# Lab 5: openEMR: EHR Administration Functions

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5 1		earning	Oh1	ectives.
5.1	1	Carining	00	

- To learn how to add and manage facilities
- To learn how to add and manage Users administration
- To learn how manage Lists
- To learn how to manage the Address Book
- To learn how to manage Procedure order administration
- To learn how to add and manage Pharmacy

### 5.2 Login page

Role: admin User Name: admin	<b>O</b> <u>openem</u>	
	Username:	
Password: pass	admin	
	Password:	
	****	
	Language:	
	Default - English (Standard)	~
	•€) Login	

5.3 Admin Account Configuration and Settings

After login, The IT admin user should do the following:

Setup the openEMR system with the following

- 1- Set up new facilities
- 2- Add new users
- 3- Manage practices
- 4- Manage procedure order
- 5- Add Pharmacy Dispensary Module
- 6- Log out

## Facilities

Facilities refer to place or equipment necessary for providing healthcare services and could be:

Clinic (inside Hospital or center, or independent clinic), Inpatient hospital, Outpatient hospital, Emergency room, Office, Radiology center, Medical lab, Pharmacy, and Others

# 1. Set up new Facilities

Admin has to add the following facilities

Facility	Facility Type	Other info
[University Name] medical center	Outpatient Hospital	Represent the whole institute University address, city, country, phone, color, etc.
[University Name] general clinic	Independent clinic	Part of the institute The address, city as above
[University Name] eye clinic	Independent clinic	Part of the institute The address, city as above
[University Name] Nurse Facility	Skilled nurse facility	Part of the institute The address, city as above
[University Name] pharmacy	Pharmacy	Part of the institute The address, city as above

To set up facility, do the following:

• Go to the **Administration** menu

Calendar Flow Board Messages Patient/Client Fees Modules Procedures	Administration Reports	Miscellaneous Popups	About	Administrator Administrator
E Patient: None	Globals			
<b></b>	Facilities			
Calendar C → × Message and Reminder Center C → ×	Users			
	Addr Book			
Hereit Construction     Hereit Construction       Hereit Construction     Hereit Construction       Hereit Construction     Hereit Construction	Practice			
Administrator Adn	Coder			
31 01 02 03 04 05 06 815	codes			
14 15 16 17 18 19 20 8 30	Layouts			
21 22 23 24 25 26 27 28 29 30 31 01 02 03 900	Lists			
All Facilities 915	ACL			
All Users Administrator 930	Files			
U 10:00	Backup			
Your Clinic Name Here         10:15           IZU Clinic         10:30	Rules			
22U pharmacy 10:45	Alerts			
11:00	Patient Reminders			
11:30				
11:45	Other ,			
12:15				
12:30				

# • Choose Facility

Calendar Flow Board Messages Patient/Client Fees Modules Procedures	Administration Repo	orts Miscellaneous	Popups About	Administrator Administrator
a Patient: None	Globals			
	Facilities			
Calendar C	Users			
	Addr Book			
A     C     Day     Week     Month	Practice			
Administrator Adn	Codes			
07 08 09 10 11 12 13 815 14 15 16 17 18 19 20 830	Layouts			
21 22 23 24 25 26 27 28 29 30 31 01 02 03 845	Lists			
Providers 900 All Facilities 915	ACL			
All Users Administrator, Administrator 930 945	Files			
	Backup			
Vour Clinic Name Here 10:15 BZU Clinic 10:30 BZU phamacy 10:30	Rules			
BZU Lab 10:45 BZU Nurse 11:00	Alerts			
11:15	Patient Reminders			
11:30 11:45	Other	•		
12:00				
12:30				

• Click Add button

🔿 Calendar	Flow Board	Messages	Patient/Client	Fees	Modules	Procedures	Administration	Reports	Miscellaneous	Popups	About	Administrator Administrator
💐 Patient: None												
🔺 Calendar 😂 🖬	<b>x</b> Message	and Reminder	Center 🛛 🔐 🗙	Facilitie	s Ø ₽ ×							
Facilitie.	dd											
Name	Addre	ss										
BZU pharmacy	Birzeit	,Ramallah,pale	estine									
BZU Clinic	Birzeit	;,Ramallah,pale	estine									
BZU Lab	Birzeit	,Ramallah,										
BZU Nurse	Birzeit	,Ramallah,pale	estine									
Your Clinic Name	Here											

http://localhost/openemr/interface/usergroup/facilities\_add.php

• Fill and Save the facility form as shown in the figure below

🔿 Calendar Flo	w Board Messages Patient/Client Fees	Modules Procedures	Administration Reports	Miscellaneous Po	pups About		Administrator Administrator
Patient: None							
▲ Calendar 🖉 🖝 🛪	Message and Reminder Center 🕫 🖝 🛪 🛛 Facilities	2 m ×					
Facilities Add						0	
Name	Address					^	
BZU pharmacy	Birzeit, Ramallah, palestine	<ul> <li>Add Facilit</li> </ul>	y Save Cancel				
BZU Clinic	Birzeit, Ramallah, palestine	1					
BZU Lab	Birzeit, Ramallah,	Name:		Phone:			
BZU Nurse	Birzeit,Ramallah,palestine	indine.	*	Thome.			
Your Clinic Name Hen	e	Address:		Fax:			
		City:		Zip Code:			
		State:		Tax ID:	EIN ~		
		Country:		Facility NPI:			
		Website:		Email:			
		Billing Location:		Accepts Assignment (only if billing location):			
		Service Location:		Color:	*[Pick]		
		Primary Business Entity:			[r ren]		
		POS Code:	01: Pharmacy **		~		
		Billing Attn:					
		CLIA Number:				~	
						_	

