Welcome to Virtual Clinical Excursions—Medical-Surgical, a virtual hospital setting in which you can work with multiple complex patient simulations and also learn to access and evaluate the information resources that are essential for high-quality patient care. The virtual hospital, Pacific View Regional Hospital, has realistic architecture and access to patient rooms, a Nurses’ Station, and a Medication Room.

BEFORE YOU START

Make sure you have your textbook nearby when you use Virtual Clinical Excursions. You will want to consult topic areas in your textbook frequently while working with the virtual hospital and workbook.

HOW TO SIGN IN

- Enter your name on the Student Nurse identification badge.
- Now choose one of the four periods of care in which to work. In Periods of Care 1 through 3, you can actively engage in patient assessment, entry of data in the electronic patient record (EPR), and medication administration. Period of Care 4 presents the day in review. Highlight and click the appropriate period of care. (For this quick tour, choose Period of Care 1: 0730-0815.)
- This takes you to the Patient List screen (see the How to Select a Patient section below). Only the patients on the Medical-Surgical Floor are available. Note that the virtual time is provided in the box at the lower left corner of the screen (0730, since we chose Period of Care 1).

Note: If you choose to work during Period of Care 4: 1900-2000, the Patient List screen is skipped since you are not able to visit patients or administer medications during the shift. Instead, you are taken directly to the Nurses’ Station, where the records of all the patients on the floor are available for your review.
PATIENT LIST

MEDICAL-SURGICAL UNIT

Harry George (Room 401)
Osteomyelitis—A 54-year-old Caucasian male admitted from a homeless shelter with an infected leg. He has complications of type 2 diabetes mellitus, alcohol abuse, nicotine addiction, poor pain control, and complex psychosocial issues.

Jacqueline Catanazaro (Room 402)
Asthma—A 45-year-old Caucasian female admitted with an acute asthma exacerbation and suspected pneumonia. She has complications of chronic schizophrenia, noncompliance with medication therapy, obesity, and herniated disc.

Piya Jordan (Room 403)
Bowel obstruction—A 68-year-old Asian female admitted with a colon mass and suspected adenocarcinoma. She undergoes a right hemicolectomy. This patient’s complications include atrial fibrillation, hypokalemia, and symptoms of meperidine toxicity.

Clarence Hughes (Room 404)
Degenerative joint disease—A 73-year-old African-American male admitted for a left total knee replacement. His preparations for discharge are complicated by the development of a pulmonary embolus and the need for ongoing intravenous therapy.

Pablo Rodriguez (Room 405)
Metastatic lung carcinoma—A 71-year-old Hispanic male admitted with symptoms of dehydration and malnutrition. He has chronic pain secondary to multiple subcutaneous skin nodules and psychosocial concerns related to family issues with his approaching death.

Patricia Newman (Room 406)
Pneumonia—A 61-year-old Caucasian female admitted with worsening pulmonary function and an acute respiratory infection. Her chronic emphysema is complicated by heavy smoking, hypertension, and malnutrition. She needs access to community resources such as a smoking cessation program and meal assistance.
HOW TO SELECT A PATIENT

- You can choose one or more patients to work with from the Patient List by checking the box to the left of the patient name(s). For this quick tour, select Piya Jordan and Pablo Rodriguez. (In order to receive a scorecard for a patient, the patient must be selected before proceeding to the Nurses’ Station.)
- Click on Get Report to the right of the medical records number (MRN) to view a summary of the patient’s care during the 12-hour period before your arrival on the unit.
- After reviewing the report, click on Go to Nurses’ Station in the right lower corner to begin your care. (Note: If you have been assigned to care for multiple patients, you can click on Return to Patient List to select and review the report for each additional patient before going to the Nurses’ Station.)

Note: Even though the Patient List is initially skipped when you sign in to work for Period of Care 4, you can still access this screen if you wish to review the shift report for any of the patients. To do so, simply click on Patient List near the top left corner of the Nurses’ Station (or click on the clipboard to the left of the Kardex). Then click on Get Report for the patient(s) whose care you are reviewing. This may be done during any period of care.
HOW TO FIND A PATIENT’S RECORDS

NURSES’ STATION

Within the Nurses’ Station, you will see:

1. A clipboard that contains the patient list for that floor.
2. A chart rack with patient charts labeled by room number, a notebook labeled Kardex, and a notebook labeled MAR (Medication Administration Record).
3. A desktop computer with access to the Electronic Patient Record (EPR).
4. A tool bar across the top of the screen that can also be used to access the Patient List, EPR, Chart, MAR, and Kardex. This tool bar is also accessible from each patient’s room.
5. A Drug Guide containing information about the medications you are able to administer to your patients.
6. A Laboratory Guide containing normal value ranges for all laboratory tests you may come across in the virtual patient hospital.
7. A tool bar across the bottom of the screen that can be used to access the Floor Map, patient rooms, Medication Room, and Drug Guide.

