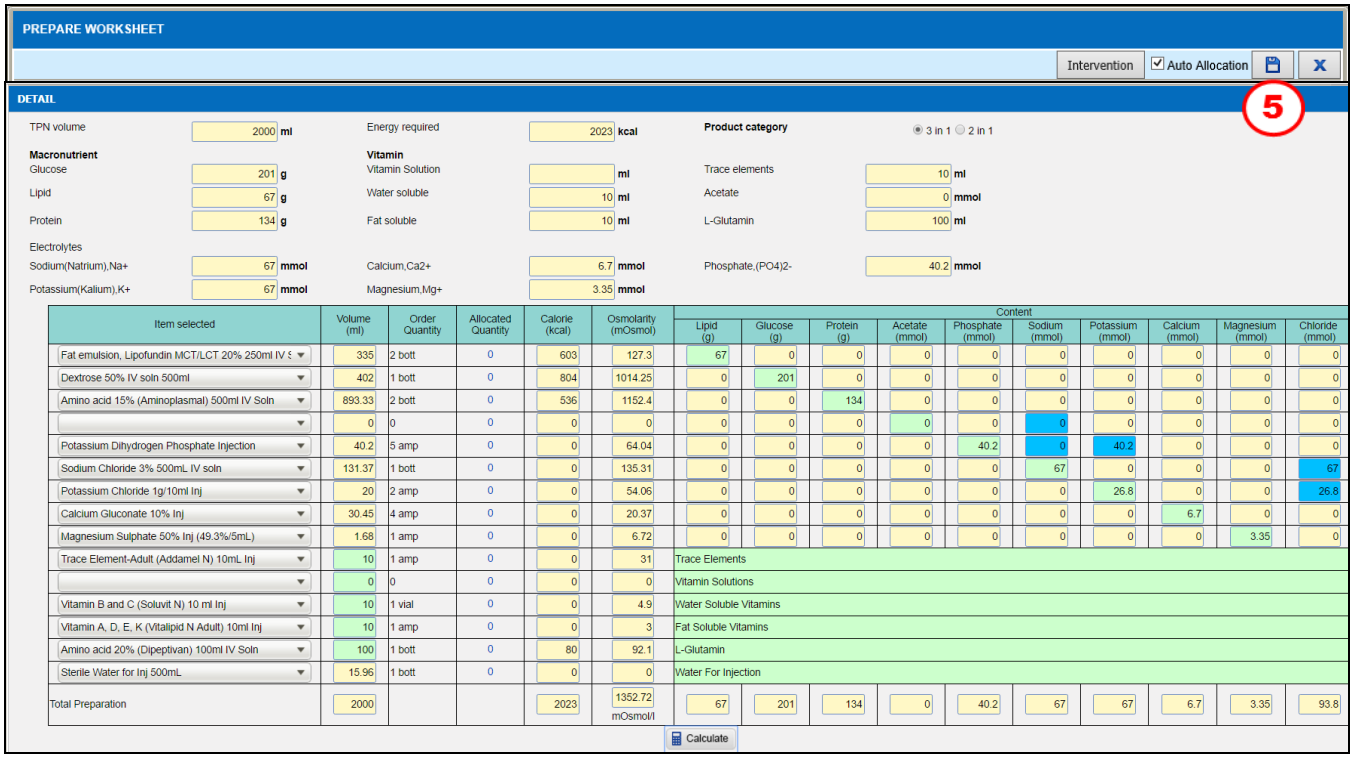


Figure 3.2.3.1-4 Prepare Worksheet

STEP 5

Click on the button to save record and alert message will be displayed as per Figure 3.2.3.1-5

Note

- Once user click on the button, system will reset the allocated qty to '0', user able to do intervention and re-calculate the worksheet and do allocation again

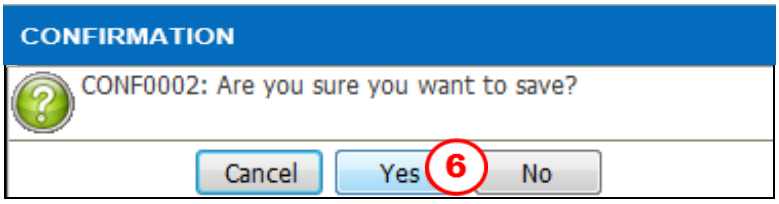
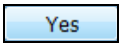


Figure 3.2.3.1-5 Confirmation Alert Message

STEP 6

Click on the  button to save record and alert message will be displayed as per Figure 3.2.3.1-6

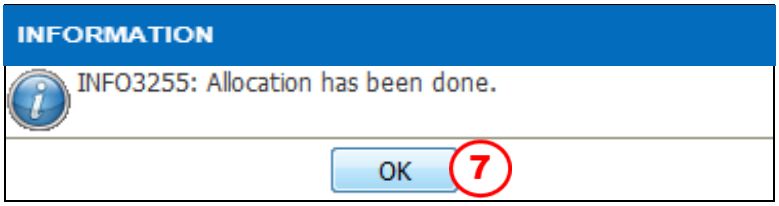


Figure 3.2.3.1-6 Information Alert Message

STEP 7

Click on the OK button to confirm and the system will allocate automatically as per Figure 3.2.3.1-7

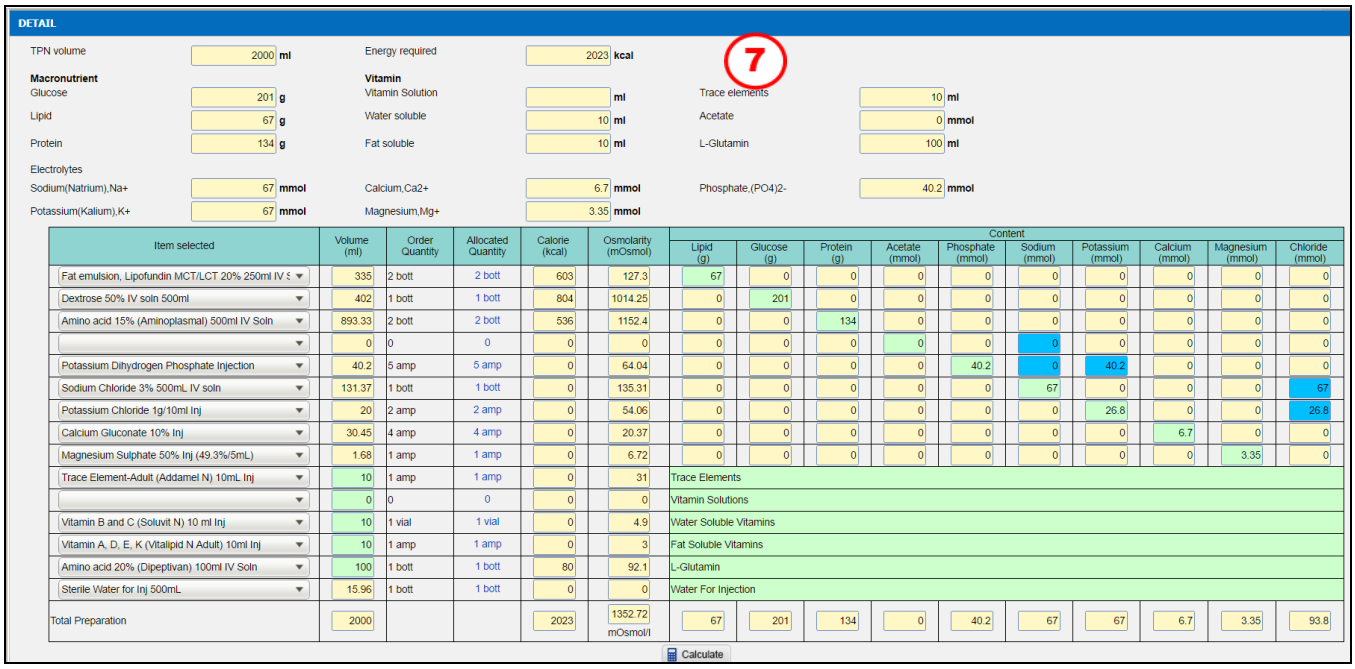


Figure 3.2.3.1-7 Information Alert Message

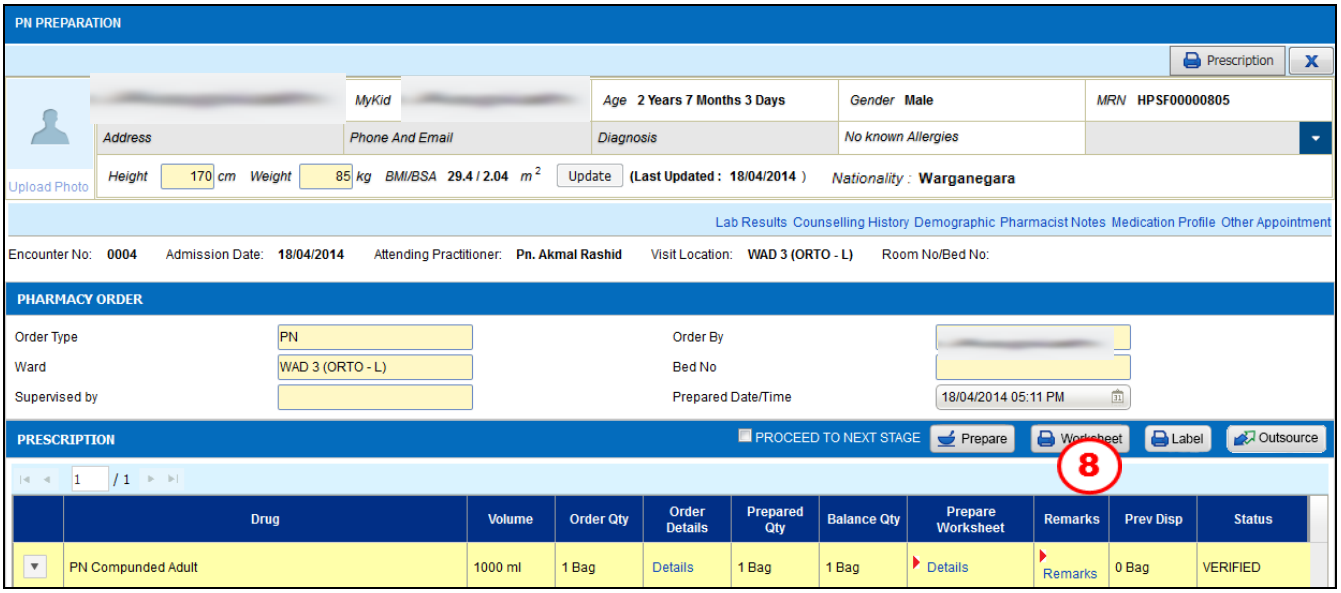


Figure 3.2.3.1-8 PN Preparation

STEP 8

Click on the Worksheet button to print worksheet as per Figure 3.2.3.1-9

Note

- *Proceed to Next Stage function will allow user advance to next stage screen for each patient record.*
- *Untick on the* Auto Allocation *checkbox to allocate manually.*

ADULT PARENTERAL NUTRITION WORKSHEET

MINISTRY OF HEALTH

Hospital Full Based

Patient Name	: OXXXX XXX XXXXXX	Worksheet	: A116-131016
MRN	: HPSF00028523	Prepared Date/Time	: 13/10/2016 03:11 PM
Ward/Bed No	: WAD 7 (MED - L)/B19	Prescription #	: 70000191335
Age	: 58 Years 11 Months 26 Days		
Gender	: Male		
Body Weight	: 67 kg		

DRUG NAME	VOLUME (ml)	QUANTITY	BATCH NO	COMPONENT DETAIL (PER DAY)
Amino acid 15% (Aminoplasmal) 500ml IV	**893.33**	2 bottle	123	134 g
Dextrose 50% IV soln 500ml	**402**	1 bottle	P1252129	201 g
Sterile Water for Inj 500mL	**15.96**	1 bottle	DMHPSF14	NA
Fat emulsion, Lipofundin MCT/LCT 20%	**335**	2 bottle	VV3456	67 g
Sodium Chloride 3% 500mL IV soln	**131.37**	1 bottle	P1124468	67 mmol
Potassium Dihydrogen Phosphate Injection	**40.2**	5 ampoule	sdfg	40.2 mmol
Magnesium Sulphate 50% Inj (49.3%/5mL)	**1.68**	1 ampoule	335074	3.35 mmol
Potassium Chloride 1g/10ml Inj	**20**	2 ampoule	14014	67 mmol
Calcium Gluconate 10% Inj	**30.45**	4 ampoule	502065	6.7 mmol
Trace Element-Adult (Addamel N) 10mL Inj	**10**	1 ampoule	124	10 ml
Vitamin A, D, E, K (Vitalipid N Adult) 10ml	**10**	1 ampoule	CF543	10 ml
Vitamin B and C (Soluvit N) 10 ml Inj	**10**	1 vial	80HF531	10 ml
Amino acid 20% (Dipeptivan) 100ml IV Soln	**100**	1 bottle	NGT543	100
TPN Volume Bag	**2000**	1 Bag		

Worksheet Generated By	: PharmacistTPN	Date	: 13/10/2016
Worksheet and Label Checked By	:	Supervised By	:
Bag Prepared By	:		
Final Product Checked By	:		

