

Updated: July 14, 2021

# eMAR/BMV Activities

#### In Class Medication Exercises:

# DO NOT MOVE AHEAD UNTIL INSTRUCTED

# **Scanner training**

#### **Exercise 1: Administer Medications**

• Scan patient armband (from barcode handouts which should match your assigned patient for the class) – MAR opens - Note the Patient Verified in red font in top left corner of the patient header

Order: ASA 81 mg po Daily SCH

- Find ASA on the medication barcode list and scan the medication (you may need to cover up the barcodes on either side to get the correct medication)
- Note the GREEN barcode as well as dose and time appears in the med cell as you scan each med
- Click OK (a summary screen appears for you to review before saving)
- Click Save

#### Exercise 2: Medication Refusal

Order: Metformin 500 mg PO BIDCC

- Find Metformin on the medication barcode list and scan the medication
- You have scanned the medication and handed it to the patient
- Your patient refuses to take the Metformin and returns the pill cup to you
- Since the medication is scanned and the medication cell (in the Today column) appears green user will need to undo scan
- Click in the medication cell (green scan and time in the box) selecting **undo** from the drop-down menu
- Since this is a scheduled medication (SCH), you also need to document that the scheduled date/time was not given because the patient refused
- Click in the medication cell a drop-down menu appears select Not Given
- Select the reason the medication was not given **Patient Declined** from the menu that appears on the screen
- Click OK









Click Save

#### Exercise 3: Dose Range Order (Remember to address both admin and flowsheet)

Order - Tylenol #3 1-2 tabs PO Q4H PRN Dose given - 2 tabs

- Find the barcode for Tylenol #3 PO Q4H PRN from the medication list handed out by your trainer
  - Scan the barcode once
  - The medication administration screen opens and the order for Tylenol #3 will highlight in green
  - From the Scan List tab scan 2nd tab to give total dose of 2 tabs
- Note the flowsheet tab has turned red, click the flowsheet tab, document pain of 7 on Numeric
- Select OK
- Dose met turns **GREEN**
- Barcode under admin time present
- Click OK to save your pain assessment
- Click OK
- Click Save
- Go out to the status board to see if the MAR Re-Assessment is on the blue secondary status board (you may need to refresh) in the **Next MAR ReAssessments** line

#### Exercise 4: Product pkg too low for ordered dose

Order - Ramipril 5 mg po BID SCH - dispensed in two 2.5 mg packages

- Find the barcode for Ramipril 5 mg
- Scan Ramipril 2.5 mg
  - Note system indicates dose requirement has not yet been met and remains on the screen to scan for medication
  - o Barcode symbol not present under med admin time
- Note discrepancy dose in RED font (Under by 2.5 mg)
- Scan Ramipril again
- System indicates dose correct/equal
- Document flowsheet assessment
- Click OK
- Click Save











# Exercise 5: Product Pkg too High for Ordered Dose

Order - Lasix 20 mg PO Daily

- Find the barcode for Lasix and scan Lasix 40 mg
- Note: Dose over by appears in RED
- Go to the Admin tab and change admin dose to 20 mg
- Click Save
- Note green Barcode, time, and info bubble present under admin time
- Click OK
- Click Save

#### Exercise 6: One time dose order

Order - Ondansetron 2 mg IV now.

- Find Ondansetron on the medication list and scan the barcode
- Multiple orders appear as the medication is on the MAR as a one time and a Q8h prn
- Select the IV Once One
- Note that the medication will be over by 2mg, go to the Admin tab and change the dose to 2mg
- Ensure the Admin tab is no longer red.
- Select the flowsheet tab and then Document on the flowsheet for Nausea
- Click OK
- Click OK
- Click Save

#### Exercise 7: Change Single Admin Time

Order - Sennosides 8.6 mg po Bedtime SCH

- Find **Sennosides** in the MAR. Highlight medication to be changed by clicking on it the box in the Medication column will turn green
- Click in the medication cell a drop-down menu will pop up click on Adjust One schedule
- Select reason for adjusting (Patient on LOA)
- In the pop-up screen click in the time box and change the time by 2 hours ahead
- Click OK
- Say yes on confirmation pop-up and new time will appear in the cell









# Exercise 8: Verbal Order to give Benadryl (Dimenhydramine) now - Scan to Order

Verbal order received to give Benadryl 25 mg PO now once

- Obtain the medication from the ADU/stock medication
- Scan medication Benadryl 25 mg cap (Do not use handheld scanner)
- Prompt will pop up "the medication has not been ordered for the patient, order and administer now?", enter Yes
- Order entry screen displays
- User to enter order Dimenhydramine 25 mg PO Now
  - Order source Telephone
  - Use Attending/MRP as ordering provider 0
  - Select most appropriate medication string 0
  - Edit if necessary 0
  - Submit 0
  - Enter PIN if prompted
- Return to MAR
- Administer
- Click OK
- Click Ok
- Save
- Note that the medication is discontinued as it is a one-time dose

#### **Exercise 9: Starting IV Infusion**

Order: NS with 40 mmol KCL/L at 125 mls/HR

- Find the barcode for the 1000 ml IV bag NS with 40 mmol KCL and scan it
- Flowsheet will open verify rate is correct and that the container volume is 1000 (there should be a start icon with a check mark)
- Click **OK** (note the rate, time, Inf icon and barcode in green in the medication cell)
- Click OK
- Click Save
- Note in the medication column there is a **full blue gas gauge** as the bad was just hung

#### Exercise 10: Change in IV Rate











Potassium result is high, order from the MD to decrease the rate to 50 ml/hr, and repeat Potassium in 1 hr

Open MAR

- Find the NS with 40 mmol KCL/L order
- Select **Document Inf/Titr** footer button or click on the **Inf icon** in the medication cell and select **infuse/titrate** from the drop-down menu
- On the flowsheet find the Infusion rate cell and enter new Infusion Rate of (50ml/hr) and click enter. All of the other fields automatically update (note **Decreased** is now in the Increase/Decrease cell)
- Click OK
- Click OK
- Click Save

The Current rate will show at 50 ml/hr under the medication and in the medication administration cell.

