

# Intro Level SimEMR® Use Cases

## 3.3 HIGH SCHOOL PROGRAMS

### Introduction

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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
- Review of information
- Hands on practice
- Documentation of clinical data

#### Time

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

# Patient Case & Scenario Overview

## HIGH SCHOOL PROGRAMS

**Patient Profile Name:** Hugo Stone    **DOB:** 05/19/1958

**Scenario:** This is a basic patient case that involves Mr. Hugo Stone, a 62-year-old male who was brought to the emergency room by his wife after multiple bee stings. Mr. Stone was working in his yard where he unknowingly disrupted a nest and was stung by wasps to multiple areas of his upper body. He has developed a growing rash, and started noting shortness of breath, at which point he called his wife for assistance. Mr. Stone has been otherwise healthy to this point.

**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 similar terms. 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 High School learner to common documentation practices within an Electronic Medical Record, SimEMR®.

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

- a. Introduction to an EMR: Identifying the importance of using one as well as safety factors
- b. Navigate the components of SimEMR®
- c. Engage with common medical terminology in an EMR
- d. Complete basic documentation practices

### Patient Profile - Hugo Stone

### Getting Started

1. Review the Patient Kit Addendum on pages 9 – 11.
2. Create the Patient Profile in SimEMR®.

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 Hugo Stone 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 Hugo, and select the **[⚙️]** on the patient row. Select **[📄 EDIT]**.
        - h. Select **[+ ADD NEW FORM]**. to add all forms according to Hugo'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.

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 Hugo to. Click **[SELECT COURSE]**.
  - c. Locate Hugo 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.

## Learner Assignment: Patient Profile - Hugo Stone

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.

As novice learners considering a health care career, (Nursing, EMS, or others), most health care jobs require the ability to obtain vital signs from a patient. Your instructors or future educational programs will provide that learning opportunity to refine your skills in obtaining this critical data.

Once you have the hands-on skill mastered, the ability to document that information accurately is key to assuring the patient care trajectory proceeds as well as possible. Different formats of documentation are available and upon obtaining a health care position in the future, you will be trained on the specific documentation platform (paper or electronic) being used by the healthcare facility you work in. The knowledge and skills of what to document and where is the goal of the following learning exercises.

### Learning Objectives

- Identify the importance of using an EMR
- Safety factors required of an EMR
- Navigate the components of SimEMR®
- Engage with common medical terminology in an EMR
- Perform basic documentation in SimEMR®

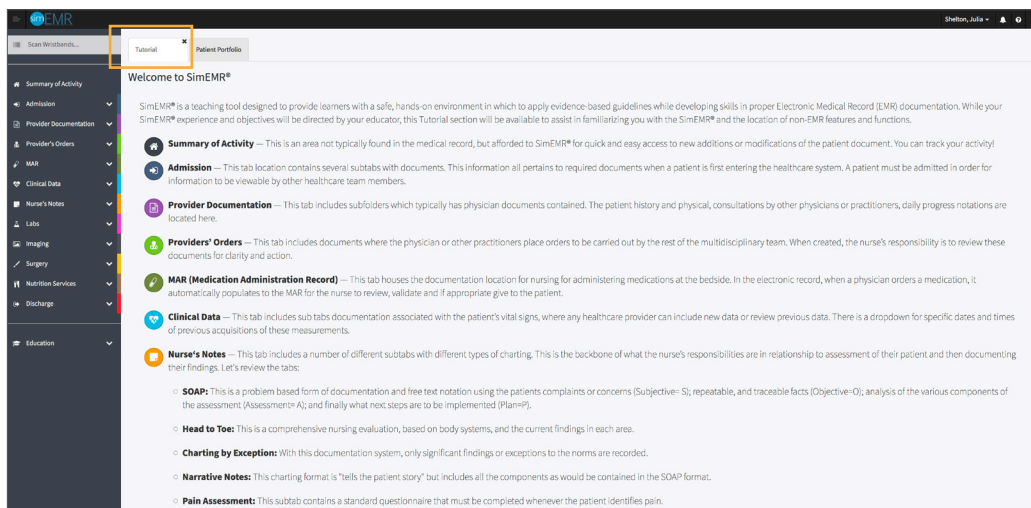
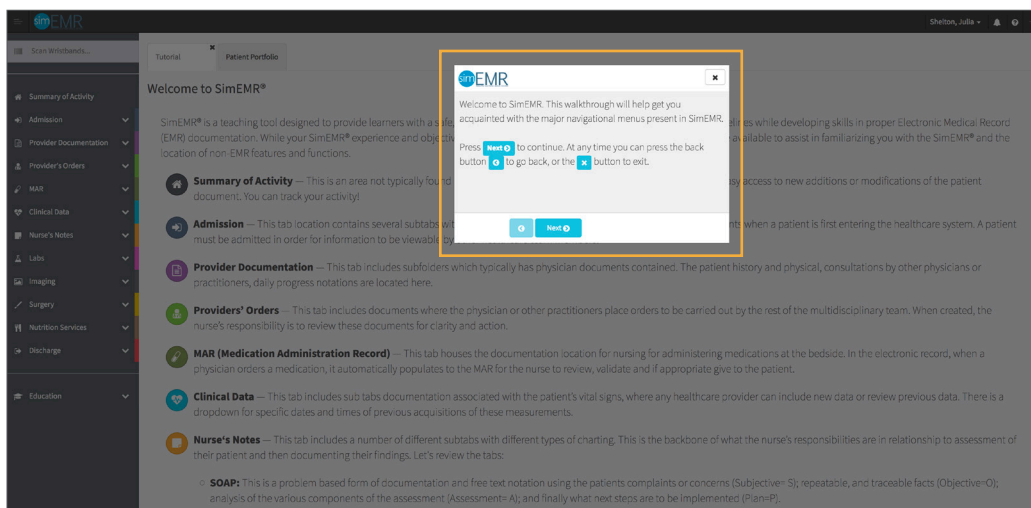
### Resources Needed