• Repeat the above steps to add the other facilities

#### 2. Add new users

• Go to the Administration menu and choose Users

🔿 Calendar Flow	w Board Messages Patient/Client	Fees Modu	les Procedures	Administration	Reports	Miscellaneous	Popups	About	Administrator Administrator
Patient: None				Globals					
<b>~</b>			-	Facilities					
<ul> <li>Calendar 𝔅 ➡ ×</li> </ul>	Message and Reminder Center 😂 📽 🗙	Facilities 🖉 🖃 :		Users					
Facilities Add				Addr Book					
Name	Address		Phone	Practice					
BZU pharmacy	Birzeit, Ramallah, palestine								
BZU Clinic	Birzeit,Ramallah,palestine			Codes					
BZU Lab	Birzeit,Ramallah,			Lavouts					
BZU Nurse	Birzeit,Ramallah,palestine								
Your Clinic Name Here			000-000-0000	Lists					
				ACL					
				Files					
				Backup					
				Rules					
				Alerts					
				Patient Reminde	NS				
				Other	•				

#### • click Add User



• Fill and Save the User form as shown in the figure below

🔿 Calendar	Flow Board Messages Patient/Clie	ent Fees M	Iodules Procedur	es Administration	Rep	orts Miscellaneous F	opups About			Administrator Administrator
Patient: None										
Calendar 🖉 📭 :	🗴 Message and Reminder Center 🤤 🖝	× User/Grou	ips 🖉 🖷 🛪 🛛 localho	ost / localhost   phpMy	Admin	4.5.4.1 Ø 🖝 🛪				
User / Groups	Add User View Facility Sp	becific User I	nformation							
Include inactiv	ve users								3	
			Add User	Save Cano	el					
Username	Real Name	Additional								
admin	Administrator Administrator									
INAD	inab tra.eng				_					
knaled	knaled knaled		Username:		*	Password:	8			
monaminau	monaminad monaminad k					Your Password:	*****			
sann	salili salili					Provider:	Calendar:			
sundy	sandy sandy		First Name:		*	Middle Name:				
			Last Name:		*	Default Facility:	BZU pharmacy ~			
			Federal Tax ID:		-	Federal Drug ID:				
			UPIN:		-	See Authorizations:	None v			
			NPI:		-	Job Description:				
			Provider Type:	Select Type	7					
			Taxonomy:	207000000X	-	Calendar UI:	Outlook v			
			State License		-					
			Number:			NewCrop eRX Role:	Select Role V			
			Access Control:	Accounting Administrators Clinicians Emergency Log	×	Additional Info:		~		

• Repeat the above steps to add the other Users

### 3. Manage List

**OpenEMR** allow administrator user to edit the **lists**, **examples on the list** 

- 1. Language list  $\rightarrow$  list of all languages
- 2. NewCrop eRX Role  $\rightarrow$  users' role in the add user form

To manage (add, edit, delete) list, **IT admin** has to do the following:

Calendar Flow Board Messages Patient/	/Client Fees Mo	dules Procedures Admin	nistration	Reports	Misc	ellaneous Popups About		Administrator Administrator
Retient: None								
<ul> <li>Calendar 𝔅 ➡ × Message and Reminder Center 𝔅</li> </ul>	🖃 🛪 🛛 List Editor 🕫	■ × localhost/localhost	phpMyAdmii	n 4.5.4.1 😭	e x			
Delete List New List Edit list Language		~						
	ID	Title	Order	Defaul	Active	e ISO 639-2 Code	Code(s)	
	decine_to_specf	Declined To Specify	0	]				
	abkhazian	Abkhazian	10	]		abk		]
	afar	Afar	20	]		aar		]
	afrikaans	Afrikaans	30	]		afr		]
	akan	Akan	40	]		aka		]
	albanian	Albanian	50	]		alb(B) sqi(T)		]
	amharic	Amharic	60	]		amh		]
	arabic	Arabic	70	]		ara		]
	aragonese	Aragonese	80	]		arg		]
	armenian	Armenian	90	]		arm(B) hye(T)		]
	assamese	Assamese	100	]		asm		]
	avaric	Avaric	110	]		ava		]
	avestan	Avestan	120	]		ave		]
	aymara	Aymara	130	]		aym		]
	· · · · · ·		1	1 —	_			1