Figure 3.2.3.1-9 Sample of Worksheet

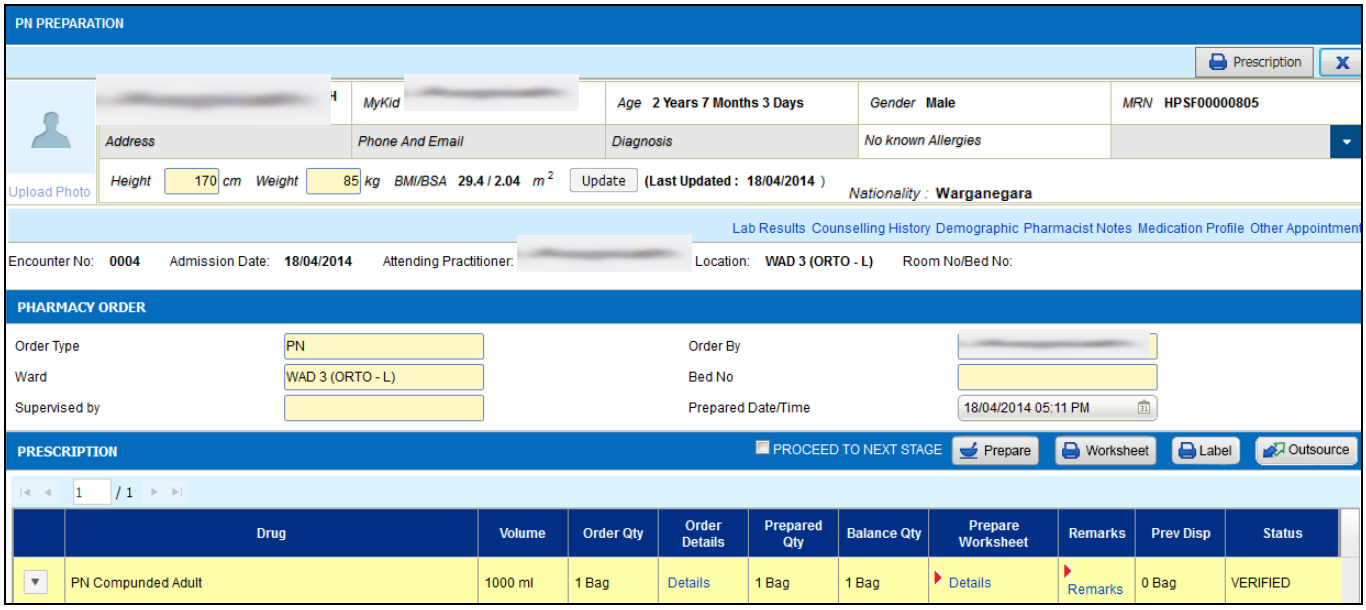


Figure 3.2.3.1-10 PN Preparation

Note

Edit Label

- *Click on the* Label *button to edit label and PN Edit Label window will display as per Figure 3.2.3.1-11.*
- *Select the* Select for print *radio button to print label.*
- *User allows to edit* ***Infusion Over, Date Prepared*** *and* ***Shelf Life*** *field.*
- ***Expiry Date*** *field will automatically display after filling the* ***Shelf Life*** *field.*
- ***Drug Name, Total Volume, Infusion Rate*** *and* ***Batch/Worksheet No*** *field will be displayed automatically by system.*
- *The* *button to print label as per Figure 3.2.3.1-12.*
- *The* *button to close PN Edit Label window.*

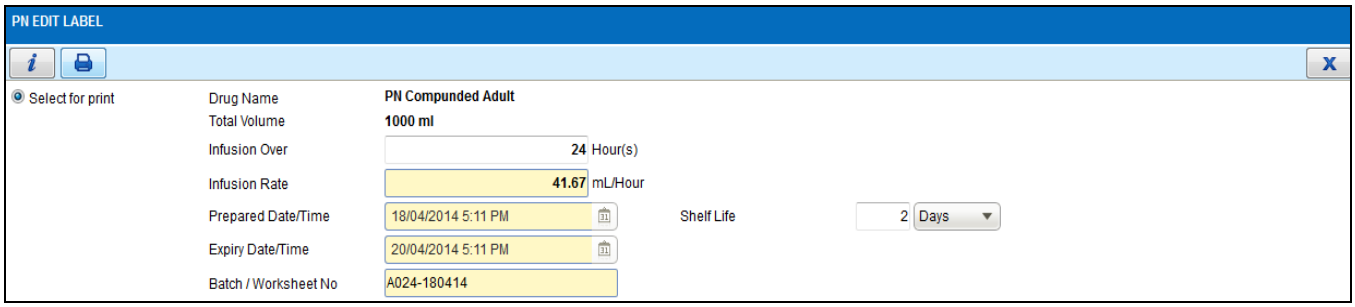


Figure 3.2.3.1-11 PN Edit Label

HOSPITAL PAKAR SULTANAH FATIMAH, MUAR

PARENTERAL NUTRITION (Adult)

NAME : [redacted]

AGE : 56 Years 10 Months 04 Days

MRN : HPSF00191617	WARD/BED NO: WAD 9 (MED - P)

Total Volume 3260 ml/bag

Content		/ kg	/ bag
Protein	(g)	2	176
Dextrose	(g)	3	264
Lipid	(g)	0	0
Sodium	(mmol	1	88
Potassium	(mmol	0	0
Calcium	(mmol	0	0
Magnesium	(mmol	0	0
Phosphate	(mmol	0	0
Chloride	(mmol	1	87.99
Acetate	(mmol	0	0
Trace	(mL)	0	0
Vitamins	(mL)	0	0
Calories	(kcal)	20	1760
Osmolarity	(mOs	10.53	926.91
L-Glutamin	(ml)	0	0

Date and Time of Administration :

Infusion Rate 135.83 ml/Hrs

Worksheet ID A011-280917	Expiry Date 29/09/2017 9:35 AM	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 24 Hours)
Ensure PN Solution is at room temperature before infusion

TO BE INFUSED : CENTRAL LINE

Figure 3.2.3.1-12 Sample of PN Label

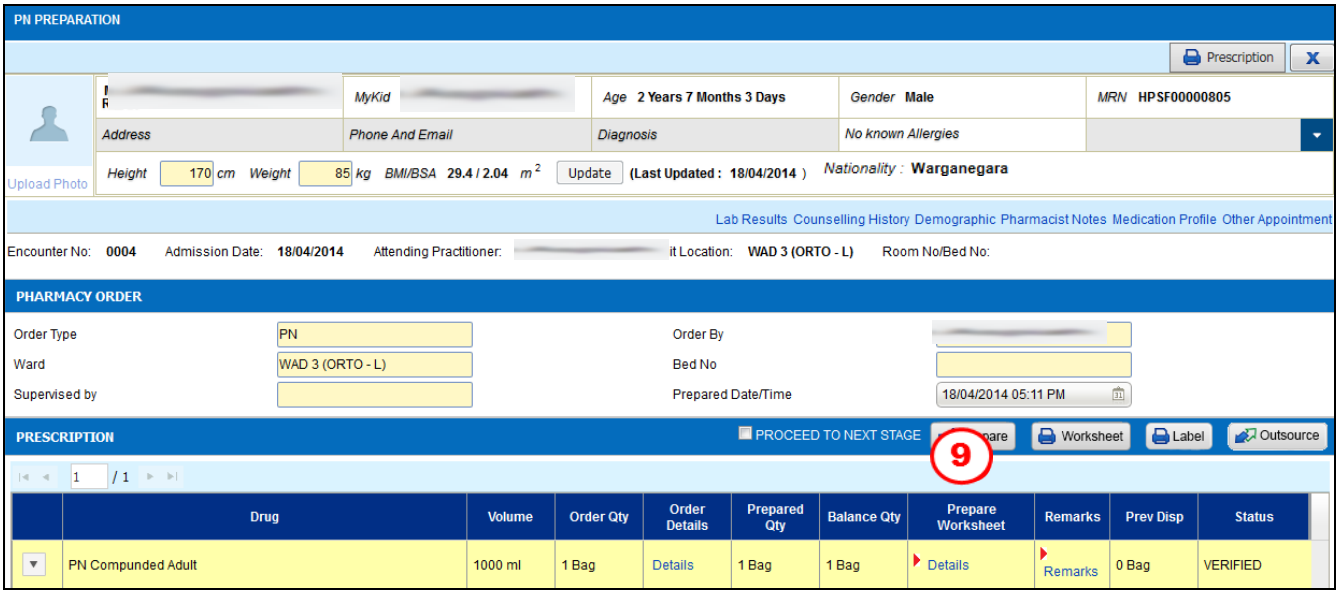


Figure 3.2.3.1-13 Sample of PN Label

STEP 9

Click on the Prepare button to prepare PN order

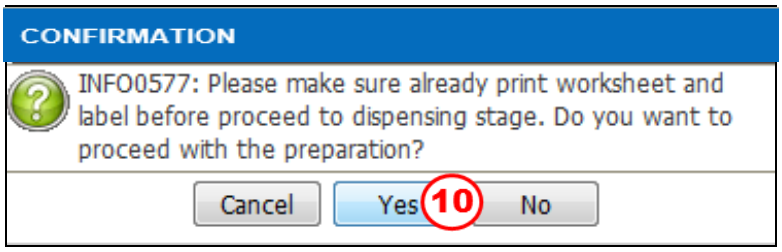


Figure 3.2.3.1-14 Preparation Confirmation Alert Message

STEP 10

Click on the Yes button to confirm prepare order

3.2.3.2 Preparation Compounded 2 in 1 Bag

Note

- *If PN order is for pediatrics, pediatric infant or neonate, product category will default to 2 in 1.*
- *To proceed with Preparation for Compounded, repeat **Step 1** to **4** from section **3.2.1 Preparation for Commercial.***

Order Details

- *Click on the* Order Details / Details *hyperlink to view order details as per Figure 3.2.3.2-2.*

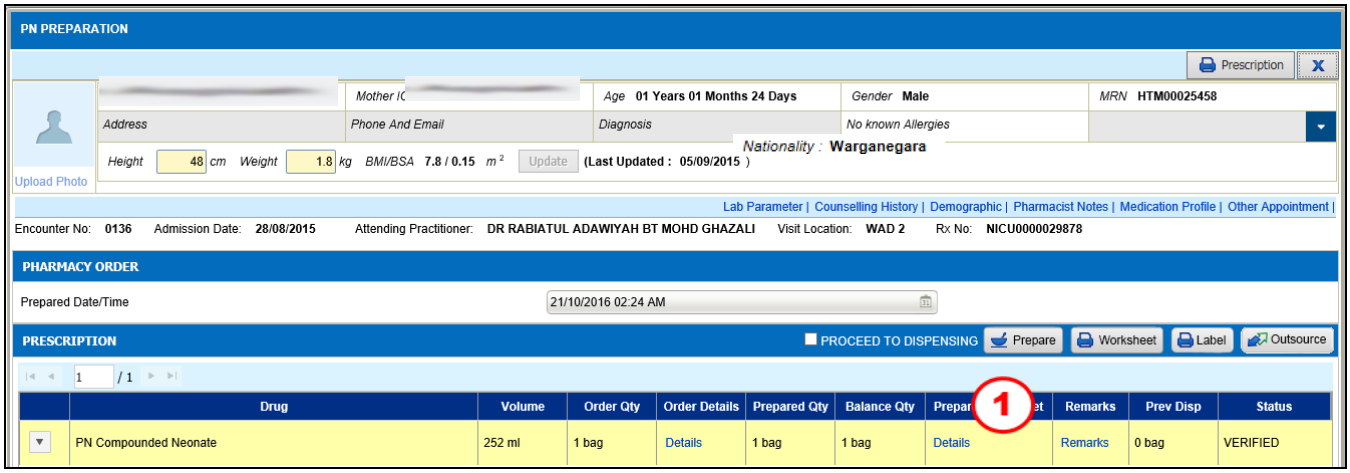


Figure 3.2.3.2-1 PN Preparation

STEP 1

Click on the Prepare Worksheet / Details hyperlink to prepare worksheet as per Figure 3.2.3.2-3