- SimEMR® login
- Internet access
- Web capable device

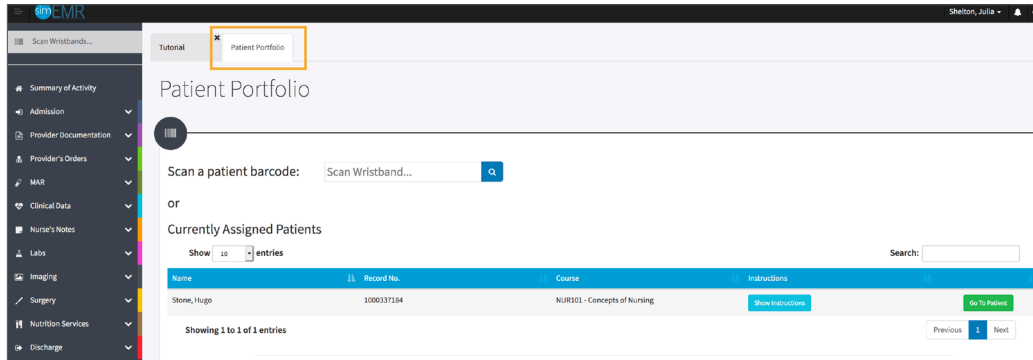
## Learner Actions: Locating Information in an Electronic Medical Record

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 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.

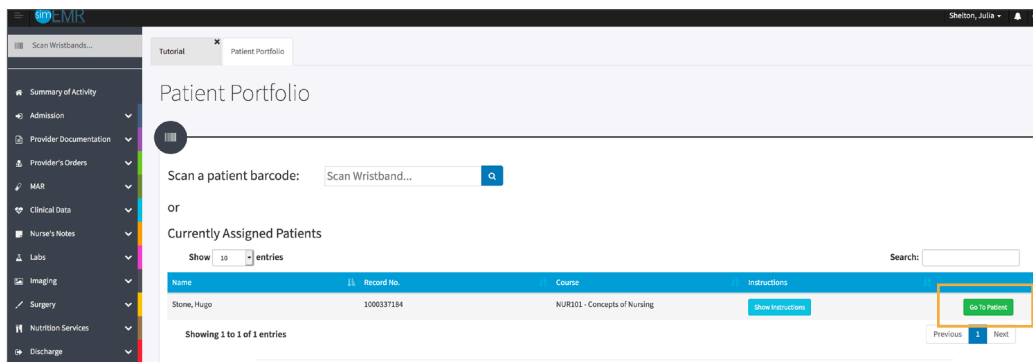
1. Open SimEMR® in a web browser.
2. At the login screen, enter your username and password. Select **[LOGIN]**.
3. If needed, review the tutorial options presented in the *Tutorial* tab.
4. Review and familiarize yourself with the tutorial options in the pop up as well as the *Tutorial* page.



- Locate the *Patient Portfolio* tab. This will house any patient profile records assigned to you. Current assignments will be presented at the top of the page, any past completed assignments will be located at the bottom of the page for reference and review at any time.