#### Exercise 11a: Pause the IV

The nurse sees the new Potassium results and wants to Pause the IV while communicating with the provider.

- Find the NS with 40 mmol KCL/L order
- Click on the inf icon in the medication cell and select infuse/titrate from the drop-down menu
- On the flowsheet find the Infusion rate cell and enter new Infusion Rate of (0ml/hr) and click enter. All of the other fields automatically update (note **Paused** is now in the Increase/Decrease cell)
- Click OK
- Click OK
- Click Save
- Note on the MAR and on the Status the IV shows as Paused

#### Exercise 11b: Stop Infusion - New solution ordered

Provider wants the 40 mmols to be stopped and a new order has been created to change the IV solution to NS with 20 mmol KCL

- Find the **NS with 40 mmols KCL/L** order, click the **inf icon** in the medication cell and select **infuse/titrate** from the drop-down list
- The flowsheet should open, if not click on the **flowsheet** button
- Find the infusion rate cell and type **0** and enter.
- Look at the container volume line the value in the cell needs to be entered into the waste cell by clicking in the waste cell and typing that number. Then click enter.









- Once you enter this value the IV will show as infused
- Click OK
- Click OK
- Click Save

Note the medication cell now displays Infused, and the gas gauge no longer displays

Open I & O tab on the EMR

Updated fluid intake should appear

#### Exercise 12: Hang new IV solution

Order: NS 1000ml with 20 mmol KCL/L at 125 ml/hr

- Find the barcode for the 1000 ml IV bag NS with 20 mmol KCL and scan it
- Flowsheet will open verify rate is correct and that the container volume is **1000** (there should be a start icon with a check mark)
- Click OK (note the rate, time, Inf icon and barcode in green in the medication cell)
- Click OK
- Click Save
- Note in the medication column there is a full blue gas gauge as the bad was just hung

#### Exercise 13: IV Bolus

Order - NS 1000 ml Bolus

- Find the barcode for the NS 1000 ml IV bag and scan it
- Flowsheet will open verify rate is correct (999) and that the container volume is 1000 (there should be a start icon with a check mark)
- Click **OK** (note the rate, time, Inf icon and barcode in green in the medication cell)
- Click OK
- Click Save

Note in the medication column there is a **full blue gas gauge** as the bad was just hung Note: The gas gauge is full as the bag was just hung. IV volume does not flow to the EMR I & O until the IV infusion is ended









#### Exercise 14: Co-Signature without PIN

Order: Insulin human regular see protocol SUBCUT TIDAC SCH

- Find Insulin human regular 100 unit/ml prefilled pen 3ml on the medication list and scan the barcode
- Click on the flowsheet then click in the cell for POC Bood Glucose and type 14
- Click on the prot/taper button and review the protocol. Blood Glucose was 14
- Based on the glucose the protocol states to give 2 units need to state how much insulin is given
- Click on the admin button and find \*Enter Administered Dose in unit enter 2 in the empty cell
- Ensure colleague who validated the medication's name is entered in co signature query.
- Click Ok
- Click Ok
- Click Save
- Note: this will be a medication that will require a co-sign with PIN entry at go-live

#### Exercise 15: Co-sign with PIN using scan to order

Order: Hydromorphone premix (Dilaudid) 100mg in 100ml IV CONTINUOUS



- Find **HYDROmorphone** on your **MAR** and click on the **P icon** in the Medication column. The **Prot/Taper** screen will open, review the protocol. Note the starting rate is **0.2 mg/hr**
- Find the **Hydromorphone** on your medication list and scan the barcode. Click **Document Unsched** from the footer. Enter dose rate **0.2** and click **enter**. Note the rate is provided.
- Click OK









- Note the RED Flowsheet. Open the flowsheet and review the container volume, dose rate, and infusion rate. If all accurate click **OK**
- The Co-sign Medication screen will pop up. Have your colleague type their last name in the **Co-signing Provider** box, select their name from the pop up screen and enter their pin.
- Click OK
- Click OK
- Click Save

# **Exercise 16: IV Titration Specialty Care Flowsheet**

Order: Norepinephrine (Levophed) 4 mg D5W + 0.5 NaCl 250 mL Titration Protocol - Titrate as per protocol

- Find **Norepinephrine** on your **MAR** and click on the **P icon** in the Medication column. The **Prot/Taper** screen will open, review the protocol. Note the starting rate is **0.3 mcg/kg/min**
- Find the **Norepinephrine** on your medication list and scan the barcode. Enter dose rate **0.3** mcg/kg/min and click enter. Note the rate is provided.
- Click OK
- Then open the Flowsheet verify information and click OK, click OK, and click Save
- Enter Pin
- Open the Specialty Care/ED Flowsheet on the right hand EMR list.
- Find the Infuse/Titrate line and click the +
- Click on the + sign beside **Current Dose**
- In the Now column find the Dose Rate and enter the new dose (0.4) click enter
- Click Save

Note the Increase/Decrease row automatically shows decreased

# Additional Practice with Medication(s)

# Flagyl 500 mg IV Pre-mixed bag

• Start this IV medication

# Ancef 3g IV- This medication is not pre-mixed (word pre-mix does not appear in orders)

- Scan the barcode 3 times as it is a one-gram vial and then scan the 100 ml bag of 0.9% NaCL
- This will be the process if a bag is not pre-mixed