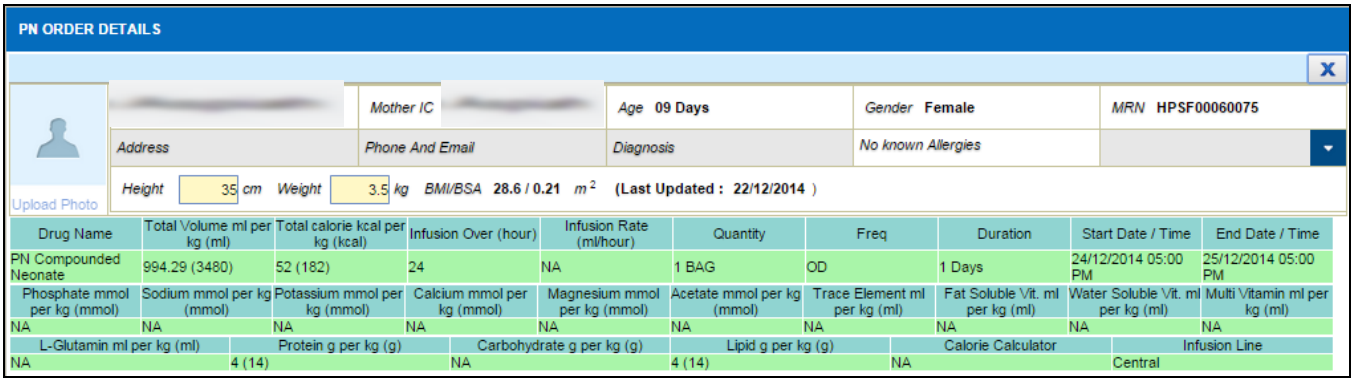


Figure 3.2.3.2-2 PN Order Details

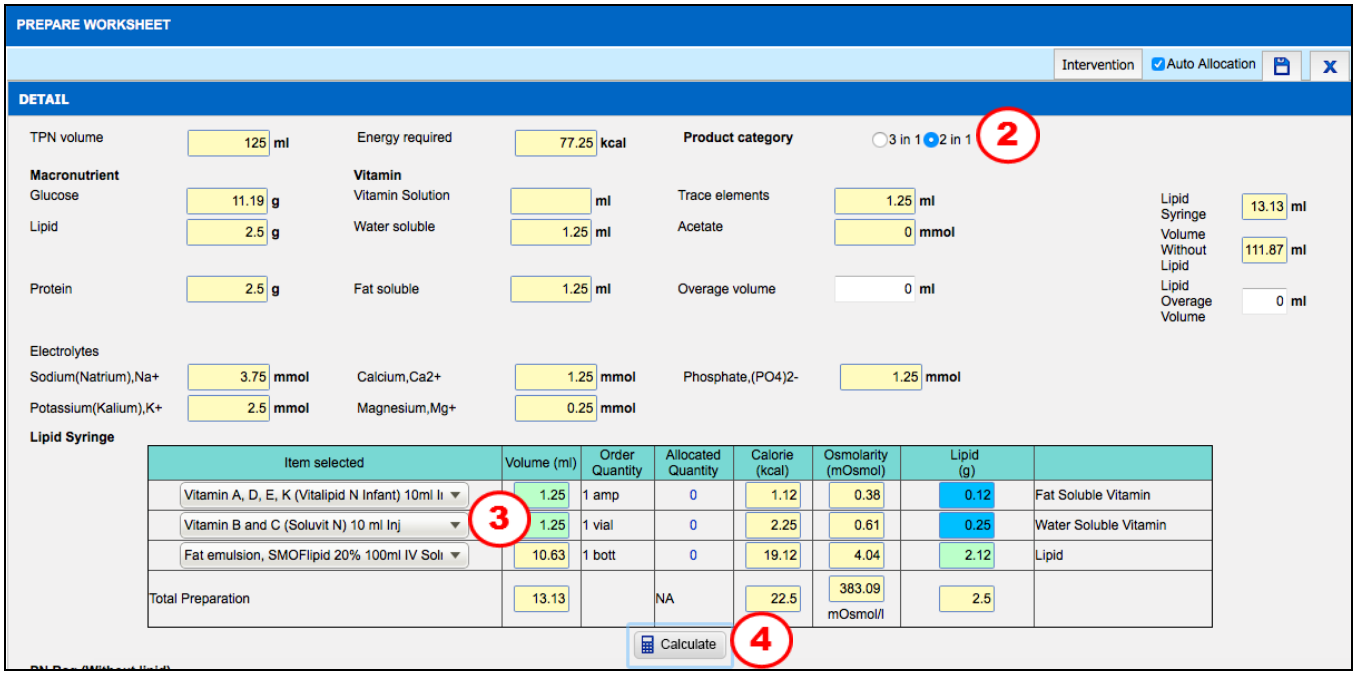


Figure 3.2.3.2-3 Prepare Worksheet

STEP 2

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

Note

- *Value at top section will be display based on value to be prepared by pharmacist based on formula.*
- ***Macronutrient, Vitamin** and **Electrolytes** field will automatically be displayed by system.*

STEP 3

Select the item from the drop down box

Note

Lipid Syringe

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

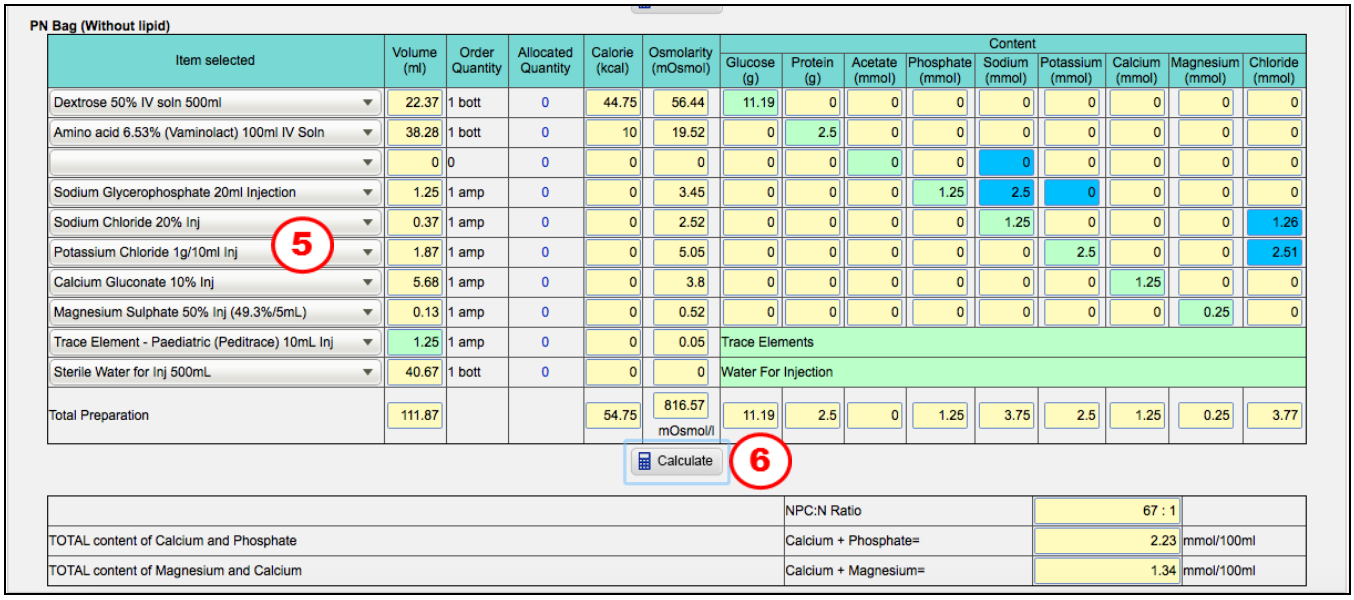
STEP 4

Click on the Calculate button to calculate PN content value

Note

PN Bag (Without Lipid)

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



Item selected	Volume (ml)	Order Quantity	Allocated Quantity	Calorie (kcal)	Osmolarity (mOsmol)	Content: Glucose (g)	Protein (g)	Acetate (mmol)	Phosphate (mmol)	Sodium (mmol)	Potassium (mmol)	Calcium (mmol)	Magnesium (mmol)	Chloride (mmol)
Dextrose 50% IV soln 500ml	22.37	1 bott	0	44.75	56.44	11.19	0	0	0	0	0	0	0	0
Amino acid 6.53% (Vaminolact) 100ml IV Soln	38.28	1 bott	0	10	19.52	0	2.5	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Glycerophosphate 20ml Injection	1.25	1 amp	0	0	3.45	0	0	0	1.25	2.5	0	0	0	0
Sodium Chloride 20% Inj	0.37	1 amp	0	0	2.52	0	0	0	0	1.25	0	0	0	1.26
Potassium Chloride 1g/10ml Inj	1.87	1 amp	0	0	5.05	0	0	0	0	0	2.5	0	0	2.51
Calcium Gluconate 10% Inj	5.68	1 amp	0	0	3.8	0	0	0	0	0	0	1.25	0	0
Magnesium Sulphate 50% Inj (49.3%/5mL)	0.13	1 amp	0	0	0.52	0	0	0	0	0	0	0	0.25	0
Trace Element - Paediatric (Peditrace) 10mL Inj	1.25	1 amp	0	0	0.05	Trace Elements								
Sterile Water for Inj 500mL	40.67	1 bott	0	0	0	Water For Injection								
Total Preparation	111.87			54.75	816.57 mOsmol/l	11.19	2.5	0	1.25	3.75	2.5	1.25	0.25	3.77

	NPC:N Ratio	67 : 1	
TOTAL content of Calcium and Phosphate	Calcium + Phosphate=	2.23	mmol/100ml
TOTAL content of Magnesium and Calcium	Calcium + Magnesium=	1.34	mmol/100ml

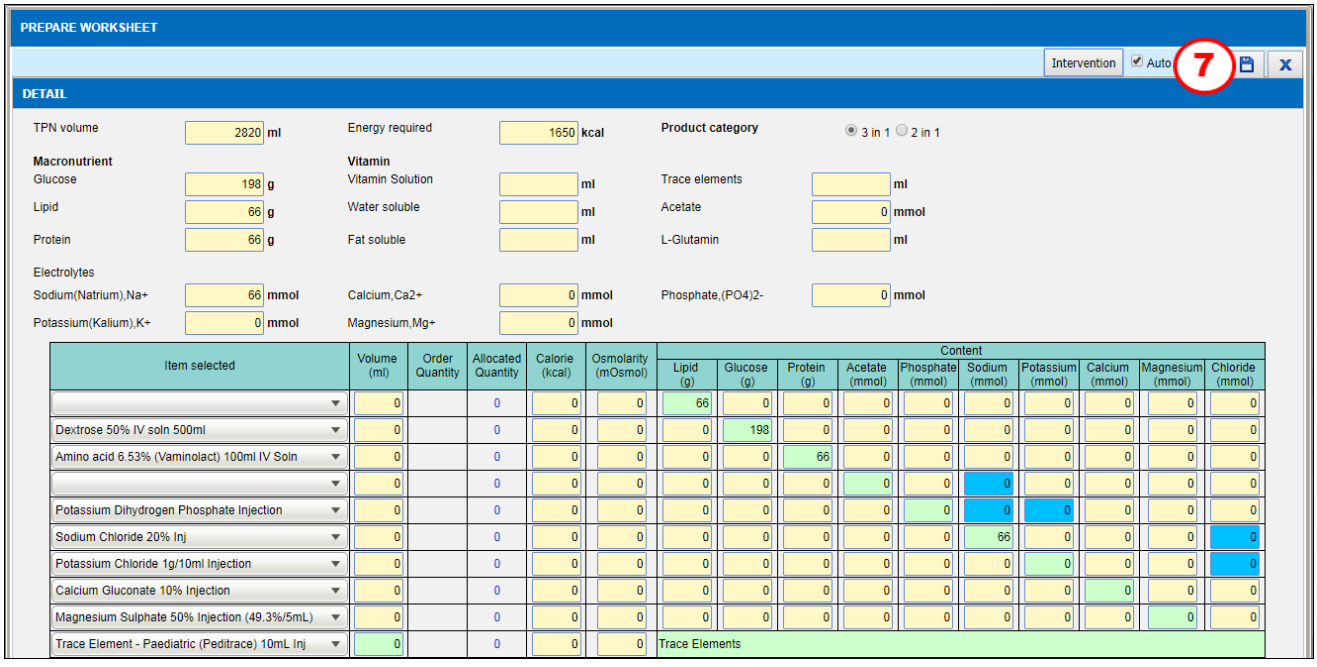
Figure 3.2.3.2-4 Prepare Worksheet

STEP 5

Select the item from the drop down box

STEP 6

Click on the Calculate button to calculate PN content value



Item selected	Volume (ml)	Order Quantity	Allocated Quantity	Calorie (kcal)	Osmolarity (mOsmol)	Content: Lipid (g)	Glucose (g)	Protein (g)	Acetate (mmol)	Phosphate (mmol)	Sodium (mmol)	Potassium (mmol)	Calcium (mmol)	Magnesium (mmol)	Chloride (mmol)
	0		0	0	0	66	0	0	0	0	0	0	0	0	0
Dextrose 50% IV soln 500ml	0		0	0	0	0	198	0	0	0	0	0	0	0	0
Amino acid 6.53% (Vaminolact) 100ml IV Soln	0		0	0	0	0	0	66	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	0		0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Chloride 20% Inj	0		0	0	0	0	0	0	0	0	66	0	0	0	0
Potassium Chloride 1g/10ml Injection	0		0	0	0	0	0	0	0	0	0	0	0	0	0
Calcium Gluconate 10% Injection	0		0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium Sulphate 50% Injection (49.3%/5mL)	0		0	0	0	0	0	0	0	0	0	0	0	0	0
Trace Element - Paediatric (Peditrace) 10mL Inj	0		0	0	0	Trace Elements									