As you run your cursor over an item, it will be highlighted. To select, simply click on the item. As you use these resources, you will always be able to return to the Nurses’ Station by clicking on the Return to Nurses’ Station bar located in the right lower corner of your screen.
**MEDICATION ADMINISTRATION RECORD (MAR)**

The MAR icon located on the tool bar at the top of your screen accesses current 24-hour medications for each patient. Click on the icon and the MAR will open. *(Note: You can also access the MAR by clicking on the MAR notebook on the far right side of the book rack in the center of the screen.)* Within the MAR, tabs on the right side of the screen allow you to select patients by room number. Be careful to make sure you select the correct tab number for your patient rather than simply reading the first record that appears after the MAR opens. Each MAR sheet lists the following:

- Medications
- Route and dosage of each medication
- Times of administration of each medication

*Note:* The MAR changes each day. Expired MARs are stored in the patients’ charts.
CHARTS

To access patient charts, either click on the Chart icon at the top of your screen or anywhere within the chart rack in the center of the Nurses’ Station screen. When the close-up view appears, the individual charts are labeled by room number. To open a chart, click on the room number of the patient whose chart you wish to review. The patient’s name and allergies will appear on the left side of the screen, along with a list of tabs on the right side of the screen, allowing you to view the following data:

- Allergies
- Physician’s Orders
- Physician’s Notes
- Nurse’s Notes
- Laboratory Reports
- Diagnostic Reports
- Surgical Reports
- Consultations
- Patient Education
- History and Physical
- Nursing Admission
- Expired MARs
- Consents
- Mental Health
- Admissions
- Emergency Department

Information appears in real time. The entries are in reverse chronologic order, so use the down arrow at the right side of each chart page to scroll down to view previous entries. Flip from tab to tab to view multiple data fields or click on Return to Nurses’ Station in the lower right corner of the screen to exit the chart.

![Chart Example](image-url)
**Electronic Patient Record (EPR)**

The EPR can be accessed from the computer in the Nurses’ Station or from the EPR icon located in the tool bar at the top of your screen. To access a patient’s EPR:

- Click on either the computer screen or the EPR icon.
- Your username and password are automatically filled in.
- Click on **Login** to enter the EPR.
- **Note**: Like the MAR, the EPR is arranged numerically. Thus when you enter, you are initially shown the records of the patient in the lowest room number on the floor. To view the correct data for your patient, remember to select the correct room number, using the drop-down menu for the Patient field at the top left corner of the screen.

The EPR used in Pacific View Regional Hospital represents a composite of commercial versions being used in hospitals. You can access the EPR:

- to review existing data for a patient (by room number).
- to enter data you collect while working with a patient.

The EPR is updated daily, so no matter what day or part of a shift you are working, there will be a current EPR with the patient’s data from the past days of the current hospital stay. This type of simulated EPR allows you to examine how data for different attributes have changed over time, as well as to examine data for all of a patient’s attributes at a particular time. The EPR is fully functional (as it is in a real-life hospital). You can enter such data as blood pressure, breath sounds, and certain treatments. The EPR will not, however, allow you to enter data for a previous time period. Use the arrows at the bottom of the screen to move forward and backward in time.

![EPR Screen Screenshot](image-url)
At the top of the EPR screen, you can choose patients by their room numbers. In addition, you have access to 17 different categories of patient data. To change patients or data categories, click the down arrow to the right of the room number or category.

The categories of patient data in the EPR are as follows:

- Vital Signs
- Respiratory
- Cardiovascular
- Neurologic
- Gastrointestinal
- Excretory
- Musculoskeletal
- Integumentary
- Reproductive
- Psychosocial
- Wounds and Drains
- Activity
- Hygiene and Comfort
- Safety
- Nutrition
- IV
- Intake and Output

Remember, each hospital selects its own codes. The codes used in the EPR at Pacific View Regional Hospital may be different from ones you have seen in your clinical rotations. Take some time to acquaint yourself with the codes. Within the Vital Signs category, click on any item in the left column (e.g., Pain: Characteristics). In the far-right column, you will see a list of code meanings for the possible findings and/or descriptors for that assessment area.

