

Intro Level SimEMR® Use Cases

1.5 MEDICAL ASSISTANT PROGRAMS

Introduction

This lesson will introduce learners to basic components and procedures for charting in an electronic medical record system while reviewing and managing a patient case. The forms and documents within SimEMR®, a system designed exclusively for charting in a clinical simulation context, are a representation of charting elements included in real-world EMR systems.

Learning Objectives

- Navigate components of SimEMR®
- Perform basic documentation in an EMR

Resources Needed

- SimEMR® login
- Internet access
- Web capable device

Content

- Introduction to SimEMR®
- Patient case review

Teaching Strategies

- Tutorial review
- Hands on practice
- Documentation of clinical data

Time

- *10-15 minutes:* Administration: Patient Profile creation
- *20 minutes:* Learner practice
- *10-15 minutes:* Review & evaluate learner work

Patient Case & Scenario Overview

MEDICAL ASSISTANT PROGRAMS

Patient Profile Name: Margaret Anthony **DOB:** 03/30/1982

Scenario: Mrs. Anthony is a 37-year-old black female who visits the PCP office for a pre-employment physical exam. She is healthy with no complaints.

Profile Overview: The following patient case includes an overview of the scenario, an overview of learner objectives, and administrative steps required to get started. As you review these materials, bear in mind some terms of art. Patient Profile refers to the electronic patient in SimEMR®. Patient case refers to your overall scenario that uses that patient profile.

Profile Objectives: Acclimate the MA learner to common documentation practices within an Electronic Medical Record, SimEMR®.

Applications for learners, will include, but are not limited to:

- a. Review all *Providers' Orders*
- b. Document Medication Administration
- c. Repeat any documentation for practice and comfortability if needed

Patient Profile - Margaret Anthony

Getting Started

1. Review the Patient Kit Addendum on pages 15 – 17.
2. Create the Patient Profile in SimEMR®. If you have already been using the Margaret Anthony profile make note of additional steps you may need to complete on pages 4 and 5.

Refer to the How To: Create a Patient Profile guide for more detailed directions.

Overview instructions to create a patient profile are as follows:

- a. At the SimEMR® login screen enter your username and password. Select **[LOGIN]**.
- b. On the dashboard, select either the **[PATIENT PROFILES]** button, or **[PATIENT PROFILES]** in the left side menu.
- c. Click **[+ CREATE NEW PATIENT PROFILES]** in the top right.
- d. Enter Margaret Anthony information. Select **[CREATE]**.
- e. Navigate to your newly created patient, and select the **[⚙]** on the patients row. Select **[ⓘ PERMISSIONS]** from the dropdown menu.
- f. Uncheck the *Locked* box. Select **[SAVE]**.

- g. Navigate back to Margaret, and select the **[⚙️]** on the patient row. Select **[🚩 EDIT]**.
 - h. Select **[+ ADD NEW FORM]** to add all forms according to Margaret's Patient Kit.
3. Identify learner objectives.
 4. Create a course to assign the newly created profile to. If you are adding it to an existing course, move to step 5.

Refer to the SimEMR® Quick Start guide pages 2 – 4 for more detailed directions. Overview instructions to create a course are as follows:

- a. On the dashboard, select either the **[MANAGE COURSES]** button, or **[MANAGE COURSES]** in the left side menu.
 - b. Click **[+ CREATE NEW COURSE]** in the top right.
 - c. Enter relevant course information and select **[CREATE]**.
 - d. Navigate to the newly created course, and select the **[⚙️]** on the course row. Using this menu, you can add learners, instructors, and edit the course.
5. Assign the patient profile to learners. If you have already assigned Margaret to a course, move to step 6.

Refer to the SimEMR® Quick Start guide pages 10 – 14 for more detailed directions. Overview instructions to assign a patient profile to learners are as follows:


- a. On the dashboard, select either the **[PATIENT ASSIGNMENTS]** button, or **[PATIENT ASSIGNMENTS]** in the left side menu.
 - b. Select the course you are assigning Margaret to. Click **[SELECT COURSE]**.
 - c. Locate Margaret and select **[CONTINUE TO NEXT STEP]**.
 - d. Select simulation time. Click **[CONTINUE TO NEXT STEP]**.
 - e. Add any additional goals and options to the profile. Click **[CONTINUE TO NEXT STEP]**.
 - f. Select **[CONFIRM ASSIGNMENT]**.
6. After learners have completed the assigned patient, review their work.

Refer to the SimEMR® Quick Start guide pages 17 – 18 for more detailed directions. Overview instructions to review learner work are as follows:

- a. On the dashboard, select either the **[LEARNER'S WORK]** button, or **[LEARNER'S WORK]** in the left side menu.
- b. Click **[REVIEW BY PATIENT]** to review all learners in the course at once. Click **[REVIEW BY LEARNER]** to review individual learners.

If you have been keeping up with the past few lesson plans, you may need to complete the steps below for set up.

1. Go to the Virtual Pharmacy. Add generics (influenza vaccine and pneumococcal vaccine).

 **Generic**
Update the information for Influenza Vaccine

Generics are the foundation of SimEMR's drug orders. The first step in creating an order is verifying that the generic is available in the formulary.


Drug

Tallman

Control level

Product Type

[Back to Generic List](#)

 **Generic**
Update the information for Pneumococcal Vaccine

Generics are the foundation of SimEMR's drug orders. The first step in creating an order is verifying that the generic is available in the formulary.