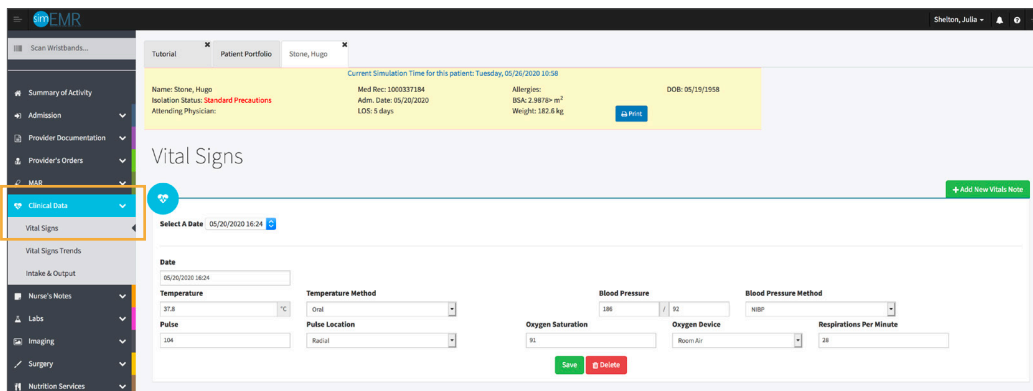


- Locate Hugo Stone and select **[GO TO PATIENT]**.

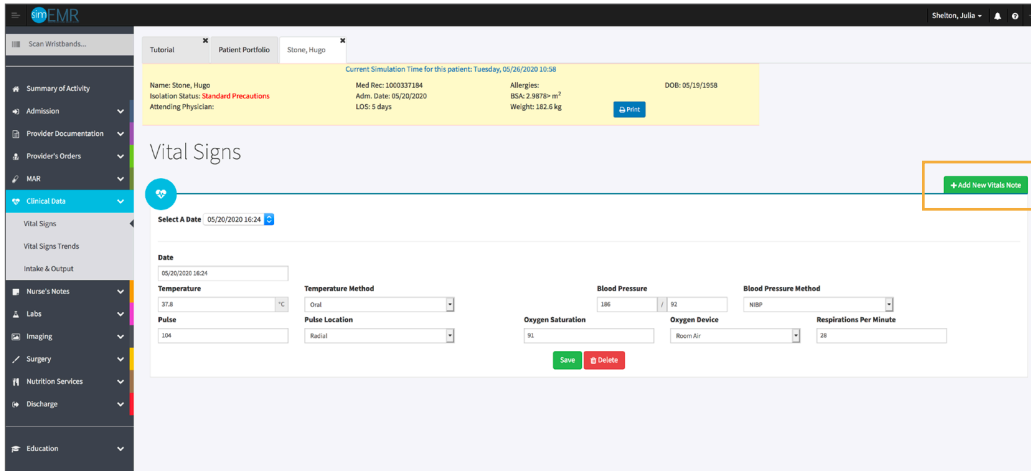


- Click **[CLINICAL DATA]** from the left menu and then select **[VITAL SIGNS]**. You will see the most recent vitals documented. Past data can be located by using the *Select A Date* dropdown.

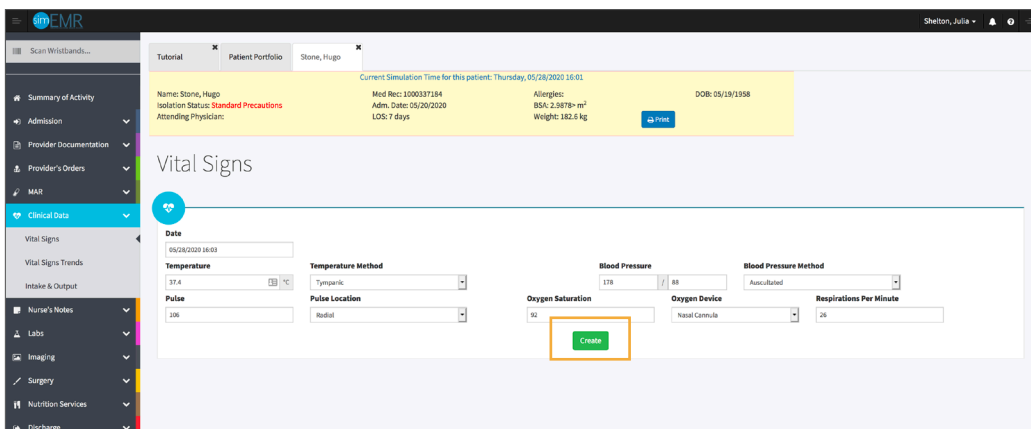
The *Vital Sign* page contains information specific to Mr. Stone in this case. He has presented to the hospital with signs of an allergic reaction to his insect stings.