• Choose List from Administration menu, this will open the List Editor

• Select the **list** to be managed from the drop-down list

Calendar Flow Board Messages Patient/Client F	Fees Modules Proc	edures Admin	istration	Reports	Misce	llaneous Popups About		Administrator Administrator
Retient: None								
Calendar 𝔅 🖉 ೫ Message and Reminder Center 𝔅 📽 ೫ List	st Editor 🕫 🖃 🛪							
Delete List New List Edit list Language	·	-						<u>^</u>
Eye QP List EXT for Nev Eve OP List RETINA for	w Providers	tle	Order	Default	Active	ISO 639-2 Code	Code(s)	
Fee Sheet		Specify	0					
General Issue List	ared Site		10			abk		
Immunization Completic Immunization Informati	on Status		20			aar		
Immunization Manufacti Immunization Observati	Immunization Information Source Immunization Manufacturer					afr		
Immunization Refusal Re Immunization Registry S	eason Status		40	]		aka		
Immunization Vaccine E Immunizations	Eligibility Results		50			alb(B) sqi(T)		
Industry Insurance Types			60			amh		
Invoice Reference Num Issue Subtypes	iber Pools		70			ara		
Language		/	80			arg		
armeniar	n Armenian		90			arm(B) hye(T)		
assames	e Assamese		100	]		asm		
avaric	Avaric		110	]		ava		
avestan	Avestan		120	]		ave		
aymara	Aymara		130			aym		
			1		_			×

- Manage list item displayed in the list table
- Save the list form as shown in the figure below:
- Repeat the above steps to manage the other lists

# 1. Address Book

To manage the address Book, **IT admin** has to do the following:

# • Choose Address Book from administration menu

🗘 Calendar Flow Board Messages Patient/Client Fees Modules Procedures Administration Reports Miscellaneous Popups About	Administrator Administrator
Patient: None	
Calendar 𝔅 𝑘 𝖈 Message and Reminder Center 𝔅 𝑘 𝖈 Address Book 𝔅 𝑘 𝛪	
Search Add New Organization: First Name: Last Name: Specialty: Type: All 🗸	
Organization Name Local Type Specialty Phone Mobile Fax Email Street City State Postal	
Administrator Administrator *	

• Click Add New to add new organization to the address book

Calendar Flow Board Messages Patient/Client Fees	Modules Pro	cedures Administration Reports Miscellaneous Popups About	Administrator Administrator
Relient: None	Туре:	Unassigned V	×
Calendar 𝔅 🖝 × Message and Reminder Center 𝔅 🖝 × Addres	Name:	V Last First Middle: Suffix	
Search Add New Organization: First Name	Specialty:		niy
Organization Name Local Type Speci	Organization:		
Administrator Administrator *	Valedictory:		
	Home Phone:	Mobile:	
	Work Phone:	2nd: Fax:	
	Assistant		
	Email:		
	Trusted Email:		
	Website:		
	Main Address:		
	City:	State/county: Postal code:	
	Alt Address:		
			×

• Fill and Save

### 2. Procedure order administration

- Procedure order allows providers to send order to other local or external providers
  - a. Lab test order
  - b. Radiology image order
  - c. Medication prescription
- To complete procedure, the admin has to make a number of preliminary steps:
  - a. Add provider
  - b. Configure order procedure
- Then, providers can add procedure order (e.g., lab order)

## To add provider, the admin has to add provider data in the address Book as follows:

- Select Administration → addr book Step 4 above
- Add new organization data

### Step 4 above

• Select organization type → Lab service

		ж
Type:	Lab Service 🗸	
	Unassigned	
Organization:	Imaging Service	
	Immunization Service	
	Lab Service	n
Director Name:	Specialist First: Middle: Suffix:	
	Vendor	
Valedictory:	Distributor	
	Care Coordination	
Home Phone:	Other	
Work Phone:	External Provider Fax	
Assistant:		
Email:		
Trusted Email:		
Website:		
Main Address:		
City:	State/county: Postal code:	
Alt Address:		
_		
City:	State/county: Postal code:	× .

• Click save

Then, create procedure provider as follows:

Select Procedure → provider → Add New

Calendar Flow Board Messages Patient/Client Fees Modules Inventory	Procedures
Administration Reports Miscellaneous Popups About	Providers
= Patient: None	Configuration
	Load Compendium
Calendar ♡ = × Message and Reminder Center ♡ = × Address Book ♡ = × Proced	Pending Review
	Patient Results
Refresh Add New NPI Protocol	Lab Overview
Hebron laboratory 1234 DL	Batch Results

To configure procedure order, the provider has to do:

Select procedure → configuration → Add Top-Level

Calendar	Flow Board	Messages	Patient/Client	Fees	Modules	Procedures	
Administration	Reports Mis	cellaneous	Popups Abo	ut		Providers	
= Patient: None						Configuratio	on
						Load Compe	endium
<ul> <li>Flow Board</li></ul>	× Message	and Reminde	r Center 😂 🖬 🗙	Order	and Result Ty	Pending Rev	iew
			Types	of Ord	ers and Re	Patient Resu	lts
Name			Order	Code	Des	Lab Overvie	W.
			(	Add T	op Level	Batch Result	is.
-							
Procedure Type:	Group	T					×
Procedure Type:	Group	<b></b>					×
Procedure Type: Name: Description:	Group Chemistry Comprehensiv	▼ ve Medical La	ab Tests				×
Procedure Type: Name: Description: Sequence:	Group Chemistry Comprehensiv 0	ve Medical La	ab Tests				