Drug


Tallman

Control level

Product Type

[Back to Generic List](#)

2. Continuing in the Virtual Pharmacy, add drugs Fluzone and Pneumovax.

 **Edit Drug**
Update the information for Fluzone 0.5 mL Injection

Drugs represent the chemical compounds available in your formulary.

Drug Name

Generic

Dose Form

Mass

Volume

Barcodes:

NDC10

NDC11

UPC

Emergency Medication

[Back to Drug List](#)

Edit Drug

Update the information for Pneumovax 23 0.5 mL Injection

Drugs represent the chemical compounds available in your formulary.

Drug Name	Generic	Dose Form	Mass	Volume
Pneumovax 23	Pneumococcal Vaccine	Injection		0.5 mL

Barcodes:

NDC10	NDC11	UPC
0367080088	00367080088	88287846

Emergency Medication

[Save](#)

[Back to Drug List](#)

[Generate Barcodes](#)

- Go to your copy of the Margaret Anthony profile, and create a Provider's Order with Fluzone and Pneumovax.

Providers' Orders

Order Date: SIMULATION START Start Date: SIMULATION START End Date:

Order Details

Flu and pneumococcal immunizations prior to leaving office today
Please provide patient with education materials for post immunizations.
John Miller, PA-C

[+ Add Medication](#)

Filters (Show)

Order: 0.5 ml Pneumovax 23 0.5mL Injection ONCE IM
NOW Please provide post injection instructions to patient

5 mg Norvasc 5mg Tablet DAILY PO Scheduled
1gm Deminrol 20% Ig 20mL IM 6HR IM Scheduled
40 mg Paxil 30mg Tablet DAILY PO Scheduled Take at b
0.5 ml Pneumovax 23 0.5mL Injection ONCE IM NOW

or

[+ Add New Order](#)

Notes:

[Delete](#)

Filters (Show)

Order: 0.5 ml Fluzone 0.5mL Injection ONCE IM NOW
Please provide post injection instructions to patient.

1 tablet Demo Dose# Tylenol # 3 30mg Tablet 4 HR PO P
2 tablets Demo Dose# Tylenol # 3 30mg Tablet 12 HR PO
5 mg Demo Dose# Valium 5mg Tablet 12 HR PO PRN
0.5 ml Fluzone 0.5mL Injection ONCE IM NOW Please

or

[+ Add New Order](#)

Notes:

[Delete](#)

Learner Assignment: Patient Profile - Margaret Anthony

This lesson will introduce you to basic components and procedures for charting in an electronic medical record system while reviewing and managing a patient case. The forms and documents within SimEMR®, a system designed exclusively for charting in a clinical simulation context, are a representation of charting elements included in real-world EMR systems.

Learning Objectives

- Navigate components of SimEMR®
- Perform basic documentation in an EMR

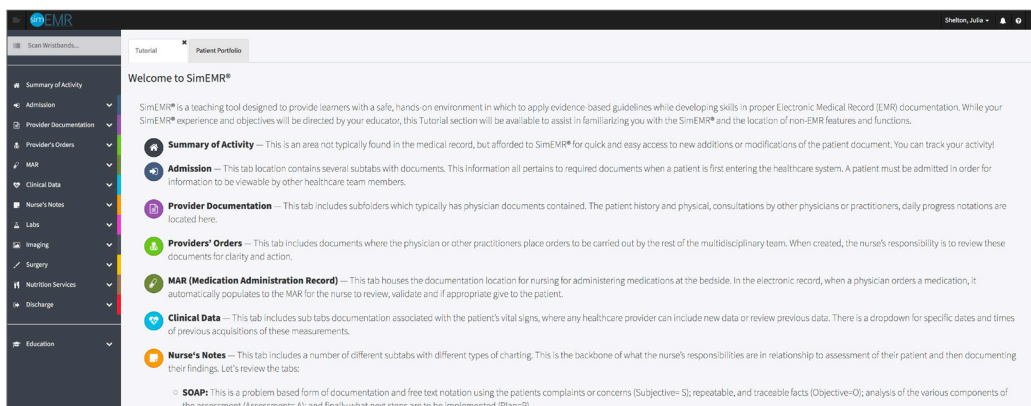
Resources Needed

- SimEMR® login
- Virtual MedsManager™ login
- Internet access
- Web capable device

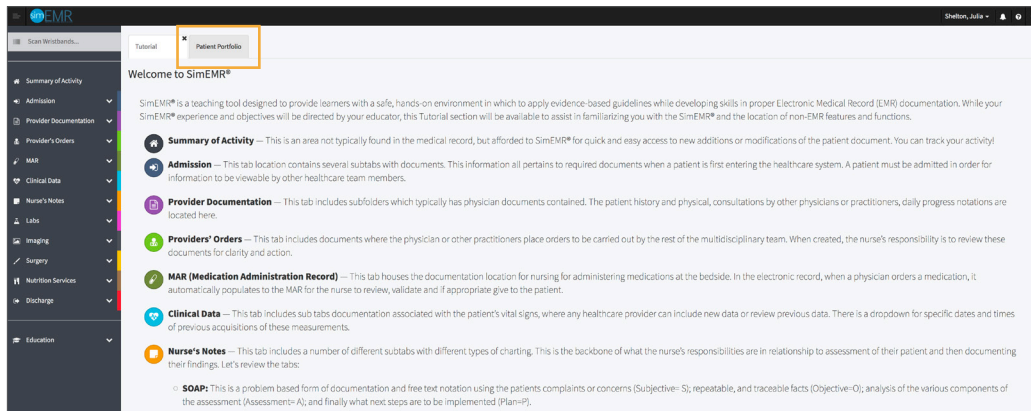
Learner Actions: Medication Administration Documentation

This lesson covers the process of practicing medication administration documentation. In the clinical environment, barcode scanning of the patient and medication to be administered is mandated for patient safety. Two options are provided for you to gain knowledge and skills with the processes. The first activity will use SimEMR®.