You will use the codes to record the data you collect as you work with patients. Click on the box in the last time column to the right of any item and wait for the code meanings applicable to that entry to appear. Select the appropriate code to describe your assessment findings and type it in the box. (Note: If no cursor appears within the box, click on the box again until the blue shading disappears and the blinking cursor appears.) Once the data are typed in this box, they are entered into the patient’s record for this period of care only.

To leave the EPR, click on Exit EPR in the bottom right corner of the screen.
VISITING A PATIENT

From the Nurses’ Station, click on the room number of the patient you wish to visit (in the tool bar at the bottom of your screen). Once you are inside the room, you will see a still photo of your patient in the top left corner. To verify that this is the correct patient, click on the Check Armband icon to the right of the photo. The patient’s identification data will appear. If you click on Check Allergies (the next icon to the right), a list of the patient’s allergies (if any) will replace the photo.

A virtual clock is provided in the upper left corner of the room to monitor your progress in real time. (Note: The fast-forward icon within the virtual clock will advance the time by 2-minute intervals when clicked.)

- The tool bar across the top of the screen allows you to check the Patient List, access the EPR to check or enter data, and view the patient’s Chart, MAR, or Kardex.
- The Take Vital Signs icon allows you to measure the patient’s up-to-the-minute blood pressure, oxygen saturation, temperature, heart rate, respiratory rate, and pain level.
- Each time you enter a patient’s room, you are given an Initial Observation report to review (in the text box under the patient’s photo). These notes are provided to give you a “look” at the patient as if you had just stepped into the room. You can also click on the Initial Observations icon to return to this box from other views within the patient’s room. To the right of this icon is Clinical Alerts, a resource that allows you to make decisions about priority medication interventions based on emerging data collected in real time. Check this screen throughout your period of care to avoid missing critical information related to recently ordered or STAT medications.
- Clicking on Patient Care opens up three specific learning environments within the patient room: Physical Assessment, Nurse-Client Interactions, and Medication Administration.
- To perform a Physical Assessment, choose a body area (such as Head & Neck) from the column of yellow buttons. This activates a list of system subcategories for that body area (e.g., see Sensory, Neurologic, etc. in the green boxes). After you select the system you
wish to evaluate, a brief description of the assessment findings will appear in a box to the right. A still photo provides a “snapshot” of how an assessment of this area might be done or what the finding might look like. For every body area, you can also click on Equipment on the right side of the screen.

- To the right of the Physical Assessment icon is Nurse-Client Interactions. Clicking on this icon will reveal the times and titles of any videos available for viewing. (Note: If the video you wish to see is not listed, this means you have not yet reached the correct virtual time to view that video. Check the virtual clock; you may return to access the video once its designated time has occurred—as long as you do so within the same period of care. Or you can click on the fast-forward icon within the virtual clock to advance the time by 2-minute intervals. You will then need to click again on Patient Care and Nurse-Client Interactions to refresh the screen.) To view a listed video, click on the white arrow to the right of the video title. Use the control buttons below the video to start, stop, pause, rewind, or fast-forward the action or to mute the sound.

- Medication Administration is the pathway that allows you to review and administer medications to a patient after you have prepared them in the Medication Room. This process is also addressed further in the How to Prepare Medications section below and in Medications in the Detailed Tour. For additional hands-on practice, see Reducing Medication Errors below the Quick and Detailed Tours in your resources.

![Floor Menu](image)

### HOW TO QUIT, CHANGE PATIENTS, OR CHANGE PERIODS OF CARE

**How to Quit:** From most screens, you may click the Leave the Floor icon on the bottom tool bar to the right of the patient room numbers. (Note: From some screens, you will first need to click an Exit button or Return to Nurses’ Station before clicking Leave the Floor.) When the Floor Menu appears, click Exit to leave the program.

**How to Change Patients or Periods of Care:** To change patients, simply click on the new patient’s room number. (You cannot receive a scorecard for a new patient, however, unless you have already selected that patient on the Patient List screen.) To change to a new period of care or to restart the virtual clock, click on Leave the Floor and then on Restart the Program.
HOW TO PREPARE MEDICATIONS

From the Nurses’ Station or the patient’s room, you can access the Medication Room by clicking on the icon in the tool bar at the bottom of your screen to the left of the patient room numbers.

In the Medication Room you have access to the following (from left to right):

- A preparation area is located on the counter under the cabinets. To begin the medication preparation process, click on the tray on the counter or click on the Preparation icon at the top of the screen. The next screen leads you through a specific sequence (called the Preparation Wizard) to prepare medications one at a time for administration to a patient. However, no medication has been selected at this time. We will do this while working with a patient in A Detailed Tour. To exit this screen, click on View Medication Room.