Figure 3.2.3.2-5 Prepare Worksheet

STEP 7

Click on button to save record

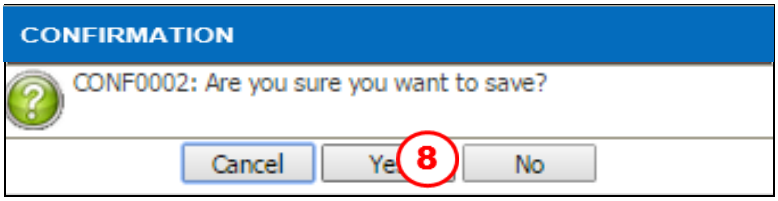
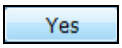


Figure 3.2.3.2-6 Confirmation Alert Message

STEP 8

Click on the  button to confirm save record

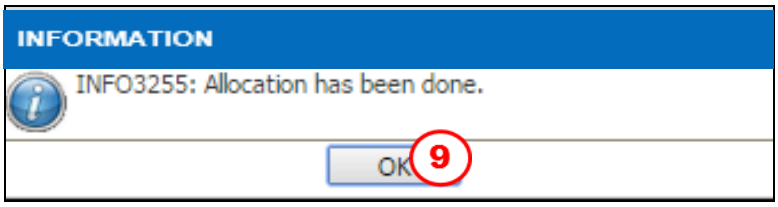
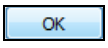
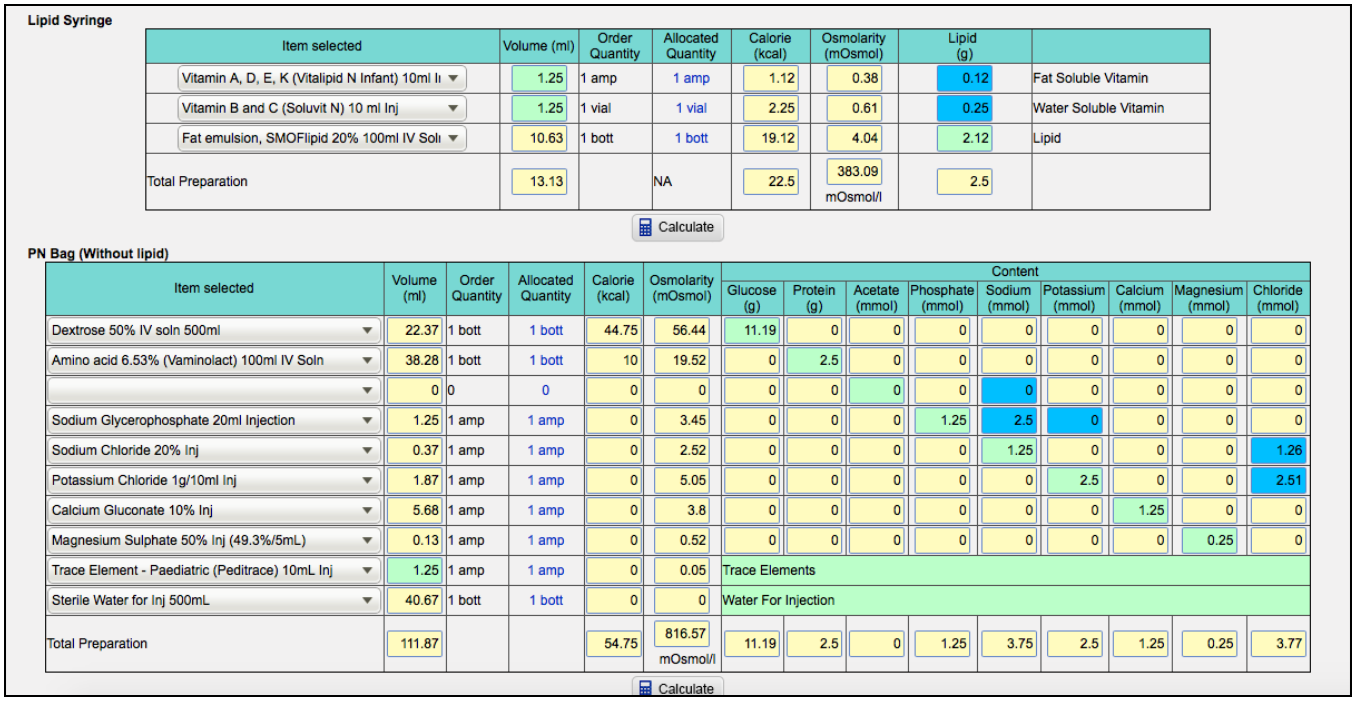


Figure 3.2.3.2-7 Information Alert Message

STEP 9

Click on the  button and the system will allocate automatically as per Figure 3.2.3.2-7



Lipid Syringe

Item selected	Volume (ml)	Order Quantity	Allocated Quantity	Calorie (kcal)	Osmolarity (mOsmol)	Lipid (g)	
Vitamin A, D, E, K (Vitalipid N Infant) 10ml I	1.25	1 amp	1 amp	1.12	0.38	0.12	Fat Soluble Vitamin
Vitamin B and C (Soluvit N) 10 ml Inj	1.25	1 vial	1 vial	2.25	0.61	0.25	Water Soluble Vitamin
Fat emulsion, SMOFlipid 20% 100ml IV Soli	10.63	1 bott	1 bott	19.12	4.04	2.12	Lipid
Total Preparation	13.13		NA	22.5	383.09 mOsmol/l	2.5	

Calculate

PN Bag (Without lipid)

Item selected	Volume (ml)	Order Quantity	Allocated Quantity	Calorie (kcal)	Osmolarity (mOsmol)	Content								
						Glucose (g)	Protein (g)	Acetate (mmol)	Phosphate (mmol)	Sodium (mmol)	Potassium (mmol)	Calcium (mmol)	Magnesium (mmol)	Chloride (mmol)
Dextrose 50% IV soln 500ml	22.37	1 bott	1 bott	44.75	56.44	11.19	0	0	0	0	0	0	0	0
Amino acid 6.53% (Vaminolact) 100ml IV Soln	38.28	1 bott	1 bott	10	19.52	0	2.5	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Glycerophosphate 20ml Injection	1.25	1 amp	1 amp	0	3.45	0	0	0	1.25	2.5	0	0	0	0
Sodium Chloride 20% Inj	0.37	1 amp	1 amp	0	2.52	0	0	0	0	1.25	0	0	0	1.26
Potassium Chloride 1g/10ml Inj	1.87	1 amp	1 amp	0	5.05	0	0	0	0	0	2.5	0	0	2.51
Calcium Gluconate 10% Inj	5.68	1 amp	1 amp	0	3.8	0	0	0	0	0	0	1.25	0	0
Magnesium Sulphate 50% Inj (49.3%/5mL)	0.13	1 amp	1 amp	0	0.52	0	0	0	0	0	0	0	0.25	0
Trace Element - Paediatric (Peditrace) 10mL Inj	1.25	1 amp	1 amp	0	0.05	Trace Elements								
Sterile Water for Inj 500mL	40.67	1 bott	1 bott	0	0	Water For Injection								
Total Preparation	111.87			54.75	816.57 mOsmol/l	11.19	2.5	0	1.25	3.75	2.5	1.25	0.25	3.77

Calculate

Figure 3.2.3.2-8 Prepare Worksheet

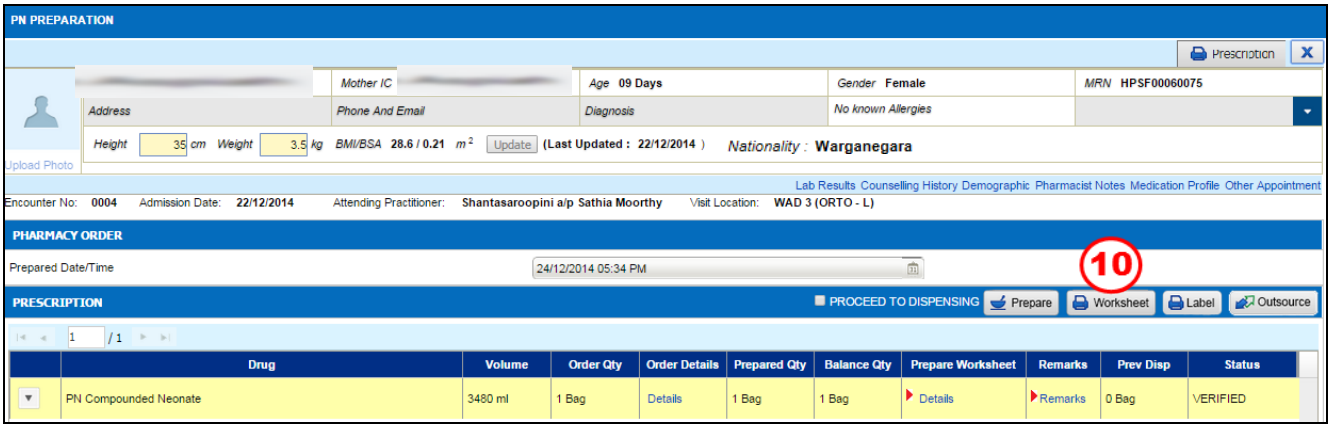


Figure 3.2.3.2-9 PN Preparation

STEP 9

Click on the Worksheet button to print the worksheet as per Figure 3.2.3.2-9

NEONATE PARENTERAL NUTRITION WORKSHEET

MINISTRY OF HEALTH

Hospital Full Based

Patient Name	: BABY 2016	Worksheet	: P334-290916
MRN	: HPSF00097491	Prepared Date/Time	: 13/10/2016 03:21 PM
Ward/Bed No	: WAD 7 (MED - L)	Prescription #	: 70000191333
Age	: 04 Months 10 Days		
Gender	: Female		
Body Weight	: 1.25 kg		

DRUG NAME	VOLUME (ml)	QUANTITY	BATCH NO	COMPONENT DETAIL (PER DAY)
Amino acid 6.53% (Vaminolact) 100ml IV Soln	**38.28**	1 bottle	BG654	2.5 g
Dextrose 50% IV soln 500ml	**22.37**	1 bottle	P1252129	11.19 g
Sterile Water for Inj 500mL	**40.67**	1 bottle	DMHPSF14	NA
Sodium Chloride 20% Inj	**0.37**	1 ampoule	hpsf1	3.75 mmol
Sodium Glycerophosphate 20ml Injection	**1.25**	1 ampoule	MBH67	1.25 mmol
Magnesium Sulphate 50% Inj (49.3%/5mL)	**0.13**	1 ampoule	335074	0.25 mmol
Potassium Chloride 1g/10ml Inj	**1.87**	1 ampoule	14014	2.5 mmol
Calcium Gluconate 10% Inj	**5.68**	1 ampoule	502065	1.25 mmol
Trace Element - Paediatric (Peditrace) 10mL Inj	**1.25**	1 ampoule	12G1L01	1.25 ml
Total Volume	**111.87**	1 Bag		

DRUG NAME	VOLUME (ml)	QUANTITY	BATCH NO	COMPONENT DETAIL (PER DAY)
Fat emulsion, SMOFlipid 20% 100ml IV Soln	**10.63**	1 bottle	SE444	2.13 g
Vitamin A, D, E, K (Vitalipid N Infant) 10ml Inj	**1.25**	1 ampoule	AS32	1.25 ml
Vitamin B and C (Soluvit N) 10 ml Inj	**1.25**	1 vial	80HD522	1.25 ml
Total Volume	**13.13**	1 Syringe		

Worksheet Generated By	: PharmacistTPN	Date	: 13/10/2016
Worksheet and Label Checked By	:	Supervised By	:
Bag Prepared By	:		
Final Product Checked By	:		

Figure 3.2.3.2-10 Sample of Worksheet

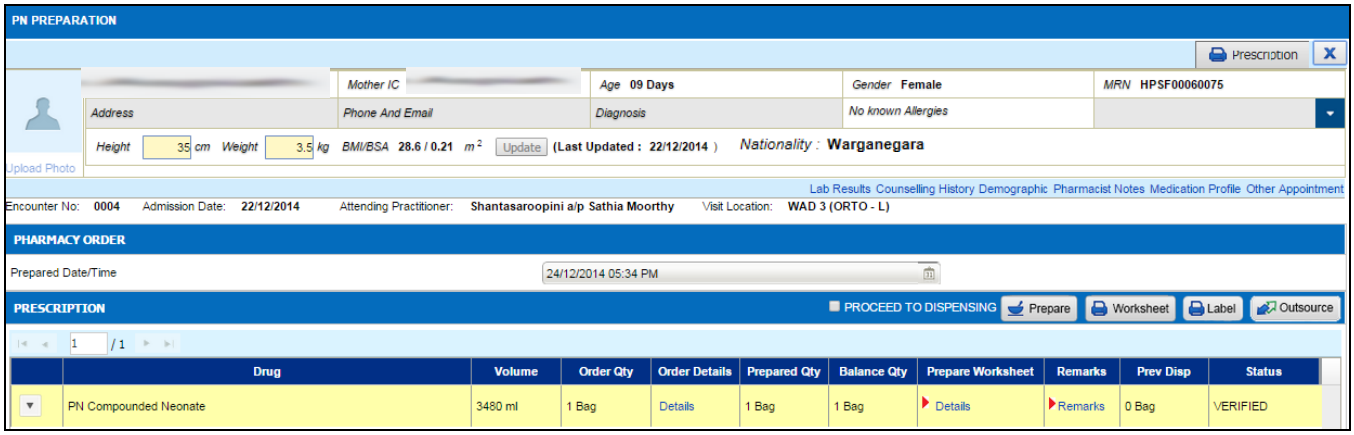


Figure 3.2.3.2-11 PN Preparation

Note

Edit Label

Click on the

button to edit label and PN Edit Label window will display as per Figure 3.2.3.2-11.