On right-side of Chemistry, click Add

# □ Add CBC as Middle-Level procedure order

▲ Flow Board 😂 🖬 🗙	Message and Reminder Center $\mathcal{Z} = X$		Order and Result Types 😂 🖝 🛪	
Name	Order	Code	Description	
Chemistry			Comprehensive Medical Lab Te	ests [Edit] [Add]
		Add Top L	evel	

# □ Add RBC as **Third-level** discrete lab test

▲ Calendar 😂 📽 🗴 Message and Re	minderCenter 😂 🖨	r × O	rder and Result Types ♀ ⋹ × Address Book ♀ ⋹ ×									
	Types of Orders and Results											
Name Order Code Description												
- Chemistry			Groups of tests that are routinely ordered to determine a person's general health status. [Edit] [Add]									
- CBC	Yes	001	complete blood count test measures several components and features of your blood, including:[Edit] [Add] Red blood cells, which carry oxygen									
RBC		004	The red blood cell count: count the number of red blood cells (RBCs) you have and how much [Edit] [Add] oxygen your tissues receive.									
WBCs		003	A white blood cell (WBC) count is a test that measures the number of white blood cells in your [Edit] [Add] body.									
Chemistry Blood test	Yes	005	measurement the levels of important electrolytes and other chemicals substances in patient's blood [Edit] [Add] such as Glucose and sodium.									
- X-Ray image			An x-ray (radiograph) is a noninvasive medical test that helps physicians diagnose and treat medical conditions. Imaging with x-rays involves exposing a part of the body to a small dose of ionizing radiation to produce pictures of the inside of the body.									
Angiography	Yes	021	Angiography is an X-ray technique used in the examination of the arteries, veins and organs to diagnose and treat blockages and other blood [Edit] [Add]									

## 3. Procedure Order Preparations

### First

Download this data set, Mayo\_loinc.zip. Because phpMyAdmin will only accept a zipped .sql file (this is a zipped .csv file), it must be extracted before import.

Understand the structure of the procedure\_type table and the characteristics of each column.

←	🗊 Server: lo	calhost:3306 »	🗊 Database:	openemr » 🔜 🖬	ble: procedui	e_typ	e						
	Browse	M Structure	e 📄 SQL	🔍 Search	👫 Insert		Export	📑 Ir	nport	Þ	Operation	s	26 T
_													
	The colum	n name 'range'	is a MySQL re	eserved keyword									
	# Name		Type	Collation	Attributes	Null	Default	Extra			Action		
	1 proced	ure_type_id	bigint(20)			No	None	AUTO_	INCREME	NT	🥜 Change	0	Drop
	2 parent		bigint(20)			No	0				🥜 Change	0	Drop 🔒
	3 name		varchar(63)	utf8_general_ci		No					🥜 Change	0	Drop 👔
	4 lab_id		bigint(20)			No	0				🥜 Change	0	Drop 👔
	5 proced	ure_code	varchar(31)	utf8_general_ci		No					🥜 Change	0	Drop 👔
	6 proced	ure_type	varchar(31)	utf8_general_ci		No					🥜 Change	0	Drop 👔
	7 body_s	ite	varchar(31)	utf8_general_ci		No					🥜 Change	0	Drop 👔
	8 specim	ien	varchar(31)	utf8_general_ci		No					🥜 Change	0	Drop 👔
	9 route_a	admin	varchar(31)	utf8_general_ci		No					🥜 Change	0	Drop 🧃
	10 lateral	ity	varchar(31)	utf8_general_ci		No					🥜 Change	0	Drop 👩
	11 descrij	otion	varchar(255)	utf8_general_ci		No					🥜 Change	0	Drop 🧃
	12 <b>standa</b>	rd_code	varchar(255)	utf8_general_ci		No					🥜 Change	0	Drop 🤞
	13 related	_code	varchar(255)	utf8_general_ci		No					🥜 Change	0	Drop 🧯
	14 units		varchar(31)	utf8_general_ci		No					🥜 Change	0	Drop 👩
	15 range		varchar(255)	utf8_general_ci		No					🥜 Change	0	Orop 🧯
	16 <b>seq</b>		int(11)			No	0				🥜 Change	0	Drop 🧯
	17 activit	<u>y</u>	tinyint(1)			No	1				🥜 Change	0	Drop 🧯
	18 notes		varchar(255)	utf8_general_ci		No					🥜 Change	0	Drop 👩

### Second

Navigate from the Menu to Administration/Other/Database. From the 4th page of the database, go to procedure\_type, then to the Import tab. Browse for the unzipped file and click Go.