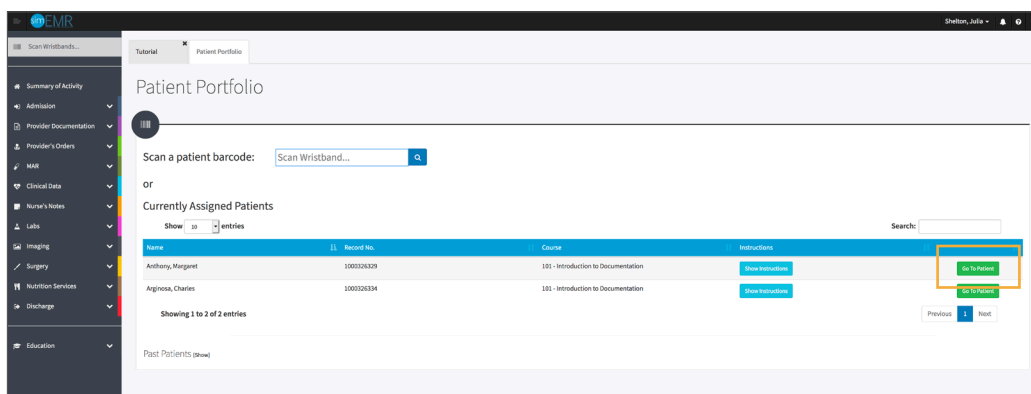
1. Open SimEMR® in a web browser.
2. At the login screen, enter your username and password. Select [\[LOGIN\]](#).
3. If needed, review the tutorial options presented in the *Tutorial* tab.
4. Review and familiarize yourself with the interface and content.



- Select the *Patient Portfolio* tab. Here you will find any patient profiles assigned by your instructor.

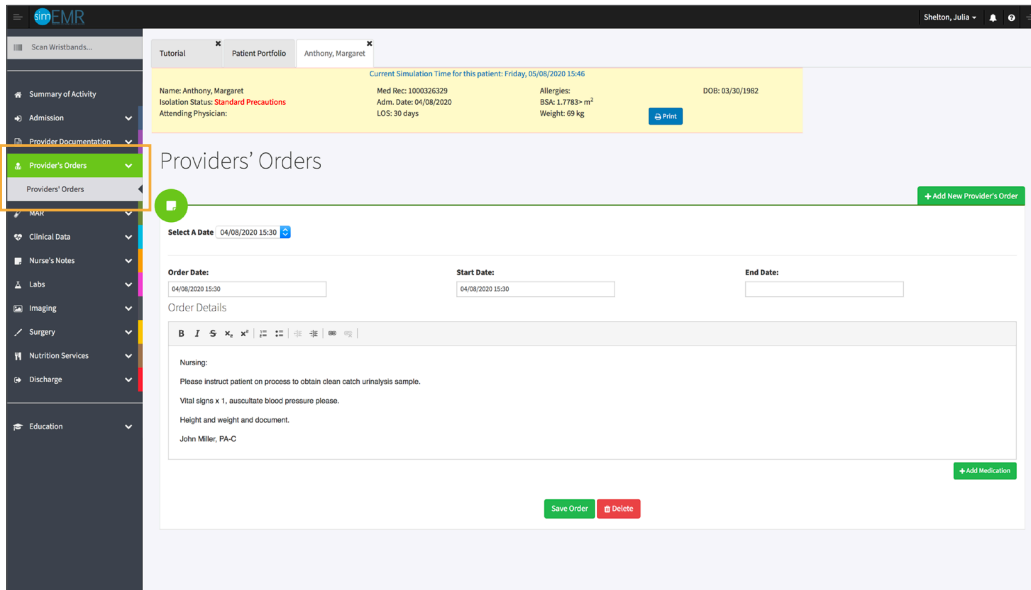


- Current assignments will be presented at the top, and any past assignments will be located at the bottom for reference. Locate Margaret Anthony and select **[GO TO PATIENT]**.



- Verify Margaret Anthony is the chart you are working in.
- Click **[PROVIDER'S ORDERS]** from the left menu and then select **[PROVIDERS' ORDERS]**. You will see that a Providers' Order is available. Past data can be located by using the *Select A Date* dropdown.