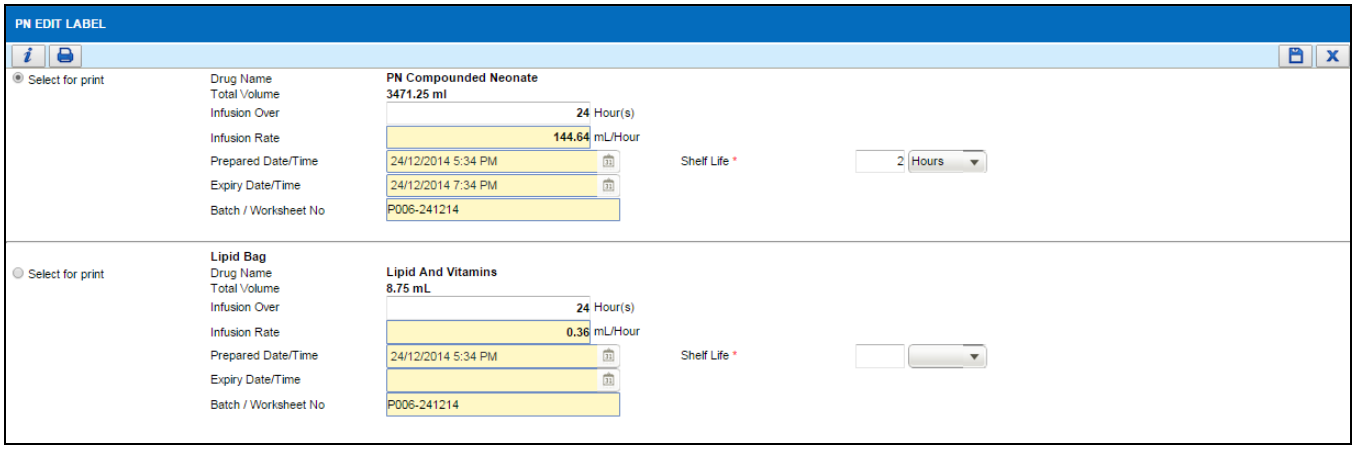
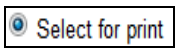


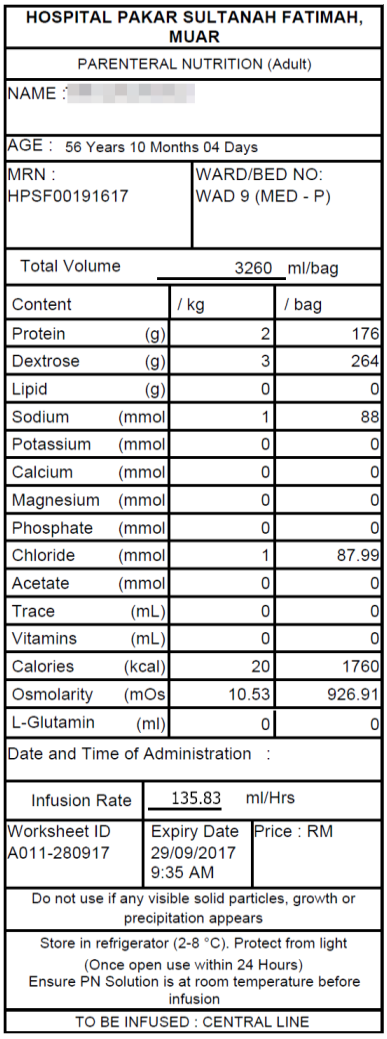
Figure 3.2.3.2-12 PN Edit Label

Note

PN Compounded Pediatric

- *Select the* 

radio button to print label.
- *User allows to edit* ***Infusion Over, Date Prepared*** *and* ***Shelf Life*** *field.*
- ***Expiry Date*** *field will automatically display after the* ***Shelf Life*** *field is filled.*
- ***Drug Name, Total Volume, Infusion Rate*** *and* ***Batch No*** *field will be displayed automatically by the system.*
- *The* *button to print label.*
- *The* *button to close PN Edit Label window.*
- *The* *button to cancel print label.*



HOSPITAL PAKAR SULTANAH FATIMAH, MUAR

PARENTERAL NUTRITION (Adult)

NAME :

AGE : 56 Years 10 Months 04 Days

MRN :	WARD/BED NO:
HPSF00191617	WAD 9 (MED - P)

Total Volume 3260 ml/bag

Content		/ kg	/ bag
Protein	(g)	2	176
Dextrose	(g)	3	264
Lipid	(g)	0	0
Sodium	(mmol	1	88
Potassium	(mmol	0	0
Calcium	(mmol	0	0
Magnesium	(mmol	0	0
Phosphate	(mmol	0	0
Chloride	(mmol	1	87.99
Acetate	(mmol	0	0
Trace	(mL)	0	0
Vitamins	(mL)	0	0
Calories	(kcal)	20	1760
Osmolarity	(mOs	10.53	926.91
L-Glutamin	(ml)	0	0

Date and Time of Administration :

Infusion Rate 135.83 ml/Hrs

Worksheet ID	Expiry Date	Price : RM
A011-280917	29/09/2017 9:35 AM	

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 24 Hours)
Ensure PN Solution is at room temperature before infusion

TO BE INFUSED : CENTRAL LINE

Figure 3.2.3.2-13 Sample PN Label

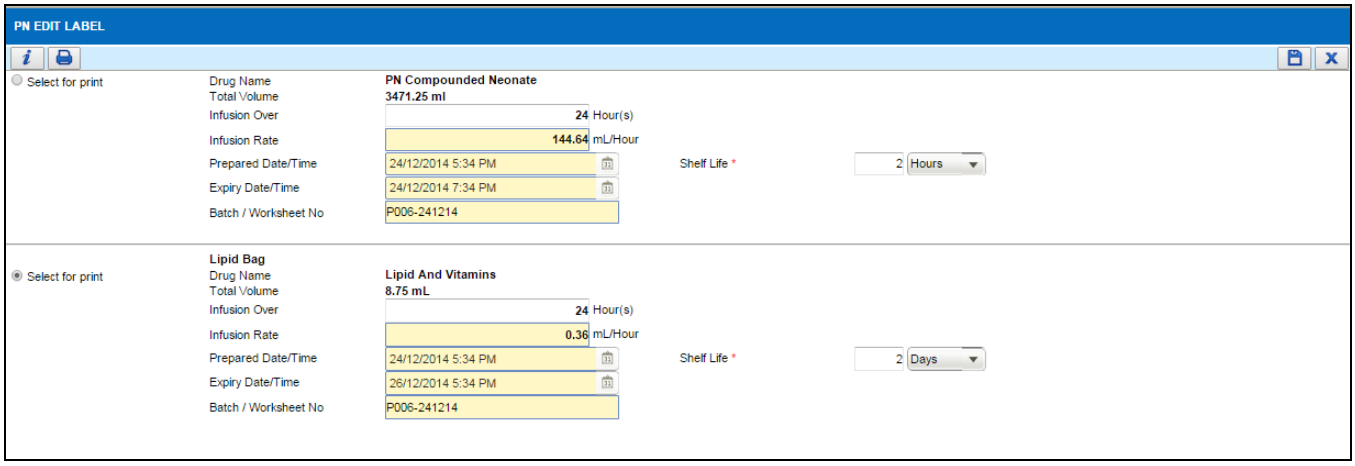
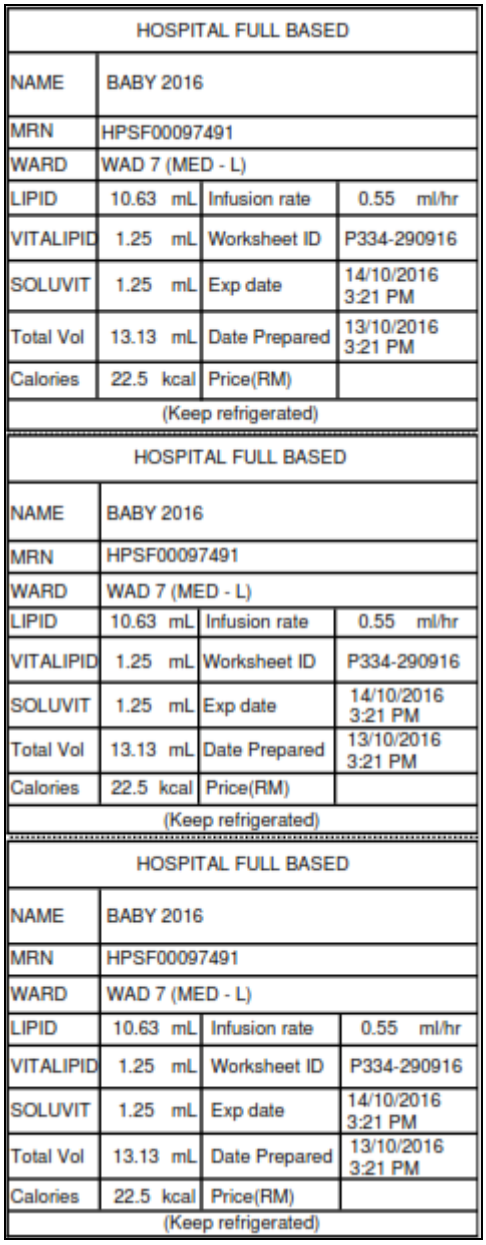


Figure 3.2.3.2-14 PN Edit Label

Note

Lipid Bag

- *Select the* Select for print *radio button to print label.*
- *User allows to edit* ***Infusion Over, Date Prepared*** *and* ***Shelf Life*** *field.*
- ***Expiry Date*** *field will automatically display after filling the* ***Shelf Life*** *field.*
- ***Drug Name, Total Volume, Infusion Rate*** *and* ***Batch No*** *field will be displayed automatically by system.*
- *The* *button to print label.*
- *The* *button to close PN Edit Label window.*
- *The* *button to cancel print label.*



HOSPITAL FULL BASED			
NAME	BABY 2016		
MRN	HPSF00097491		
WARD	WAD 7 (MED - L)		
LIPID	10.63 mL	Infusion rate	0.55 ml/hr
VITALIPID	1.25 mL	Worksheet ID	P334-290916
SOLUVIT	1.25 mL	Exp date	14/10/2016 3:21 PM
Total Vol	13.13 mL	Date Prepared	13/10/2016 3:21 PM
Calories	22.5 kcal	Price(RM)	
(Keep refrigerated)			

HOSPITAL FULL BASED			
NAME	BABY 2016		
MRN	HPSF00097491		
WARD	WAD 7 (MED - L)		
LIPID	10.63 mL	Infusion rate	0.55 ml/hr
VITALIPID	1.25 mL	Worksheet ID	P334-290916
SOLUVIT	1.25 mL	Exp date	14/10/2016 3:21 PM
Total Vol	13.13 mL	Date Prepared	13/10/2016 3:21 PM
Calories	22.5 kcal	Price(RM)	
(Keep refrigerated)			

HOSPITAL FULL BASED			
NAME	BABY 2016		
MRN	HPSF00097491		
WARD	WAD 7 (MED - L)		
LIPID	10.63 mL	Infusion rate	0.55 ml/hr
VITALIPID	1.25 mL	Worksheet ID	P334-290916
SOLUVIT	1.25 mL	Exp date	14/10/2016 3:21 PM
Total Vol	13.13 mL	Date Prepared	13/10/2016 3:21 PM
Calories	22.5 kcal	Price(RM)	
(Keep refrigerated)			

Figure 3.2.3.2-15 Sample of PN Label

Note

It will print 3 set of label in one page.