← 📑 Server: localhost:3306 » 🗊 Database	: openemr » 🔜 T	able: procedure	_type		
🖩 Browse 🥻 Structure 🗐 SQL	🔍 Search	👫 Insert	Export	📑 Import	▼ More
Browse your computer: Browse Ma	yo_loinc.csv	(Max: 30M	1iB)		
Character set of the file: utf-8	•	unzinn	ed		
Partial Import:		unzipp	cu		
Allow the interruption of an import in way to import large files, however it can b	case the script ( reak transaction	detects it is clo as.)	se to the PHP t	timeout limit. (7	This might be a good
Skip this number of queries (for SQL) or li	nes (for other fo	rmats), starting	from the first	one: 0	
Format:					
CSV •					
Note: If the file contains multiple tables, the	hey will be comb	oined into one.			
Format-Specific Options:					
Replace table data with fil	e				
Columns separated with:	,				
Columns enclosed with:	н				
Columns escaped with:	п				
Lines terminated with:	auto				
Column names: 🔞					
Do not abort on INSERT er	ror				
Go					

If all goes well, you should see the following.

🛏 🗊 Server: localhost:3306 » 🍘 Database: openemr » 🔜 Table: procedure_type											
Browse	M Structure	SQL	Search	👫 Insert	🐱 Export	📑 Import	▼ More				
🛷 Import ha	s been successfull	ly finished, 179	6 queries ex	ecuted. (Mayo	_loinc.csv)						

# 4. Manage Pharmacy

Pharmacy Dispensary Module must be activated before it can be used. To activate it, the **admin** has to do the following:

• Select Administration → Globals menu

Calendar Flow Board Messages Patient/Client Fees Mod	ules Procedures	Administration Rep	ports	Miscellaneo	us Popups	About				Admir	iistrator Ad	ministrator	
Retient: None		Globals											
		Facilities											
Calendar 2	s C ≝ ×	Users											
Edit Global Settings		Addr Book								Search			] ^
Appearance Locale Features Report Billing	E-Sign Docu	Practice		ecurity	Notifications	CDR	Logging	Miscellaneous	Portal	Connectors	Rx	PDF	
Main Top Pane Screen	Calendar Screen	Codes											
Layout (need to logout/login after change this setting)	Tabs 🗸	Layouts											
Tabs Layout Theme (need to logout/login after change this setting)	Full ~	Lists											
Vertical Menu Style		A(1											
Default Encounter View	Clinical View ~												
Navigation Area Width	150	Files											
Application Title	OpenEMR	Backup	÷		1								
New Patient Form	All demographics f	Rules		tion check									
Modify Patient Form	Standard check	Alerts	Ī	~									
Patient Search Results Style	Encounter statisti		Ī										
Tall Navigation Area		Patient Reminders											
Navigation Area Visit Forms	$\checkmark$	Other	•										
Simplified Demographics			_										
Simplified Prescriptions													
Simplified Co-Pay													
Use Charges Panel													
Enable Fees Submenu	$\checkmark$												
Enable Batch Payment	$\square$												
	_												w.

• Select Feature tab

🛇 Calendar Flow Board Messages Patient/Client Fees Modules Procedures Administration Reports Miscellaneous Popups About										Admi	Administrator Administrator			
Patient: None														
▲ Calendar 🔉 🖬 🛪 Message and Reminder Center 🖇 🖬 🛪	Global Settings 😅 🛥 🛪													
Edit Global Settings										Search			] ^	
Appearance Locale Features Report	Billing E-Sign	Documents	Calendar	Security	Notifications	CDR	Logging	Miscellaneous	Portal	Connectors	Rx	PDF		
Specific Application	None	~												
Drugs and Products	Do not invent	ory and sell any	products	~										
Disable Chart Tracker														
Disable phpMyAdmin														
Disable Immunizations														
Disable Prescriptions														
Omit Employers														
Support Multi-Provider Events														
Disable User Groups	$\checkmark$													
Skip Authorization of Patient Notes	$\checkmark$													
Allow Encounter Claims														
Advance Directives Warning														
Configuration Export/Import														
Restrict Users to Facilities														
Remember Selected Facility														
Print Receipts by Provider														
Discounts as Monetary Amounts	$\checkmark$													
Referral Source for Encounters														
Mask for Patient IDs														
localhost/openemr/interface/super/edit_globals.php#				]									¥	

• Select the appropriate option from the combo box

For example: Inventory and sell both drug and non-drug product

Calendar Flow Board Messages Patient/Client Fees	Modules Procedures Administr	ration Reports Miscellan	eous Popups About				Adminis	trator Adminis	trator
Ratient: None									
Calendar ♡	iettings 🖉 🖝 🗙								
Edit Global Settings							Search		^
Appearance Locale Features Report Billi	ig E-Sign Documents	Calendar Security	Notifications CDR	Logging	Miscellaneous	Portal	Connectors	Rx PDF	
Specific Application	None								
Drugs and Products	Inventory and sell both drugs ar	ad non-drug products							
Disable Chart Tracker	Do not inventory and sell any pr	oducts							
Disable phpMyAdmin	Inventory and sell drugs only	d anna dana ana di ata							
Disable Immunizations	Products but no prescription drugs and	igs and no templates							
Disable Prescriptions	Π								
Omit Employers									
Support Multi-Provider Events									
Disable User Groups									
Skip Authorization of Patient Notes	$\checkmark$								
Allow Encounter Claims									
Advance Directives Warning									
Configuration Export/Import									
Restrict Users to Facilities									
Remember Selected Facility									
Print Receipts by Provider									
Discounts as Monetary Amounts	$\checkmark$								
Referral Source for Encounters									
Mask for Patient IDs									
Mask for Invoice Numbers									~

- Click save
- When the Pharmacy Module is activated, the Inventory menu item appears in Navigation menu as in the following figure.