- To the right of the cabinets (and above the refrigerator), IV storage bins are provided. Click on the bins themselves or on the IV Storage icon at the top of the screen. The bins are labeled Microinfusion, Small Volume, and Large Volume. Click on an individual bin to see a list of its contents. If you needed to prepare an IV medication at this time, you could click on the medication and its label would appear to the right under the patient’s name. (Note: You can Open and Close any medication label by clicking the appropriate icon.) Next, you would click Put Medication on Tray. If you ever change your mind or decide that you have put the incorrect medication on the tray, you can reverse your actions by highlighting the medication on the tray and then clicking Put Medication in Bin. Click Close Bin in the right bottom corner to exit. View Medication Room brings you back to a full view of the entire room.

- A refrigerator is located under the IV storage bins to hold any medications that must be stored below room temperature. Click on the refrigerator door or on the Refrigerator icon at the top of the screen. Then click on the close-up view of the door to access the medications. When you are finished, click Close Door and then View Medication Room.
To prepare controlled substances, click the **Automated System** icon at the top of the screen or click the computer monitor located to the right of the IV storage bins. A login screen will appear; your name and password are automatically filled in. Click **Login**. Select the patient for whom you wish to access medications; then select the correct medication drawer to open (they are stored alphabetically). Click **Open Drawer**, highlight the proper medication, and choose **Put Medication on Tray**. When you are finished, click **Close Drawer** and then **View Medication Room**.

Next to the Automated System is a set of drawers identified by patient room number. To access these, click on the drawers or on the **Unit Dosage** icon at the top of the screen. This provides a close-up view of the drawers. To open a drawer, click on the room number of the patient you are working with. Next, click on the medication you would like to prepare for the patient, and a label will appear, listing the medication strength, units, and dosage per unit. To exit, click **Close Drawer**; then click **View Medication Room**.

At any time, you can learn about a medication you wish to prepare for a patient by clicking on the **Drug** icon in the bottom left corner of the medication room screen or by clicking the **Drug Guide** book on the counter to the right of the unit dosage drawers. The **Drug Guide** provides information about the medications commonly included in nursing drug handbooks. Nutritional supplements and maintenance intravenous fluid preparations are not included. Highlight a medication in the alphabetical list; relevant information about the drug will appear in the screen below. To exit, click **Return to Medication Room**.

To access the MAR from the Medication Room and to review the medications ordered for a patient, click on the **MAR** icon located in the tool bar at the top of your screen and then click on the correct tab for your patient’s room number. You may also click the **Review MAR** icon in the tool bar at the bottom of your screen from inside each medication storage area.

After you have chosen and prepared medications, go to the patient’s room to administer them by clicking on the room number in the bottom tool bar. Inside the patient’s room, click **Patient Care** and then **Medication Administration** and follow the proper administration sequence.
PRECEPTOR’S EVALUATIONS

When you have finished a session, click on Leave the Floor to go to the Floor Menu. At this point, you can click on the top icon (Look at Your Preceptor’s Evaluation) to receive a scorecard that provides feedback on the work you completed during patient care.

Evaluations are available for each patient you selected when you signed in for the current period of care. Click on the Medication Scorecard icon to see an example.
The scorecard compares the medications you administered to a patient during a period of care with what should have been administered. Table A lists the correct medications. Table B lists any medications that were administered incorrectly.

Remember, not every medication listed on the MAR should necessarily be given. For example, a patient might have an allergy to a drug that was ordered, or a medication might have been improperly transcribed to the MAR. Predetermined medication “errors” embedded within the program challenge you to exercise critical thinking skills and professional judgment when deciding to administer a medication, just as you would in a real hospital. Use all your available resources, such as the patient’s chart and the MAR, to make your decision.

Table C lists the resources that were available to assist you in medication administration. It also documents whether and when you accessed these resources. For example, did you check the patient armband or perform a check of vital signs? If so, when?

You can click Print to get a copy of this report if needed. When you have finished reviewing the scorecard, click Return to Evaluations and then Return to Menu.
FLOOR MAP

To get a general sense of your location within the hospital, you can click on the Map icon found in the lower right corner of most of the screens in the Virtual Clinical Excursions—Medical-Surgical program. (Note: If you are following this quick tour step by step, you will need to Restart the Program from the Floor Menu, sign in again, and go to the Nurses’ Station to access the map.) When you click the Map icon, a floor map appears, showing the layout of the floor you are currently on, as well as a directory of the patients and services on that floor. As you move your cursor over the directory list, the location of each room is highlighted on the map (and vice versa). The floor map can be accessed from the Nurses’ Station, Medication Room, and each patient’s room.