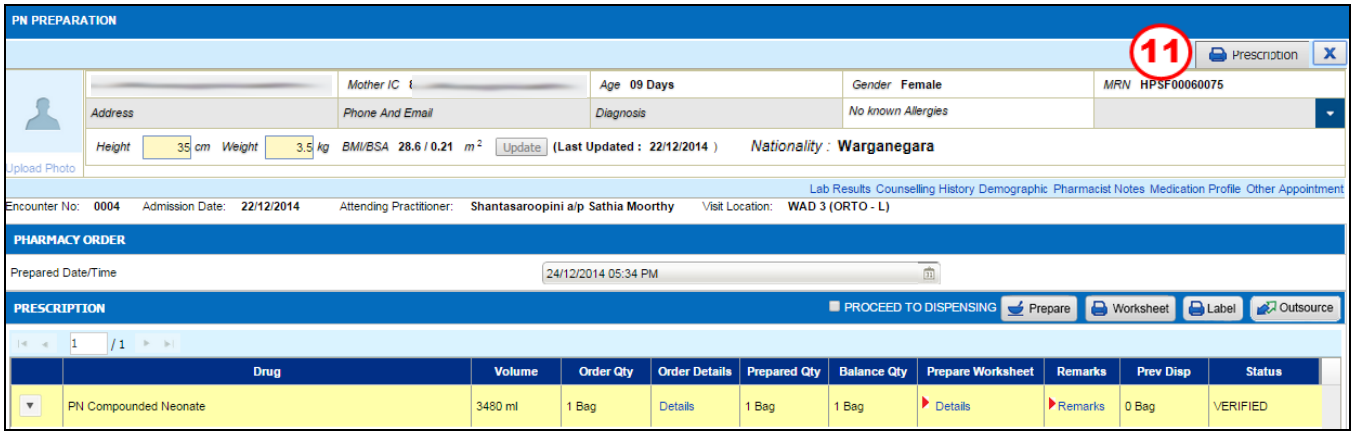


Figure 3.2.3.2-16 PN Preparation

STEP 11

Click on the Prepare button to prepare PN order

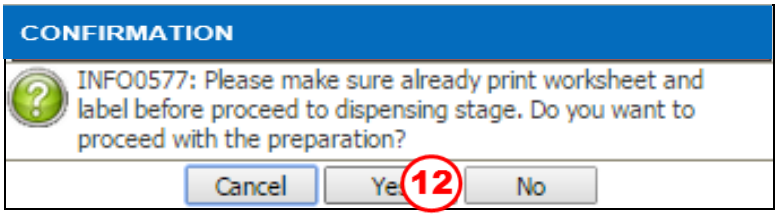


Figure 3.2.3.2-17 Preparation Confirmation Alert Message

STEP 12

Click on the Yes button to confirm prepare order

Note

Proceed to Next Stage function will allow user to go next screen for each patient record.

3.3 Parenteral Nutrition (PN) Dispensing

Dispensing screen allows user to dispense all prepared bag.

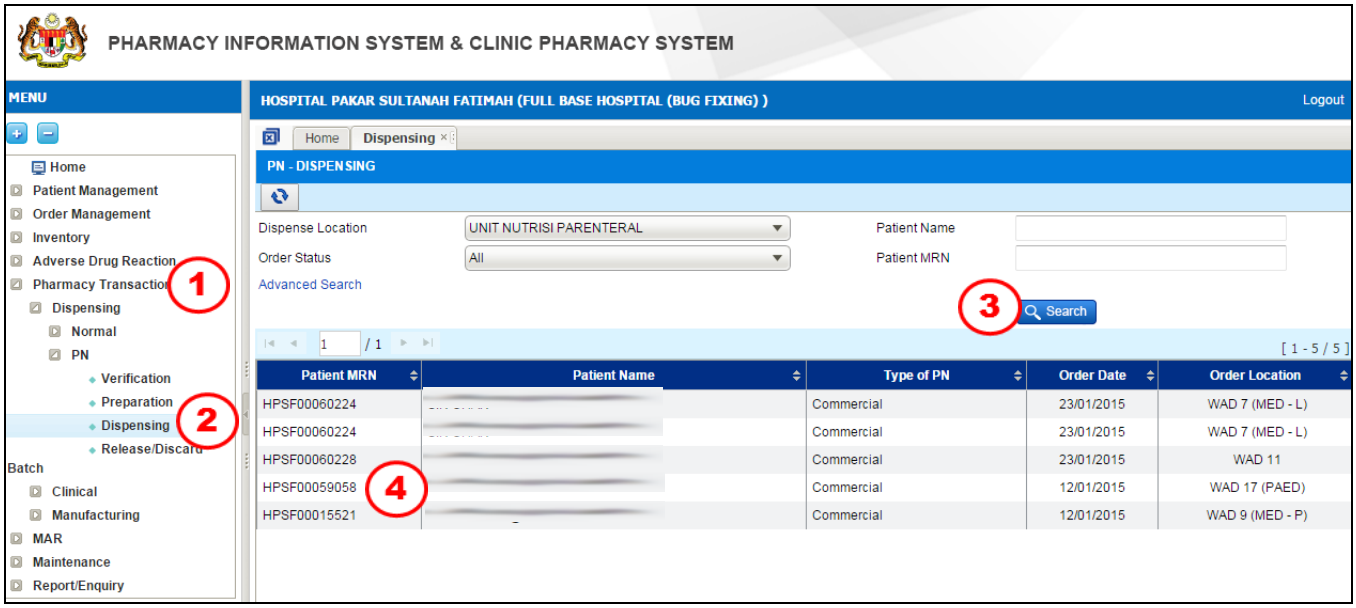


Figure 3.3-1 PN Dispensing Listing Page

STEP 1
Click on 'Pharmacy Transaction' menu follow by 'Dispensing' sub menu and select 'PN '

STEP 2
Click on 'Dispensing' menu

STEP 3
Click on Search button to search patient

Note
Search result of patient record list will be displayed:

- *Patient MRN*
- *Patient Name*
- *Type of PN*
- *Order Date*
- *Order Location*

STEP 4
Double click on record and PN Dispensing screen will be displayed as Figure 3.3-2

Note

Search patient record based: -

Basic Search			
No	**Field**	**Description**	**Remark**
a	Dispense Location	Dispensing location. (It will list down all active location)	Able to filter and search patient name by dispensing location
b	Order Status	Search by: - All - Prepared - Prepared hold	Able to filter and search patient name by order status
c	Patient Name	Patient Name	Allow to search by full name or partial
d	Patient MRN	Patient Medical Record Number	Search option: Type the MRN either full or partial: *Example: HPSF00001234 or "1234"*
Advance Search			
a	Order Location Type	Search by: All Clinic Day Care ER Nursing Unit Pharmacy	Able to filter and search patient name by order location type
b	Order Location	Current visit Location	Able to filter and search patient name by visit location
c	Order Date From	Order confirmed date	Allow to search by start date of order created
d	Order Date To	Order confirmed date	Allow to search by selected duration of order created

Table 3.3-1: Search Criteria

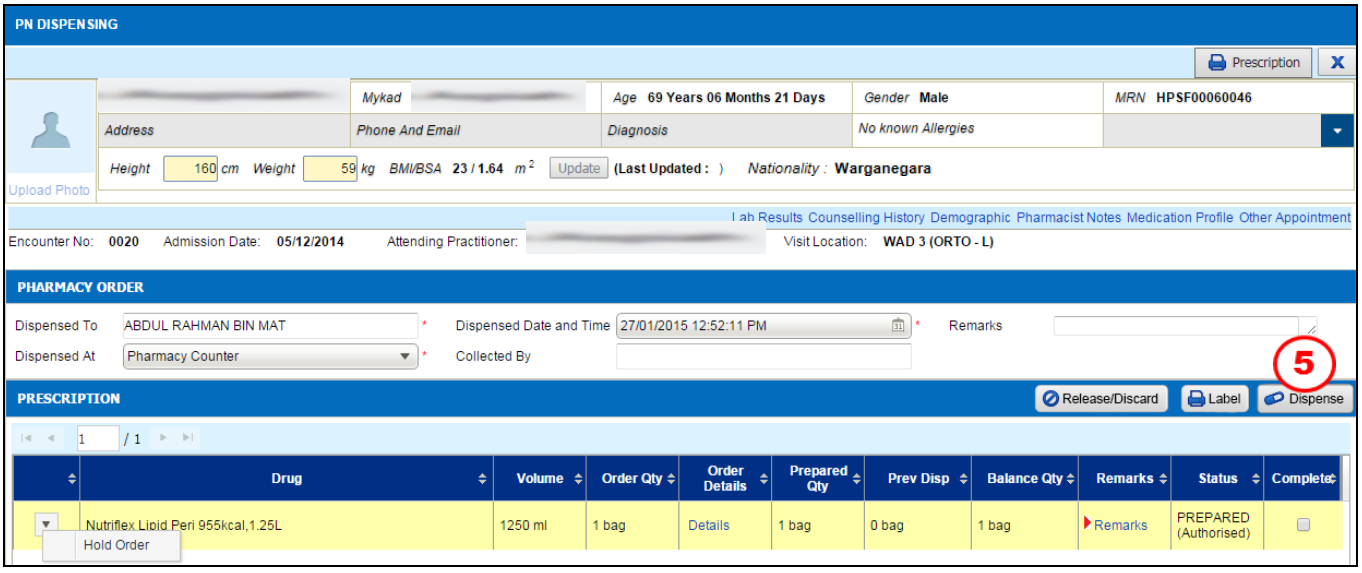


Figure 3.3-2 PN Dispensing

Note

- *Click on the* ▼ *button to select* ***Hold Order*** *as per Figure 3.3-2.*
- *User only can do* ***Hold/Resume Order*** *at Dispensing screen.*

- *Check at*

checkbox to force close order by Pharmacist.

STEP 5

Click on the

button and Collection Details will display as per Figure 3.3-3

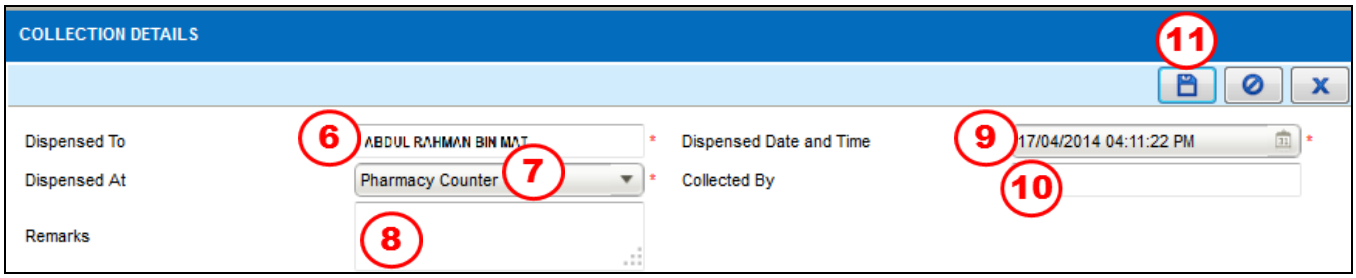


Figure 3.3-3 Collections Details

STEP 6

Enter ***Dispensed To***

Note

- ***Dispensed To***, ***Dispensed Date and Time*** *and* ***Dispensed At*** *fields are automatically defaulted by system but user can still amend the field if applicable.*
- *All this three fields are mandatory.*

STEP 7

Select ***Dispensed At***

STEP 8

Select ***Remarks***

STEP 9

Select ***Dispensed Date and Time***

STEP 10

Enter ***Collected By***

STEP 11

Click on the button and alert message will be displayed as per Figure 3.3-4

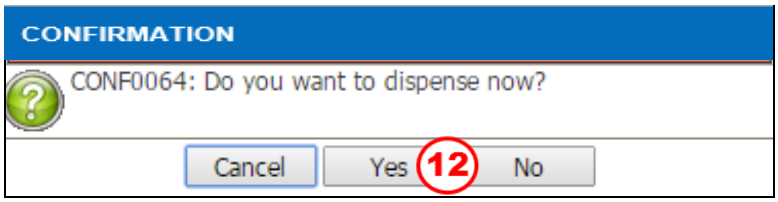


Figure 3.3-4 Confirmation Alert Message

STEP 12

Click on the Yes button to dispense order

3.4 Release/Discard Batch

Release function is to release and update back stock into inventory. Discard function is to discard stock from inventory even without dispensing.

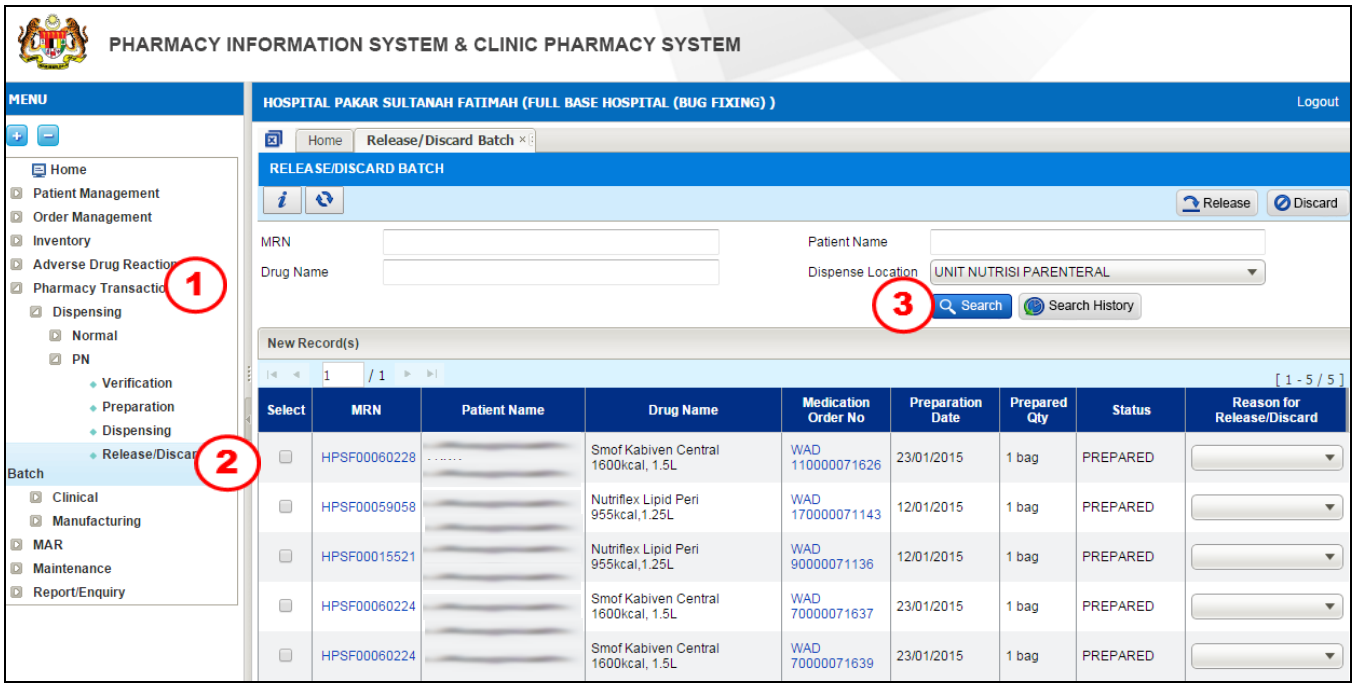


Figure 3.4-1 Release/Discard Batch Listing Page

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: *Example: HPSF00001234 or "1234"*
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