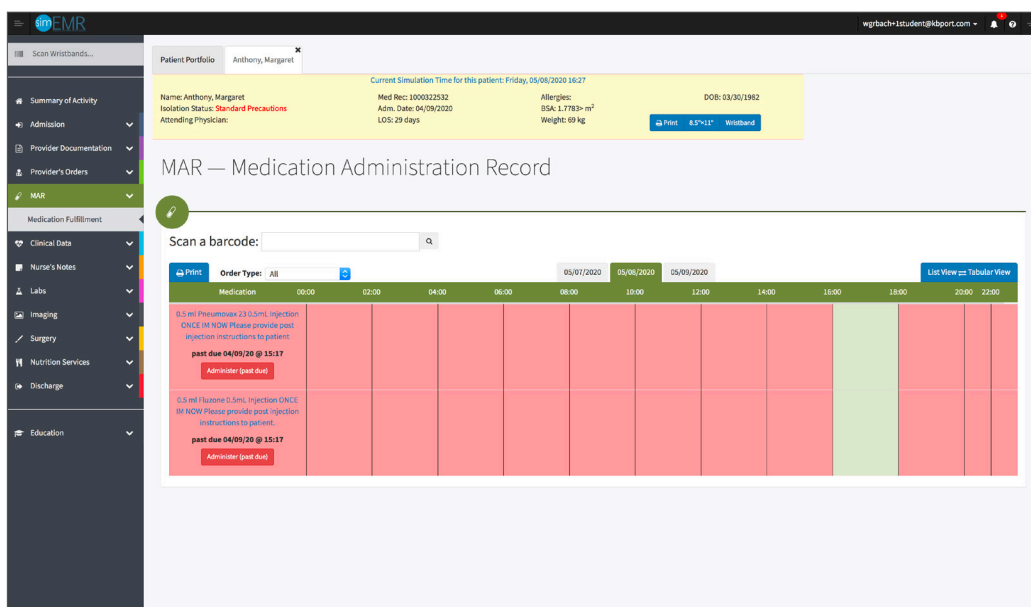
Validation of the Providers' Order is the first part of the medication administration process, and is crucial as any questions or clarifications can be made prior to engagement with the patient.



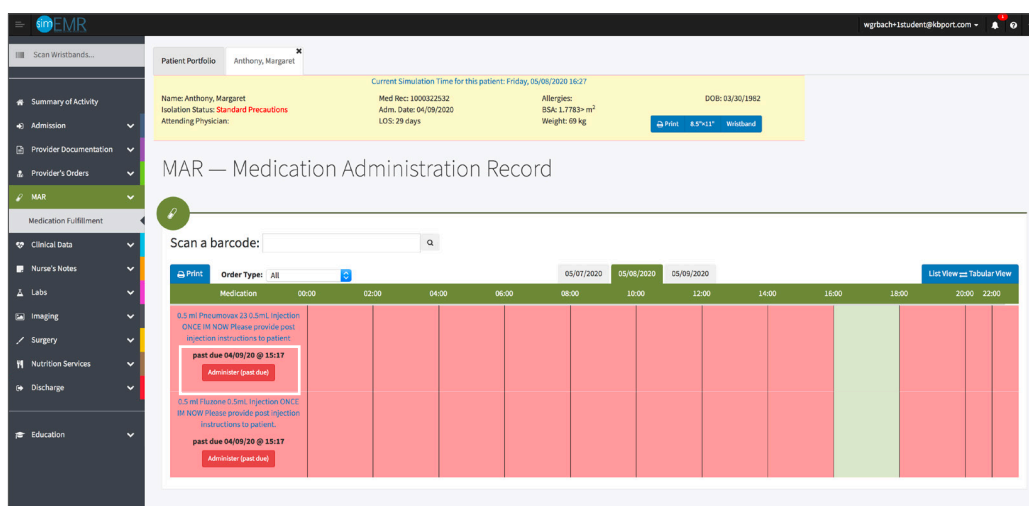
- Click **[MAR]** from the left menu and then select **[MEDICATION FULFILLMENT]**. You will see the a Medication Administration Record (MAR) populates. Any medications ordered by the provider are located here.

Note the *Scan a barcode* area. This is used in the clinical setting once the medication has been retrieved from the medication dispensing device or stock room. The user scans the barcode of the medication for safety and accuracy, as connection to the Provider's Order is accomplished within the formulary database in the Pharmacy and the EMR.

Note the three tabs on the table. The first is for any medications given in the last 24-hours, the middle and default is the current date and time, and the last is 24 hours in the future. The last is beneficial for organization and knowledge of when the next dose is due.



10. Sorting of medications can be done if looking for specific medications due. Click the *Order Type* dropdown for practice.
11. For this activity, you are going to administer the Pneumovax. Locate the Pneumovax order.
Hovering the mouse over the order text is a hyperlink to the provider order for validation.
12. Click **[ADMINISTER]** under the medication.
The row could be green, yellow, or red to signify whether the medication is active, impending late, or past due for administration, depending on when the provider entered the order.



13. You will be redirected to the medication documentation screen where you add data for the med pass. The fields include:

Date: clicking here will open a calendar that defaults to the current date and time

Medication Order: the medication being given; this is an additional validation for safety

Administration Options: clicking each radio button provides an additional text box; *Given* or *Partially Given* provide an additional text box to include the dosage, *Refused* (patient declined medication) and *Withheld* (clinician does not proceed with the medication based on clinical status or other data) and *Wasted* (clinician discarded medication) all prompt a text box to include reasoning

Notes: free text for additional information if needed; ex: pre-administration vital signs or labs

Location: free text for where the medication administration occurred on the patient's body also known as ROUTE, here you type the physical location of where the medication was applied, instilled, or injected using proper medical terminology

Initials: the final step for completion of documentation

EMR Patient Portfolio Anthony, Margaret

Current Simulation Time for this patient: Friday, 05/08/2020 16:27

Name: Anthony, Margaret
 Med Rec: 1000322332
 Allergies: BSA; 1.7783+ m²
 Adm. Date: 04/09/2020
 LOS: 29 days
 Weight: 69 kg
 DOB: 03/30/1982