Calendar Flow Board Messages Patient/Client	Fees Modules Inventory Procedures	Administration Reports M
Revenue Patient: None		Globals
		Facilities
▲ Calendar ☎ 📽 🗙 Message and Reminder Center ☎ 🖝 🗙	Clobal Settings ∅ 🖝 🛪	Users
Edit Global Settings		Addr Book
Appearance Locale Features Report	Billing E-Sign Documents	Practice
PDF		Codes
Specific Application Drugs and Products	None   None None	Layouts
Disable Chart Tracker	Do not inventory and sell any pro	ducts
Disable phpMyAdmin	Inventory and sell drugs only	
Disable Immunizations	Inventory and sell both drugs and	I non-drug products
Disable Prescriptions	Products but no prescription drug	as and no templates
Omit Employers		Files
Support Multi-Provider Events		Backup
Disable User Groups		buckup
Skip Authorization of Patient Notes		Rules
Allow Encounter Claims		
Advance Directives Warning		Alerts
Configuration Export/Import		Patient Reminders
Restrict Users to Facilities		
Remember Selected Facility		Other
Print Receipts by Provider		

After activation of Pharmacy Module, admin/pharmacist can add drugs

# ✤ Select Inventory → Management

Patient: None Management Calendar Ø m' x Message and Reminder Center Ø m' x Clobal Settings Ø m' x	🔿 Calendar	Flow Boa	rd Mes	ssages	Patient/Client	Fees	Modules	Inventory	Procedures	Administration	Reports	Miscellaneous	Popups	About	Administrator Administrator
Calendar 🕫 🖝 x Message and Reminder Center 🕫 🖝 x	🝍 Patient: None							Manageme	ent						
	▲ Calendar Ø	<b>∩x</b> Mes	age and R	teminder	Center 🔉 🖝 🛪	Global S	Settings 🕫 🖬	Destroyed							

# Click Add Drug button

🔿 Calendar	Flow Board Messages	Patient/Client	Fees Modules I	nventory Procedures	Administration	Reports Mise	ellaneous Popups	About	Ad	ministrator Administrator
Ratient: None										
▲ Calendar 🕫 🗗	× Message and Remind	er Center 🛛 🛥 🛪	Drug Inventory 🛛 🖃 🛪							
Name	Act	NDC	Form	Size	Unit	New	Lot	Warehouse	QOH	Expires
Add Drug										

# Enter Drug details and save

Name:	Nexium
Active:	0
Allow:	Multiple Lots Combining Lots
NDC Number:	00186-5022 (72 NIS)
Drug Code:	
On Order:	0
Limits:	Global On Site
	Min 0 0
	Max 0 0
Form:	tablet V
Pill Size:	
Units:	mg v
Route:	IM V
Relate To:	ICD10:K31.9
Templates:	Name Schedule Interval Qty Refills Standard
Save Delete	Cancel

# **Practical Exercises**

Consider the following health organization configuration:

A health organization, named Shefa, has the following

- Three clinics, named Birzeit Clinic, Kober Clinic and Dir Sudan Clinic.
- Three laboratories, named Birzeit Laboratory, Kober Laboratory and Dir Sudan Laboratory.
- Three Pharmacies, named Birzeit Pharmacy, Kober Pharmacy and Dir Sudan Pharmacy.

At Shefa, there are 3 receptionists staff work, named Sandy, Suzan, and Sandra one is located at each clinic. Also, there are five nurses, named Rida, Nuha, Sukaina, Imad and Khollood. Rida, Nuha at Birzeit Clinic, Sukina at Kober Clinic, and Imad and Kholloed at Dir Sudan Clinic. There are four doctors, named Lina at Birzeit Clinc, Khaled, Yousef at Kober Clinic, Munir at Dir Sudan Clinic. Finally, there are three MidLevel Prescribers at each clinic, named Sabrina, Sumaiya, and Nadeen.

Q1. Setup the openEMR system to add three clinics for Birzeit, Kober and Dir Sudan.