Table 3.4-1 : Patient Record Search

STEP 3
Click on the Search 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 Quantity*
- *Status*
- *Reason for Discard*

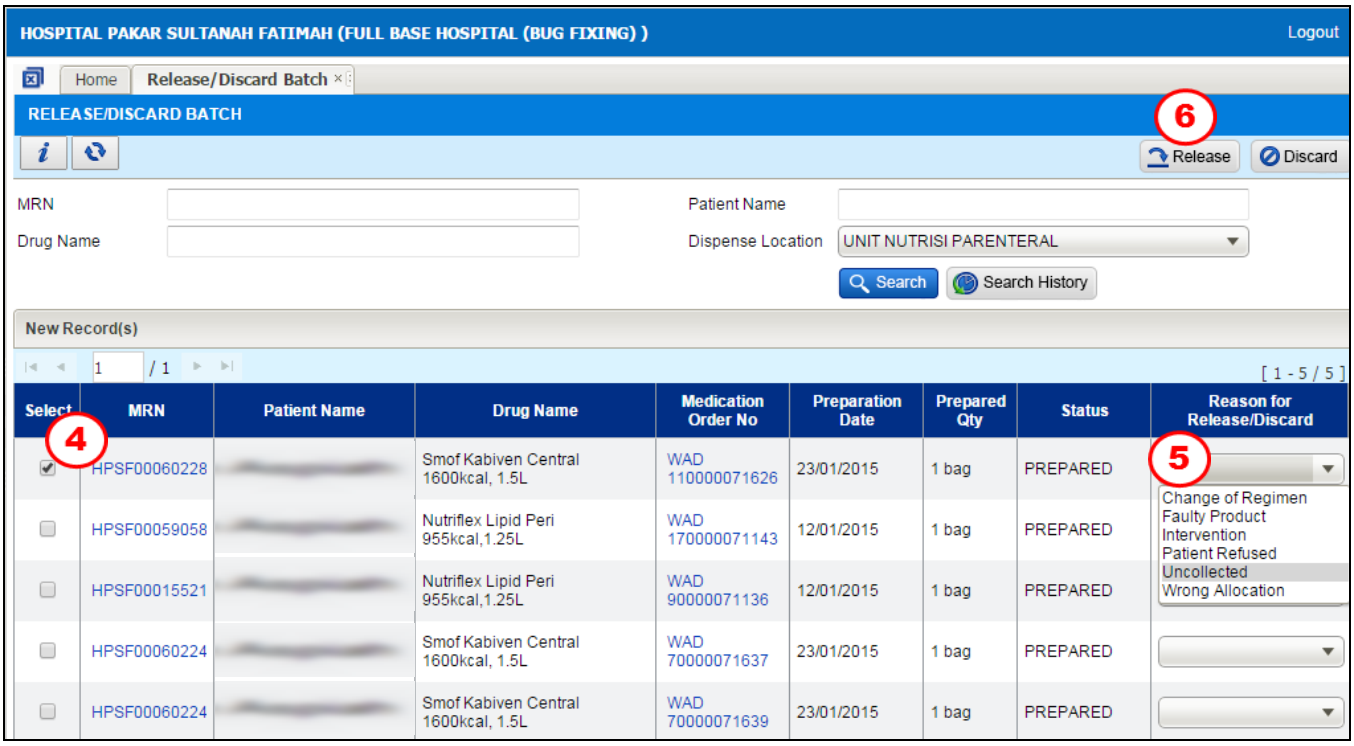


Figure 3.4-2 Release/Discard Batch

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 Release button to release batch and inventory stock will be updated

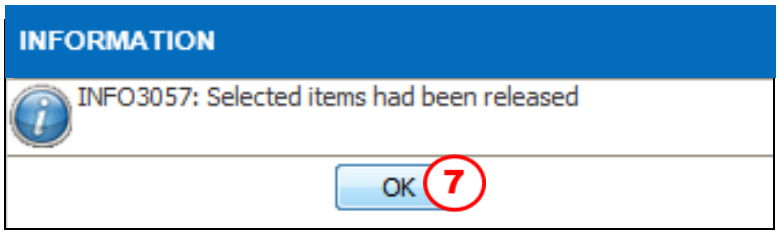


Figure 3.4-3 Information Alert Message

STEP 7

Click on the OK button to release order batch

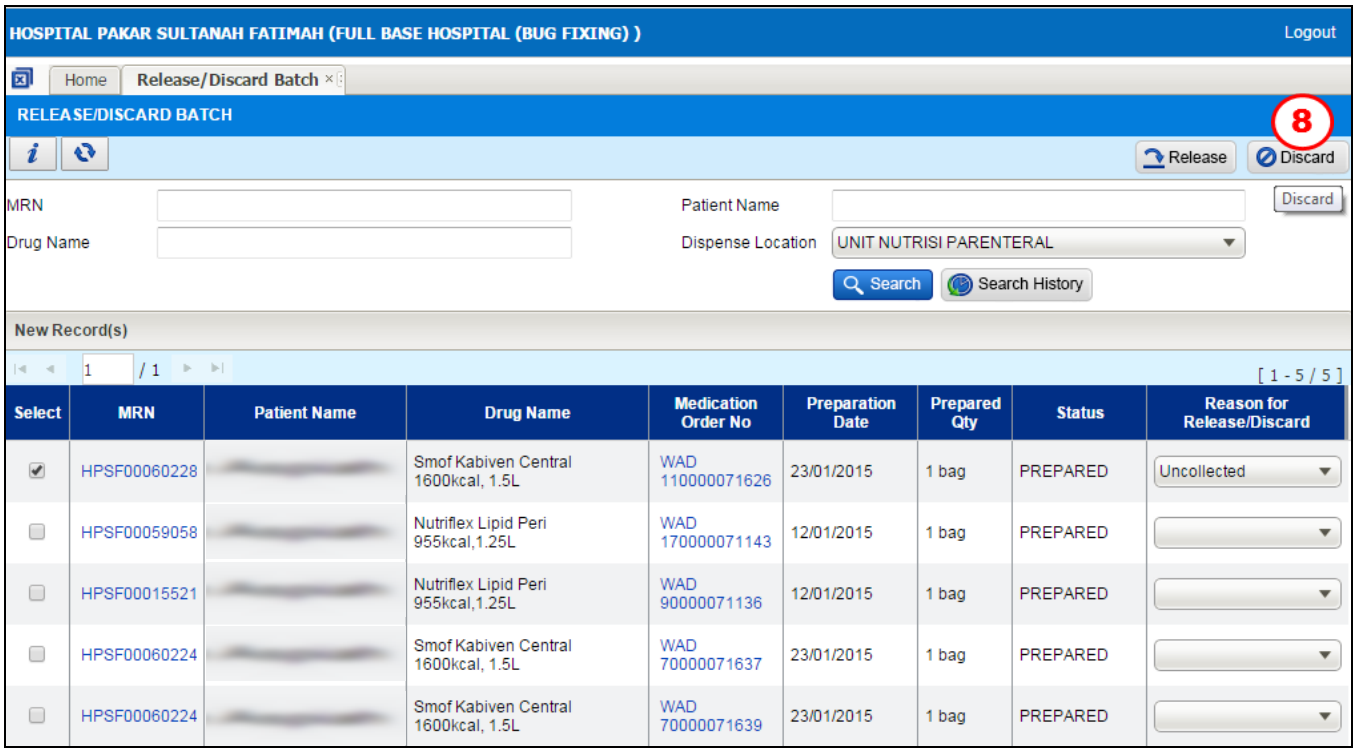


Figure 3.4-4 Release / Discard Batch

STEP 8

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

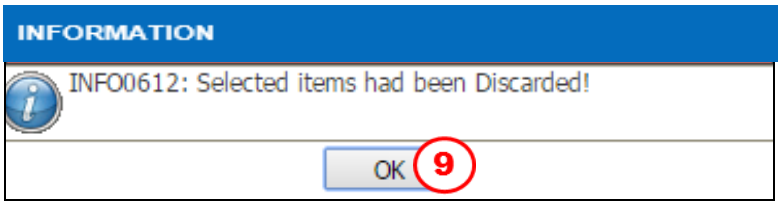


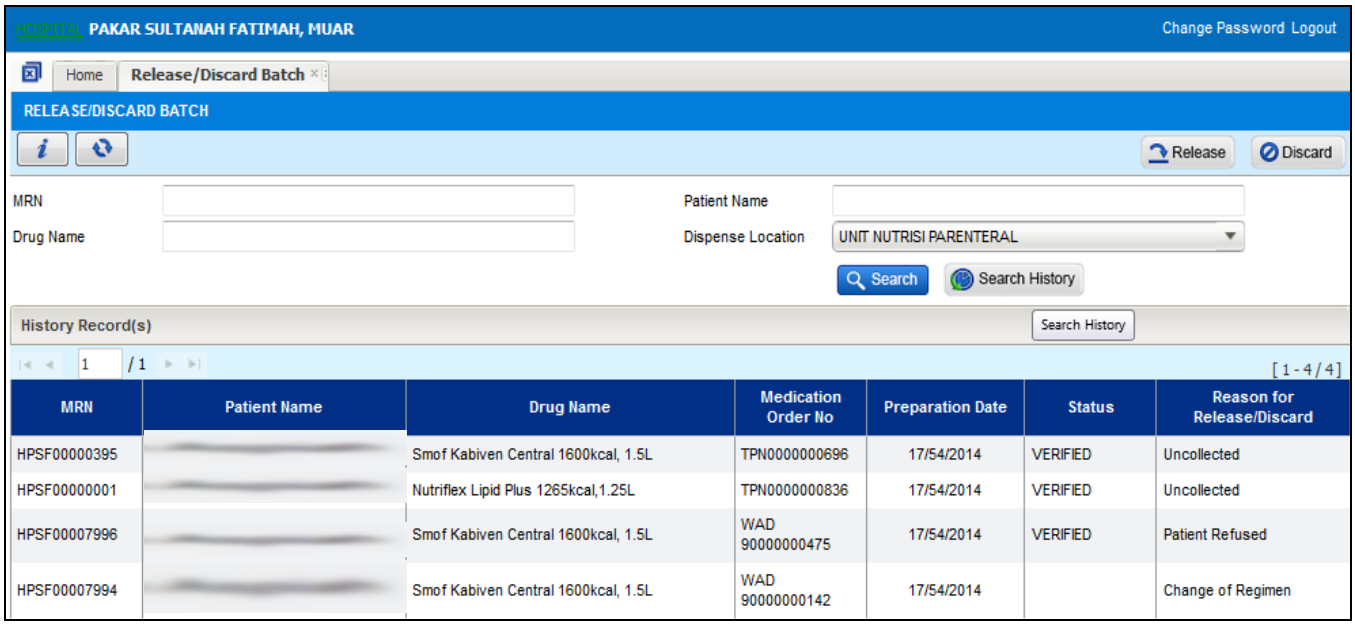
Figure 3.4-5 Information Alert Message

STEP 9

Click on the OK button to discard batch

Note

Click on the Search History button to view release/discard history as Figure 3.4-6.