Isolation Status: **Standard Precautions**

MAR — Medication Administration Record

Date: 05/08/2020 16:03

0.5 ml Pneumovax 23 0.5mL Injection ONCE IM NOW Please provide post injection instructions to patient

Given
 Partial Given
 Refused
 Withheld
 Wasted

Notes

Location Given: Initials

Go Back Create

Complete the following documentation for administering Pneumovax:

- a. Date: current date and time
- b. Medication administration: select the **[GIVEN]** radio button and in the *Dosage* prompt box enter 0.5 mL
- c. Notes: include the manufacturer ID number and Expiration date on the vial of Pneumovax for tracing, ex: 12345, exp: 4/30/2021
- d. Initials: enter your initials

EMR Patient Portfolio Anthony, Margaret

Current Simulation Time for this patient: Friday, 05/08/2020 16:27

Name: Anthony, Margaret
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Date: 05/08/2020 16:03

0.5 ml Pneumovax 23 0.5mL Injection ONCE IM NOW Please provide post injection instructions to patient

Given
 Partial Given
 Refused
 Withheld
 Wasted

Notes: 12345, exp: 4/30/2021

Location Given: Type II Right Central, WI Initials: JS

Go Back Create

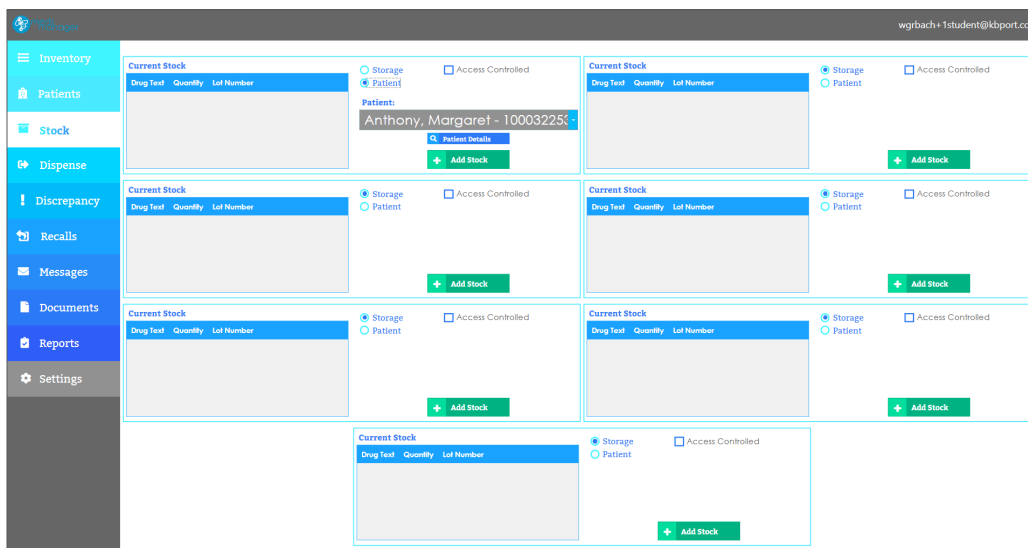
14. Select **[CREATE]**.
15. Repeat the above steps with any vital information until you are comfortable with the form.

16. Repeat the above steps with any vital information until you are comfortable with the form.
17. Close the patient chart by clicking the X on the *Margaret Anthony* tab.
18. Logout by locating the dropdown with your name at the top right of the page, select *Sign Out*.

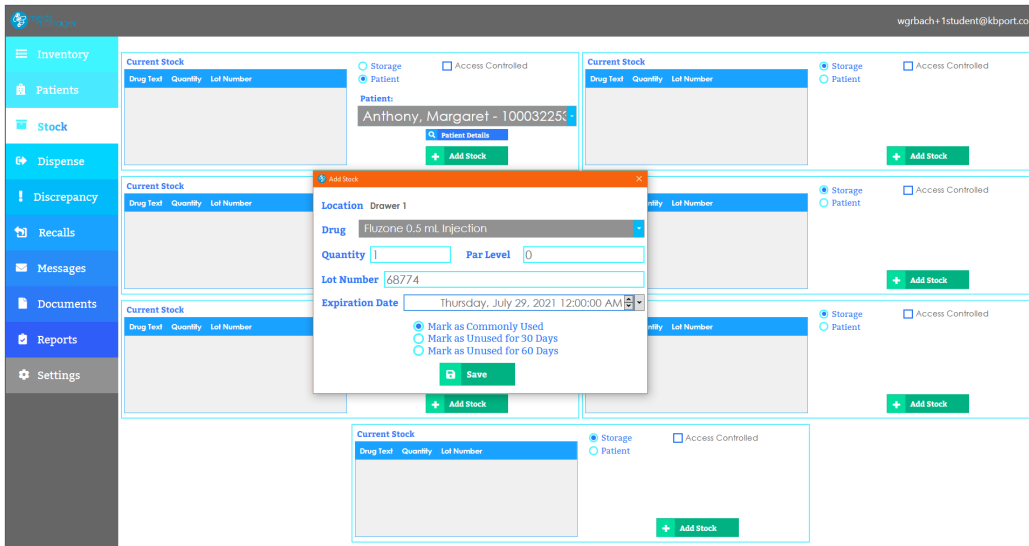
Additional Documentation Practice

For additional practice, your instructor may have shared use of Virtual MedsManager™ to permit practicing Medication Administration virtually without a barcode scanner present. If not, you will have to download Virtual MedsManager™ to proceed. The documentation of the medication administration is exactly the same, but the document format is different.