Calendar Flo	ow Board Messages Patient/Client	Fees Modules Inventory	Procedures Administration	Reports Miscellaneous	Popups About	Administrator Administrator
atient: None			Globals Facilities 2			
.alendar () ₽ ×	Message and Reminder Center 2 🖬 🛪	Patient Finder 2 🖉 🛪 🖌 Facilities	C = × Users			
ducies Add			Addr Book			
1e	Address	Phone	Practice			
pharmacy Clinic	Birzeit, Ramallah, palestine Birzeit, Ramallah, palestine		Codes			
Lab	Birzeit,Ramallah, Birzeit Ramallah palestine		Layouts			
r Clinic Name Her	e	000-000-0000	Lists			
			ACL			
			Files			
			Backup			
			Rules			
			Alerts			
			Patient Reminde	lers		
			Other	•		

1. From Administration menu select Facilities and click on Add button as follow

2. Fill the facility form then press save as follows

Add Facili	ty Save Cancel			^
Name:	Birzeit Clinic	Phone:		
Address:	Birzeit	Fax:		
City:	Ramallah	Zip Code:		
State:		Tax ID:	EIN 🗸	
Country:	Palestine	Facility NPI:		
Website:		Email:		
Billing Location:		Accepts Assignment (only if billing location):		
Service Location:		Color:	#006600 *[Pick]	
Primary Business Entity:				
POS Code:	49: Independent Clinic			
Billing Attn:				
CLIA Number:				
C 49 10		1		~

3. Click on the Add button to add the other clinics (Kober and Dir Sudan)

Calendar Flow	Board Messages	Patient/Client	Fees M	Aodules I	inventory	Procedures	Administration	Reports	Miscellaneous	Popups	About	Administrator Administrator
n Patient: None ▲ Calence C → × N	lessage and Reminder	r Center 🕱 🔐 🗙	Patient Fin	der Ø ∎° ×	Facilities	<i>ପ ∎</i> ×						
Facilities Add				at								
Name	Address			Ph	one							
Birzeit Clinic	Birzeit,Ramallah,Pale	estine										

- Q2. Setup the openEMR system to add three laboratories for Birzeit, Kober and Dir Sudan.
  - To add laboratories for Birzeit, Kober, and Dir Sudan. Repeat the steps that in question 1, and fill the facility form to be suitable with laboratory information. Change POS Code to be Independent laboratory instead of Independent Clinic as follows

Add Facili	<b>cy</b> Save Cancel		
Name:	Birzeit laboratory	Phone:	
Address:	Birzeit	Fax:	
City:	Ramallah	Zip Code:	
State:		Tax ID:	EIN 🗸
Country:	Palestine	Facility NPI:	
Website:		Email:	
Billing Location:		Accepts Assignment (only if billing location):	
Service Location:		Color:	#00CC00 *[Pick]
Primary Business Entity: POS Code:	91: Independent Laborate	201	
		лу	
Billing Attn:			
CLIA Number:			

2. Add other laboratories (Kober, and Dir Sudan)

Q3. Setup the openEMR system to add three pharmacies for Birzeit, Kober and Dir Sudan.

1. To add pharmacies for Birzeit, Kober, and Dir Sudan. Repeat the steps that in Q 1, and fill the facility form to be suitable with pharmacy information. Change POS Code to be **Pharmacy instead of Independent Clinic** as follows

Add Facili	ty Save Cancel			Ŷ
Name:	Birzeit pharmacy	Phone:		
Address:	Birzeit	Fax:		
City:	Ramallah	Zip Code:		
State:		Tax ID:	EIN ~	
Country:	palestine	Facility NPI:		
Website:		Email:		
Billing Location:		Accepts Assignment (only if billing location):		
Service Location:		Color:	#CC9966 *[Pick]	
Primary Business Entity:				
POS Code:	01: Pharmacy **			
Billing Attn:				
CLIA Number:				~

2. Add other pharmacies (Kober, and Dir Sudan)

Q4. Configure the openEMR by adding the following users based on the data presented in the following table.

User	Role	Facility
Sandy		Birzeit clinic
Suzan	Receptionist	Kober clinic
Sandra		Dir Sudan clinic
Rida, Nuha		Birzeit clinic
Sukaina	Nurse	Kober clinic
Imad and Khollood		Dir Sudan clinic
Lina		Birzeit clinic
Khalid, Yousef	Doctor	Kober clinic
Munir		Dir Sudan clinic
Sabrina		Birzeit Pharmacy
Maya	MidLevel Prescriber	Kober Pharmacy
Nadeen		Dir Sudan Pharmacy

- 1. To add Sandy, Suzan, and Sandra as receptionists in the three clinics.
  - I. From the Administration menu select Users, then click Add User

Calendar Flow Board Messages Patient/	Client Fees Modules Inventory	Procedures Administration Deport	Miscellaneous Popups	About	Administrator Administrator
👼 Patient: None		Globals			
		Facilities			
<ul> <li>Calendar Ø</li></ul>	w x Patient Finder ∅ w x User/G	roups 0 and 1 Users 2			
User / Groups Add User / View Facility	Specific User Information	Addr Book			
□ Include inactive users		Practice			
Username Real Name	Additional Info	Authoriz Codes			

# II. Fill Sandy information inside the User Form

					~
Username:	Sandy	*	Password:	sandy *	
			Your Password:	•••• *	
			Provider:	🗹 Calendar: 🗹	
First Name:	Sandy	*	Middle Name:	Bell	
Last Name:	Chuan	*	Default Facility:	Birzeit Clinic 🗸	
Federal Tax ID:			Federal Drug ID:		
UPIN:			See Authorizations:	Only Mine 🗸	
NPI:			Job Description:		
Provider Type:	Select Type 🛛 🗸				
Taxonomy:	207Q00000X		Calendar UI:	Outlook ~	
State License Number:			NewCrop eRX Role:	Manager v	- 11
Default Warehouse:	~		Invoice Refno Pool:	Main ~	- 11
Access Control:	Clinicians Emergency Log Front Office Physicians V	>	Additional Info:		
					~