8. Validate Hugo Stone is the chart you are working in.
9. Select **[+ ADD NEW VITALS NOTE]**.

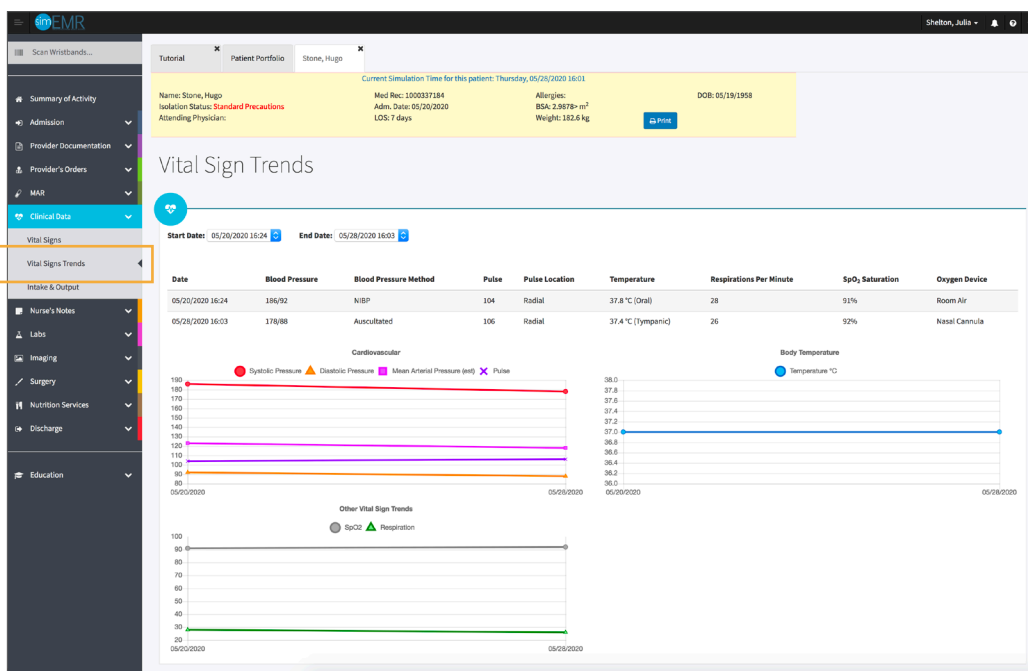


10. You will be redirected to a blank form. Complete the following documentation:
  - a. Add the current date and time by clicking in the *Date* field.
  - b. Enter 37.4° C in the *Temperature* field and select **[TYMPANIC]** from the *Temperature Method* dropdown.
  - c. Enter 106 in the *Pulse* field and select **[RADIAL]** from the *Pulse Location* dropdown.
  - d. Enter 178/88 in the *Blood Pressure* field and select **[AUSCULTATED]** from the *Blood Pressure Method* dropdown.
  - e. Enter 92 in the *Oxygen Saturation* field and select **[NASAL CANNULA]** from the *Oxygen Device* dropdown. Enter 26 in the *Respirations Per Minute* field.
11. Select **[CREATE]**.



12. Repeat the above steps with any vital information until you are comfortable with the form.
13. Click **[CLINICAL DATA]** from the left menu and then select **[VITAL SIGNS TRENDS]** to review the and determine the patient's physical status and changes over time.

The most recent data sets are listed chronologically with the most recent being at the top of the list. The graphs represent a variety of different data points, such as SpO2 and pulse.



14. Close the patient chart by clicking the X on the *Hugo Stone* tab.
15. Logout by locating the dropdown with your name at the top right of the page, select *Sign Out*.



# Patient Kit Addendum

## HUGO STONE

**Name:** Hugo Stone                      **DOB:** 5/19/1958                      **Gender:** M\_x F\_\_                      **Age:** 62  
**Race:** Caucasian                      **Weight:** 69 kg/137 lbs                      **Height:** 165 cm/5'5"  
**Religion:** Catholic                      **CODE STATUS:**                      **Advance Directive:** Y\_\_ N\_\_  
**Major Support:** Mary, wife                      **Phone:** 814-555-1212                      **Isolation Status:** Std Precautions

**Allergies & Reactions:** None Known

**Immunizations:** Tetanus booster, 1985

**Attending Physician/Team:** Cardiologist: Jason Miller, MD

**Primary Diagnosis:** Insect stings with possible allergic reaction

**History of Present Illness:** Pt doing yard work at his home, disrupted a wasp nest accidentally and was stung multiple times to upper body. Initially no sequelae but noted reddened rash within 30-45 minutes and began having shortness of breath. Called to his wife for assistance.