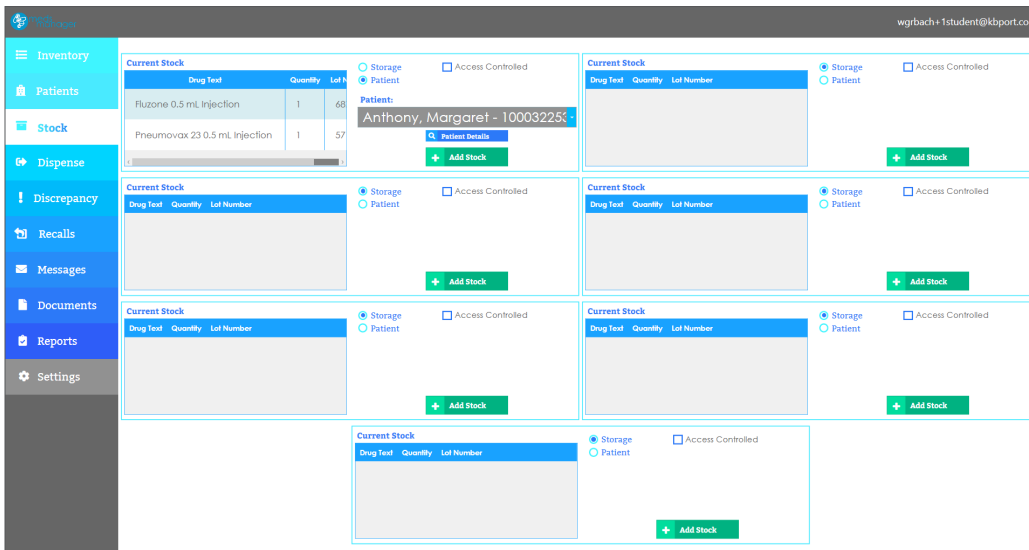
1. Open Virtual MedsManager™.
2. At the login screen, enter your username and password (the same as your SimEMR® account). Select **[LOGIN]**.
3. Select **[STOCK]** to add medications to the formulary. You will select the **[PATIENT]** radio button and locate *Margaret Anthony* from the dropdown.



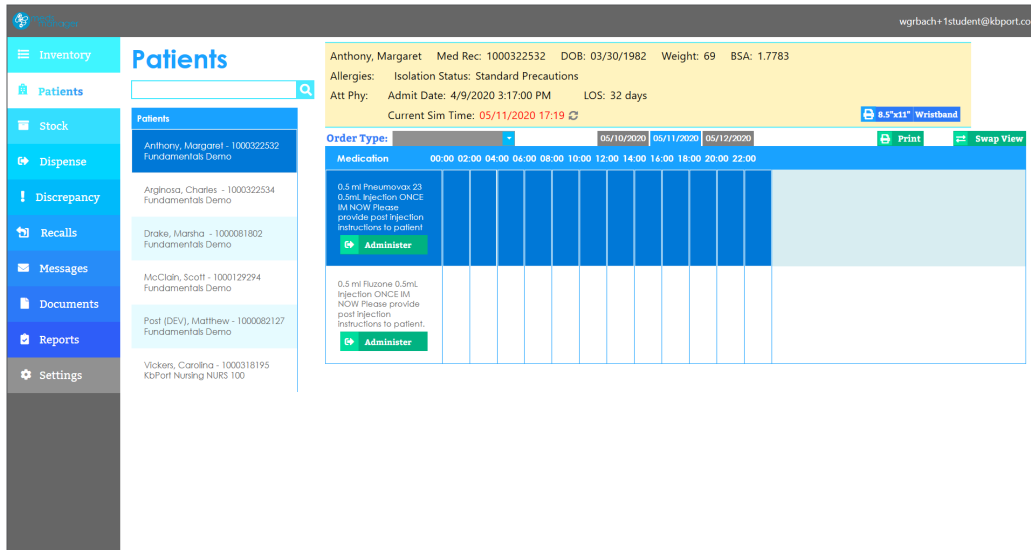
4. Select **[ADD STOCK]**.
5. Fill in details for Fluzone and select **[SAVE]**.



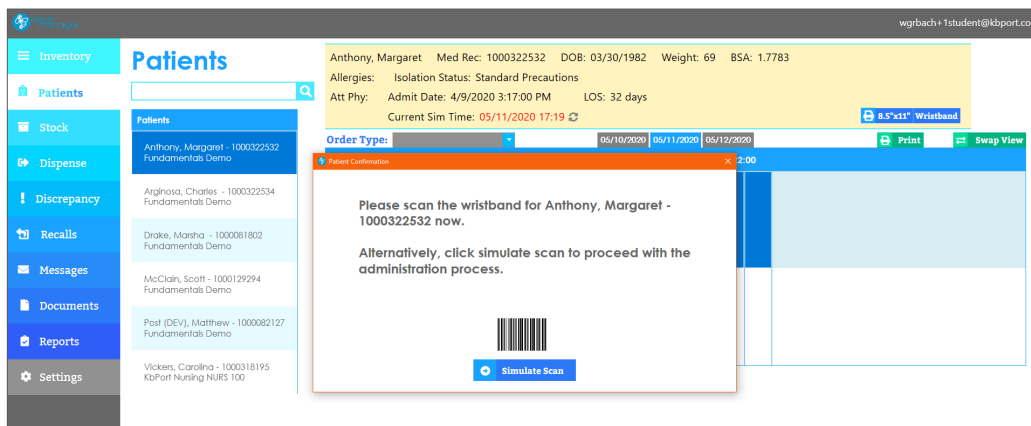
6. Repeat the two previous steps for Pneumovax.