MRN	Patient Name	Drug Name	Medication Order No	Preparation Date	Status	Reason for Release/Discard
HPSF00000395	[redacted]	Smof Kabiven Central 1600kcal, 1.5L	TPN0000000696	17/54/2014	VERIFIED	Uncollected
HPSF00000001	[redacted]	Nutriflex Lipid Plus 1265kcal,1.25L	TPN0000000836	17/54/2014	VERIFIED	Uncollected
HPSF00007996	[redacted]	Smof Kabiven Central 1600kcal, 1.5L	WAD 90000000475	17/54/2014	VERIFIED	Patient Refused
HPSF00007994	[redacted]	Smof Kabiven Central 1600kcal, 1.5L	WAD 90000000142	17/54/2014		Change of Regimen

Figure 3.4-6 Release/Discard Batch

3.5 Outsource

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

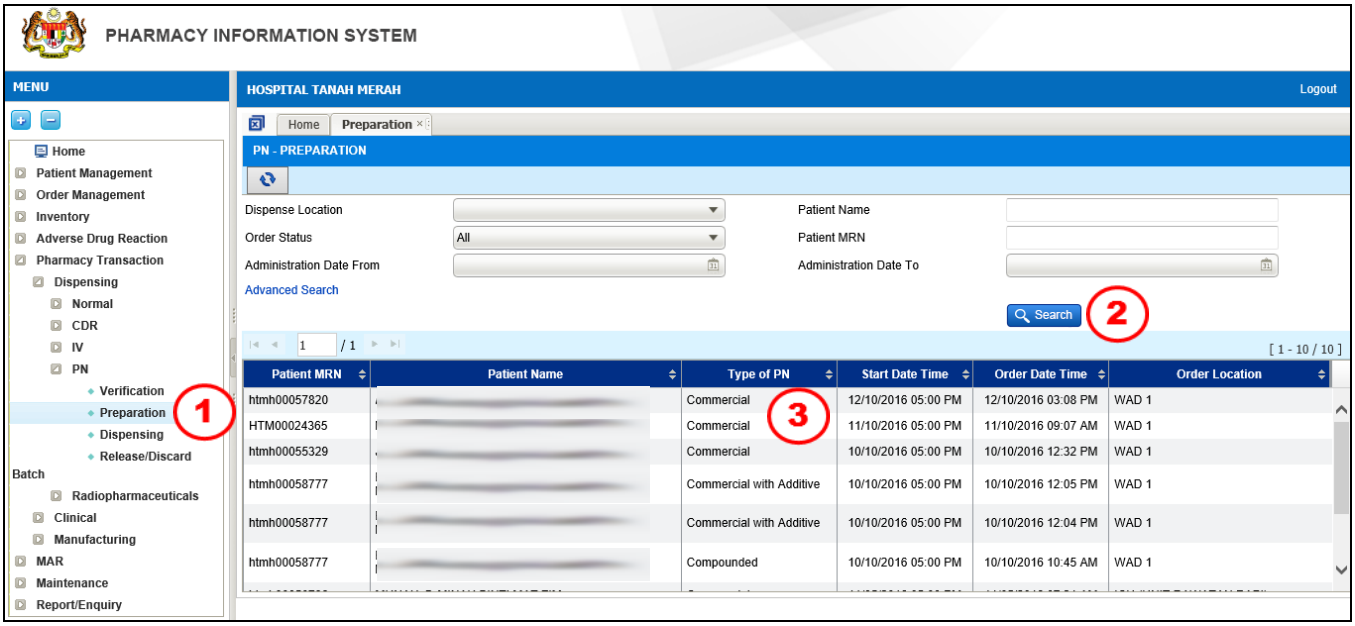


Figure 3.5-1 PN Preparation Listing Page

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:*
  a) Dispense Location
  b) Patient Name
  c) Order Status
  d) Patient MRN

- *Click on the* Advanced Search *hyperlink for advance search.*

STEP 2

Click on the Search 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 3.5-2

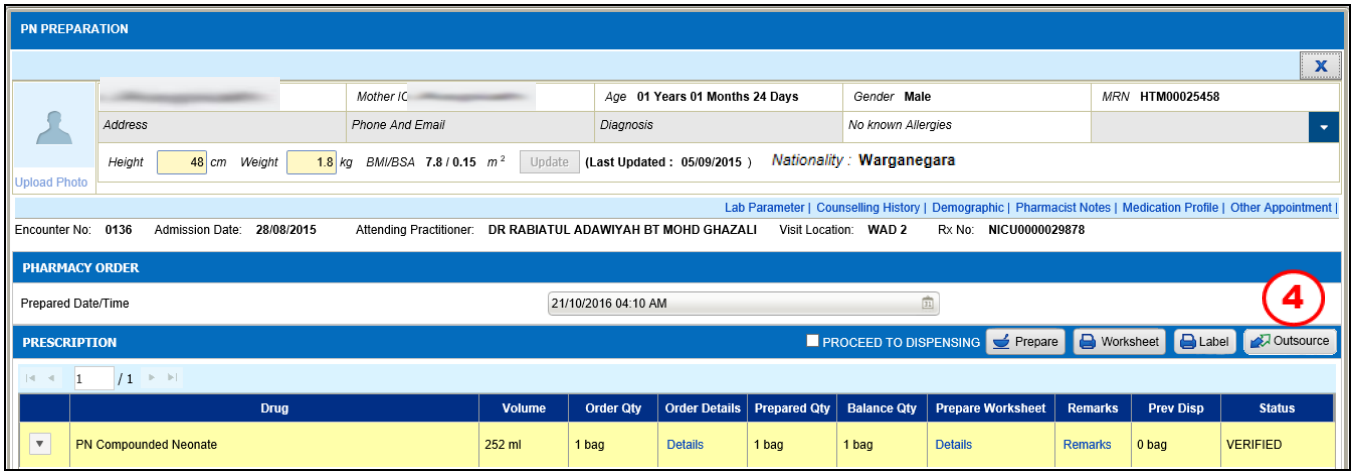
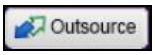


Figure 3.5-2 PN Preparation

STEP 4

Click on the  button to prepare outsource product

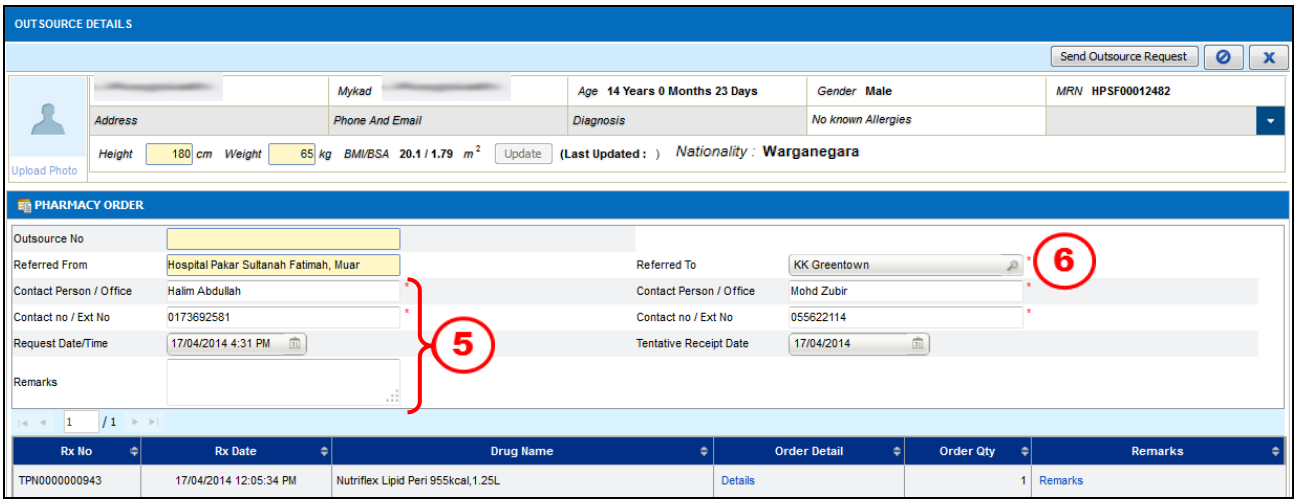


Figure3.5-3 Outsource Details

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.***

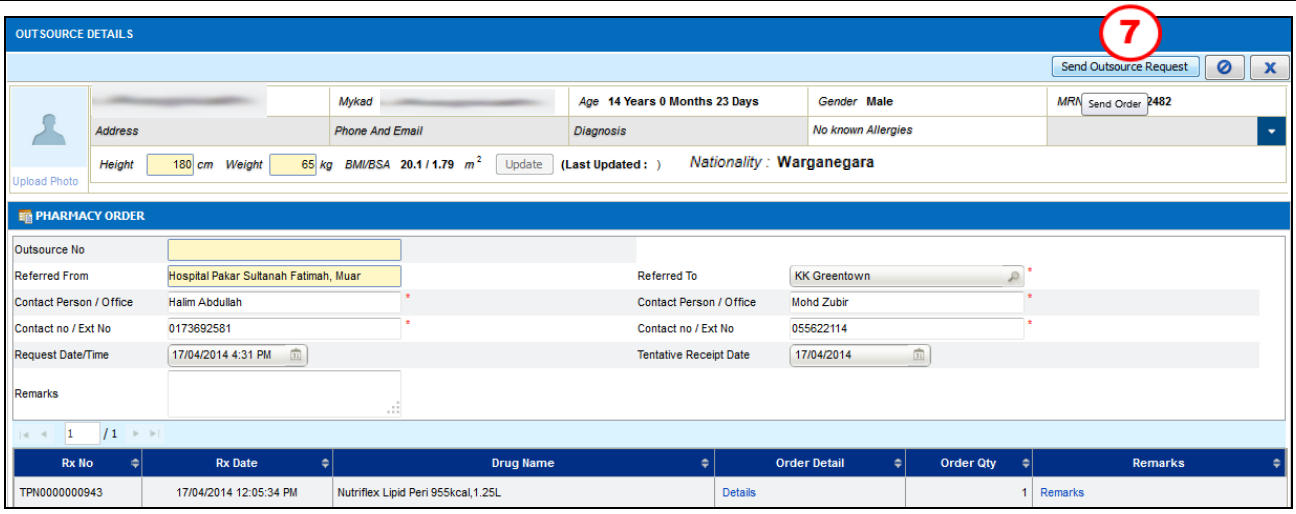


Figure 3.5-4 Outsource Details

STEP 7

Click on the Send Outsource Request button to send outsource request

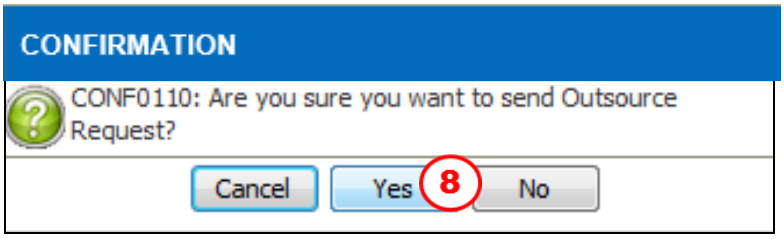


Figure 3.5-5 Send Request Alert Message

STEP 8

Click on the Yes button to send outsource request

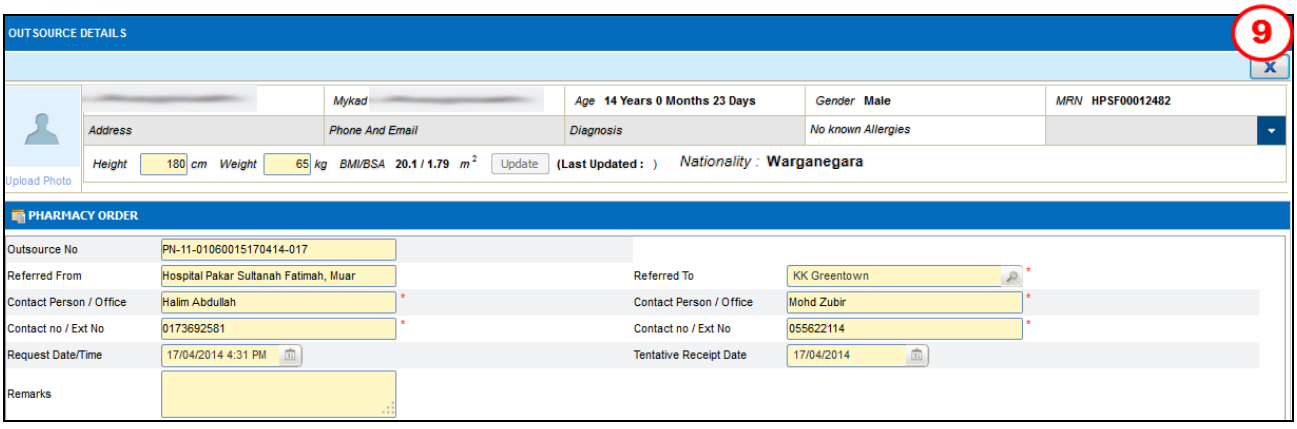


Figure 3.5-6 Outsource Details

STEP 9

Click on the X button to close outsource screen as per Figure 3.5-6

4.0 Acronyms

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

5.0 Links to Clinical Modules

No	*Module*	*PDF Links*	*No*	*Module*	*PDF Links*
1	*Inpatient*	*Click Here*	*12*	*CDR Dispensing*	*Click Here*
2	*CDR Order*	*Click Here*	*13*	*Methadone Dispensing*	*Click Here*
3	*TDM Order*	*Click Here*	*14*	*PN Dispensing*	*Click Here*
4	*PN Order*	*Click Here*	*15*	*Order Management*	*Click Here*
5	*IV Order*	*Click Here*	*16*	*Patient Management*	*Click Here*
6	*Prepacking*	*Click Here*	*17*	*Radiopharmaceuticals*	*Click Here*
7	*Galenical*	*Click Here*	*18*	*Outpatient*	*Click Here*
8	*MTAC*	*Click Here*	*19*	*Special Drug Request*	*Click Here*
9	*ADR & DAC*	*Click Here*	*20*	*MAR*	*Click Here*
10	*Medication Counselling*	*Click Here*	*21*	*DICE*	*Click Here*
11	*Ward Pharmacy*	*Click Here*	*22*		