# III. Edit the user to be Active

					^
Username:	Sandy	*	Password:	sandy	*
		-	Your Password:	••••	*
		_	Provider: 🗹 Calenda	r: 🗹 Active: 🗹	>
First Name:	Sandy	*	Middle Name:	Bell	
Last Name:	Chuan	*	Default Facility:	Birzeit Clinic 🔍	
Federal Tax ID:		]	Federal Drug ID:		
UPIN:		]	See Authorizations:	Only Mine v	·
NPI:		]	Job Description:		
Provider Type:	Select Type 🛛 🗸	]			
Taxonomy:	207Q00000X		Calendar UI:	Outlook ~	·
State License Number:		]	NewCrop eRX Role:	Manager v	
Default Warehouse:	~		Invoice Refno Pool:	Main 🗸	_
Access Control:	Clinicians Emergency Log Front Office Physicians V	$\mathbf{D}$	Additional Info:		
					~

- IV. Do same for Suzan and Sandra.
- To add Rida, Nuha, Sukaina, Imad and Khollood as Nurses in the three clinics.
   I. From the Administration menu select Users, then click Add User

Calendar	Flow Board	Messages P	Patient/Client	Fees	Modules	Inventory	Procedures	1 Administration	Peports	Miscellaneous	Popups	About	Administrator Administrator
💐 Patient: None								Globals					
								Facilities					
<ul> <li>Calendar</li></ul>	Message	d Reminder Ce	enter 🕽 🚽 🛪	Patient Fir	nder 🛛 🖬	× User/G	roups 🛛 🖬 🖉	Users	2				
User / Grou	s Add User	View Fa	acility Specif	ic User I	Informat	ion		Addr Book					
Include inact	tive users							Practice					
Username	Real Nan	ne	A	dditiona	l Info		Authori	Codes					

# II. Fill Rida information inside the User Form

						^	Ì
Username:	Rida	*	Password:	rida	*		
	·,	1	Your Password:	••••	÷		
			Provider:	🗹 Calendar: 🗹		н.	
First Name:	Rida	*	Middle Name:				
Last Name:	Dar Salem	*	Default Facility:	Birzeit Clinic 🛛 🗸	$\triangleright$		
Federal Tax ID:			Federal Drug ID:				
UPIN:			See Authorizations:	Only Mine $\sim$			
NPI:			Job Description:				
Provider Type:	Select Type 🛛 🗸						
Taxonomy:	207Q00000X		Calendar UI:	Outlook ~	]		
State License Number:		]	NewCrop eRX Role:	Nurse v	D		
Default Warehouse:	~		Invoice Refno Pool:	Main 🗸	1		
Access Control:	Clinicians Emergency Log Front Office Physicians		Additional Info:			ļ	
						~	

- III. Edit the user to be **Active**
- IV. Do the same for Nuha, Sukaina, Imad and Khollood
- 2. To add Lina, Khaled, Yousef, and Munir as Doctors in the three clinics.
  - I. From the Administration menu select Users, then click Add User

Calendar	Flow Board Message	s Patient/Client	Fees Modules	Inventory	Procedures	Administration	Riports	Miscellaneous	Popups	About	Administrator A	dministrator
Ratient: None						Globals						
▲ Calendar Ø 🗗	• • • • • • • • • • • • • • • • • • •	der Center 🛛 🔐 🛪	Patient Finder 🖉 🖬	× User/G	roups © ⊮ ×	Users	2					
User / Group	s Add User Vi	ew Facility Speci	fic User Informa	ition		Addr Book						
Include inact	tive users					Practice						
Username	Real Name		Additional Info		Authori	Codes						

### II. Fill Lina information inside the User Form

						^
Username:	Lina	*	Password:	lina	*	Ŀ
		1	Your Password:	••••	*	
			Provider:	🗹 🖸 lendar: 🗹	1	
First Name:	Lina	*	Middle Name:	Sami		
Last Name:	Manasra	*	Default Facility:	Birzeit Clinic 🔍		
Federal Tax ID:			Federal Drug ID:			
UPIN:			See Authorizations:	Only Mine 🗸 🗸		
NPI:			Job Description:			
Provider Type:	Select Type 🛛 🗸				a	
Taxonomy:	207Q00000X		Calendar UI:	Outlook ~	]	
State License Number:		]	NewCrop eRX Role:	Doctor v		
Default Warehouse:	~		Invoice Refno Pool:	Main 🗸	1	
Access Control:	Clinicians Emergency Log Front Office Physicians		Additional Info:			~

- III. Edit the user to be **Active**
- IV. Do the same for Khaled, Yousef, and Munir

- 3. To add Sabrina, Sumaiya, and Nadeen as receptionists in the three clinics.
  - I. From the Administration menu select Users, then click Add User





II. Fill Sabrina information inside the User Form

- III. Edit the user to be **Active**
- IV. Do the same for Sumaiya, and Nadeen