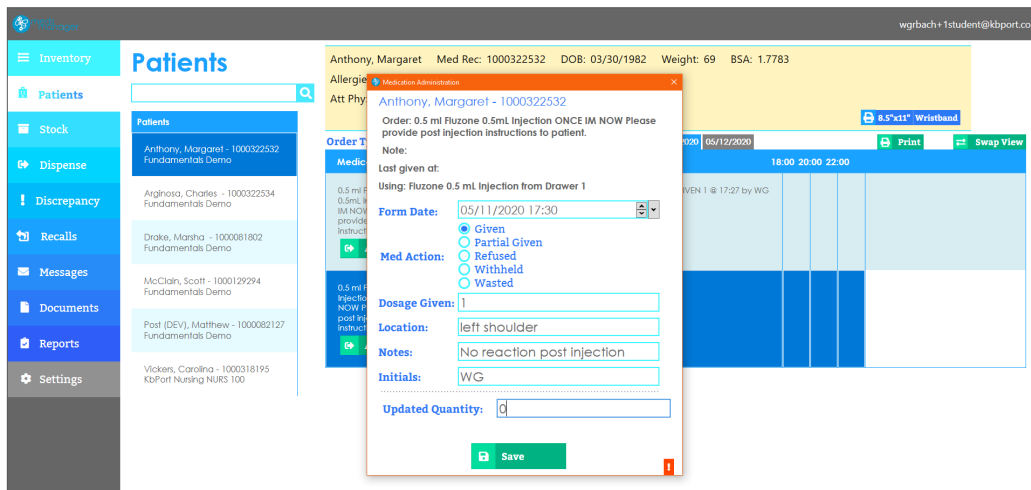
7. Select **[PATIENT TAB]** to open a list of patient records assigned to you by your instructor.
8. Select **[MARGARET ANTHONY]**.
9. You will be redirected to the MAR for Margaret Anthony.
10. Select **[ADMINISTER]**.



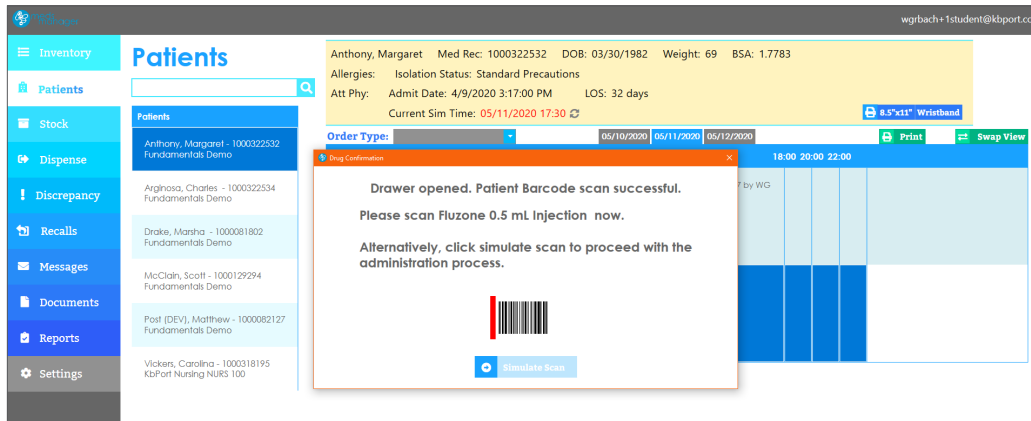
11. You will be prompted to scan the patient wristband. Select [\[SIMULATE SCAN\]](#).



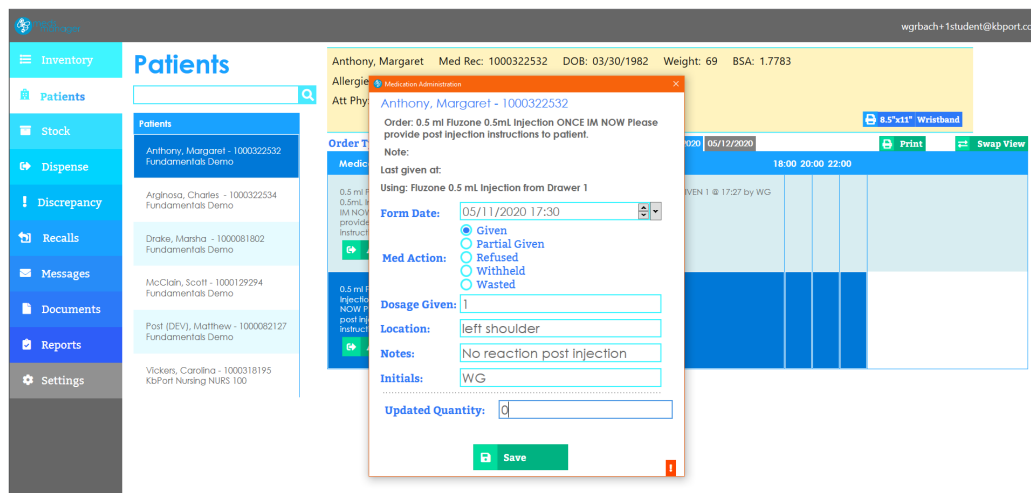
12. Fill in medication information for Fluzone. Select [\[SAVE\]](#).



