Overview

MAR
The MAR (Medication Administration Record) shows all ordered medications and IVs. Order information is automatically transferred to the MAR from a signed Order. Medication administration is recorded in the MAR and a record of previous actions is found here.

1. Medication Order- All active orders appear in the MAR. All Medication orders, both active and discontinued, can also be seen in the Orders tab and Patient Summary.

2. Scheduled Medication Reminders appear at the appropriate times in the MAR, but only if the schedule times were entered on the Order form.

3. Documented actions appear with initials of the user. Click the action to see the exact time and dose/rate.

4. Previous and Next links allow you to see other administrations at earlier or later times.

Barcode Scanning
Barcode scanning for medication administration and patient identification is a requirement for acute healthcare facilities in order for them to meet certain Meaningful Use criteria. With EHR Tutor, students are able to practice barcoding procedures similar to those they will encounter in the workplace.

Documenting medication administration
The follow steps describe how to document medication administration with and without the use of barcode scanners. The alternative method of not using a scanner is shown in brown text.

1. Open a patient’s chart by clicking on the patient’s name in blue. You must have the patient’s chart open for scanning to be active.

2. Scan the patient’s barcode while you have any part of the patient’s chart open. (Without scanning- Click on MAR from the left menu will also open the patient’s MAR.) This will cause the patient’s MAR page to open.

3. Scan the medication barcode for any medication that is ordered for the patient. (Without scanning- Click in the box that corresponds to the correct medication and time. 
   **If the course is set for Barcode Warnings**, a pop-up window appears warning that barcode scanning is required to identify the patient and medications. Students must then select a reason for not scanning before they can continue, as described in the **Barcode Warnings** section below.)

The Medication Details window opens.

4. Enter all details of the medication administration in the appropriate fields.
   - **Actions**: Click the dropdown arrow and select an action. If you select Hold or Refused from the list, you should type a reason in the comments.
   - **Time**: The current date and time appears in these fields by default. Make sure you change them when necessary.
   - **Dose**: These two fields, dose and unit, should always be filled in for a medication. Complete the fields with a number in the first field and units in the second. Example: 2 mg
   - **Rate**: This field is only used for IVs. Complete both fields with a number in the first field and units in the second.
   - **Comments**: Use this text area for any further clarification needed.
   - **Submit**: Click this button to submit the data you entered and sign off this action.
Barcode Warnings

When you create or edit a Course, you have the option to have barcode warnings displayed or not.

Click Courses from the left menu. Then click the New Course button if creating a course, or Edit Course/Course Users for an existing course.

The Edit Course page opens.

You can check or uncheck the Barcode Warnings checkbox. This setting applies to all patient activities within the same course. This box should be checked to best simulate the current procedure related to barcode scanning being used in medical facilities.

- If not checked, meds can be administered without scanning barcodes and without receiving a warning that barcodes are required. Scanning can be used or not used for patients and meds, but there is no warning if not scanned.
- If checked, and if barcodes haven’t been scanned before attempting to administer a medication, students will receive warnings that barcode scanning is required to identify the patient and medications. Students can still continue without scanning, but they must select a reason first for not scanning.

The barcode warning appears as a pop-up. Students must select a reason from the dropdown list for not scanning barcodes and then click Submit. They can then continue without using a scanner, just as they would in the workplace if scanning was temporarily unavailable for some reason.

Printing Barcodes

Barcodes must be printed for patients and medications before they can be scanned by student users.

1. Barcodes are printed from Student View. Click Student View from the top of the page. Then choose the correct course and click the blue link of the patient name. The Patient Summary page will open.

2. Click on Print Barcodes from the left menu. The Barcodes page opens.

The barcode for the selected patient is shown first, followed by all medications that have been entered as orders for this patient.

3. Click the Print button on the page or use keyboard print commands to open your printer dialog box to print the barcodes.

Important! Poor printing quality may result in barcodes unable to be scanned. Select the best print quality setting to help insure barcodes will scan correctly. Do not make copies of barcodes from other paper copies. Test your barcodes after printing by scanning with a barcode scanner that your students will use. They should scan easily and consistently.
Using the Printed Barcodes in Classrooms and Labs

After barcodes are printed they must be made available to each student that will be using a barcode scanner. As an instructor, you may need to print barcodes for each student or arrange for students to share or rotate the patient and med barcodes.

For a more realistic simulation, the patient barcodes can be cut in a strip from the printed sheet, placed around the wrist of a simulation mannequin and the ends taped together. This works as a scannable wristband. The medication barcodes can be cut from the printed sheet and secured to empty medication containers or packages to act as scannable labels.

Be prepared! Before teaching a lesson that involves barcode scanning, it is always best to open the appropriate patient chart in Student View and make sure the scanners and barcodes work as expected.