**PMH:** Hypertension, Angina Pectoris, "heartburn sometimes that I take Pepcid for"

**Surgeries/Procedures:** NONE

**Social History:** Married to wife Mary Stone for 35 years, 3 children not living in the home. Denies tobacco use, but former heavy cigar smoker. Rare social alcohol use admitted, denies drug use other than those prescribed. Couple live in 2 story home in local area.

**Data:** Blood pressure: 168/92, Heart Rate: 104, Respirations: 28, Temp: 37.8° C

### Review of Systems:

**CNS:** PERRLA, follows commands. Denies visual or auditory changes recently. No fall history. Ambulation not tested but patient walked into triage on his own. Hand grasps and pedal pushes = in strength. Admits to some occasional elbow pain due to arthritis.

**Cardiovascular:** Regular rate and rhythm, no murmurs, rubs or gallops on auscultation. Tachycardia noted. Peripheral pulses equal throughout and full. No edema noted. Denies chest pain prior to event or current. Skin is erythematous to upper torso and arms, non-blistered. Mild diaphoresis noted.

**Pulmonary:** Lungs clear to auscultation with few inspiratory wheezes, no oxygen in use presently. Mild tachypnea noted. States occasionally difficulty to get full inspiration since event. SpO2 91+ %. 2 Liters nasal cannula applied.

**Gastrointestinal:** Abdomen flat, soft. Normoactive bowel sounds noted in all quads. Denies N/V/C/D. Denies difficulty with meals, but admits to post-prandial upper GI discomfort. Relieved with Pepcid OTC, prn.

**Hepato/Renal:** States voids without difficulty

**Endocrine:** No history of diabetes or thyroid issues

**Hematologic:** Non-contributory

**Musculoskeletal:** Hand grasps = and full strength, dorsi-plantar flexation is equal and full.

**Integumentary:** Dry skin, otherwise intact, Capillary refill WNL

**Developmental:** N/A, well developed male, behavior is appropriate to situation

**Psychological:** Noncontributory at present, pt in mild distress due to low-level insect bite reaction

## Current Medications:

Patient verbalized medications

Medication (Generic/Trade)	Dose Available	Dose Ordered	Route	Frequency	Parameters/ Instructions	Provider Ordering
Metoprolol (LOPRESSOR)	25 mg	same	PO	2x Daily		Miller
Famotidine (PEPCID)	10 mg	OTC	PO	As Needed	When heartburn happens	Self
Nitroglycerine Patch (NitroDUR o.3%)	1 patch		TOP	Daily	Change at Night	Miller

## 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:
<b>Coagulation</b>	Mg:	HDL:	<b>Other Tests</b>	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: Pending Order

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.

### At Simulation Start

**Purpose:** All activities are designed to allow the learner to evaluate initial findings

#### Insurance

**Description:** All insurance information is documented including the patient name, address, employer and employer phone

#### Diagnostic Strip

**Description:** A Diagnostic Strip report is available

#### SOAP

**Description:** All *Subjective, Objective, Assessment, and Plan* fields are complete

#### Consent for Treatment

**Description:** Shows the patient and witness have signed the form

#### Admission

**Description:** Info selected include *Standard Precautions* check box under Isolation Status, the admitting physicians and diagnosis (*Insect stings w. possible allergic reaction*), as well as *Patient Information*

#### Progress Notes

**Description:** The patient's status is documented

### Provider's Orders

**Description:** Order for 50 mg Demo Dose® Diphenhydramin (Benadr) 50mg/1mL Injection ONCE IV NOW, 25 mg Demo Dose® Benadr 25mg Tablet 8 HR PO PRN Itching, 1000 mL Normal Saline 0.9% Solution 1000mL IV ONCE IV Continuous Infusion

#### Labs

**Description:** Chemistry, Hematology, and Coagulation labs were all documented

#### Vital Signs

**Description:** Vital inputs for include *Temperature (37.8° C), Temperature Method (Oral), Blood Pressure (186/92), Blood Pressure Method (NIBP), Pulse (104), Pulse Location (Radial), Oxygen Saturation (91), Oxygen Device (Room Air), Respirations per Minute (28)*