13. You will be prompted to scan the medication. Select **[SIMULATE SCAN]**.



14. Repeat steps 10-13. Select **[SAVE]**.



15. Repeat the above steps with any vital information until you are comfortable with the administration steps.
16. Logout by locating the dropdown with your name at the top right of the page, select *Sign Out*.

Patient Kit Addendum

MARGARET ANTHONY

Name: Margaret Anthony **DOB:** 3/30/1982 **Gender:** M__ F__ X__ **Age:** 37

Race: Black **Weight:** 69 kg/137 lbs **Height:** 165 cm/5'5"

Religion: Bap **CODE STATUS:** **Advance Directive:** Y__ N__ X__

Major Support: Paul Anthony **Phone:** 412-555-1212 **Isolation Status:** N/A

Allergies & Reactions: Denies

Immunizations: Normal Childhood, no boosters to date

Attending Physician/Team: PCP John Miller, MD

Primary Diagnosis: Denies issues, Pre-Employment Exam

History of Present Illness: Denies issues, Pre-Employment Exam

PMH: Hypertension, GERD

Surgeries/Procedures: NONE

Social History: Married to Paul Anthony, live in Maryland in 2 story home. No children, siblings live close by. Margaret has been hired to work at the local Target Store as department manager. Denies alcohol or drug use, smokes half pack of cigarettes/day. Husband is employed at local hospital as a supply chain manager. Margaret is covered by her husband's insurance at this time.

Data: Blood pressure: 142/92, Heart Rate: 85, Respirations: 22, Temp: 37.0° C

Review of Systems: Normal physical exam data

CNS: Alert, calm

Cardiovascular: Heart rate regular rhythm, Pulses full and = throughout

Pulmonary: "smokers" cough, lungs clear, no supplemental O2, no SOB

Gastrointestinal: GERD, ABD soft round, nontender

Hepato/Renal: Denies issues

Endocrine: Denies issues

Hematologic: Denies issues

Musculoskeletal: Denies issues

Integumentary: Dry skin, otherwise intact, Capillary refill WNL

Developmental: Non- contributory

Psychological: Pleasant, talkative, excited for new job, denies concerns for risks or depressive symptoms

Current Medications:

Medication (Generic/Trade)	Dose Available	Dose Ordered	Route	Frequency	Parameters/ Instructions	Provider Ordering
Metoprolol		25 mg	PO	BID		Miller, MD
Melatonin		1 cap	PO	HS	OTC	self

Laboratory Values, Radiology, or Diagnostic Testing:

Arterial Blood Gas	Chemistry	Chemistry	Hematology	Microbiology	Toxicology
pH:	Na:	AST:	WBC:	Blood C/S:	Dig:
paO2:	K:	ALT:	Hgb:	Urine C/S	ETOH:
pcO2:	Cl:	Amylase:	Hct:	Sput C/S	Opioids:
HCO3:	Co2:	Lipase:	Platelets:	VRE:	Coc:
BE/D:	BUN:	Tot Prot:	ESR:	MRSA:	Amph/Meth:
Lactate:	Cr:	Albumin:	Other:	C-Diff:	PCP;
PA Sat:	Ca:	LDL:		GNR:	THC:
Coagulation	Mg:	HDL:	Other Tests	MDRO:	Lidocaine:
PT:	Phos:	Trig:	CBS:	VDRL:	MetHgb:
PTT:	Gluc:	CPK total:		GBS:	
INR:	HgA1C:	CPK MB:			
d-Dimer	Lactate:	Troponin:			

CXR:

CT/MRI:

US:

EEG:

ECG:

Other:

SimEMR® Forms

Below contains an explanation of how the patient is entered into SimEMR®, as well as the reasoning behind each of the patient forms created as a part of that process.

LAB TIP



Simulation Start is the time the student first begins the encounter. This notation is part of SimEMR's innovative SimTime™ system. *Simulation Start* will be replaced in the patient's chart by whatever time the encounter begins, and all other dates are described relative to that time. For example, if an encounter begins 04/15/2017 at 13:00, an event with a time of 1 day before simulation start would display a date of 04/14/2017.

Admission

at *Simulation Start*

Description: Blank form for learner input

Purpose: Allows the learner to collect basic patient information and document admission accurately

Admission Assessment

at *Simulation Start*

Description: Blank form for learner input

Purpose: Allows the learner to collect necessary information to document admission accurately. Learners may collect demographic information, visit-specific information, as well as family medical history, allergies, vaccinations, and other important information that may impact patient care later.

Insurance

at *Simulation Start*

Description: Blank form for learner input

Purpose: Allows the learner to collect insurance information from patient Margaret

SOAP

at *Simulation Start*

Description: Blank form for learner input

Purpose: Allows the learner to collect assessment information from patient Margaret

Pain Assessment

at *Simulation Start*

Description: Blank form for learner input

Purpose: Allows the learner to collect Pain Assessment information from patient Margaret

Advance Directive

at *Simulation Start*

Description: Blank form for learner input

Purpose: Allows the learner to collect Advance Directive information from patient Margaret

Provider's Orders

at *Simulation Start*

Description: Order for urine sample, vital signs, height and weight

Purpose: Allows the learner to check things typically required for a physical examination

Vital Signs

at *Simulation Start*

Description: Blank form for learner input

Purpose: Allows the learner to check vitals