Clinical Practice Policy:	Medication Reconciliation in the NICU
Effective Date:	May 2020
Review Period:	May 2023

1. Purpose

The purpose of this clinical practice policy is to ensure all patients requiring medication reconciliation are (1) consistently identified, (2) receive complete and thorough medication reconciliation to ensure continuation of appropriate medication regimens across transitions of care, and (3) all staff involved in medication reconciliation are aware of their roles and responsibilities.

2. Brief Background and Summary of the Evidence

What is Medication Reconciliation ("Med Rec")?

Med Rec is the process of identifying a complete and accurate list of all medications a patient is taking, identifying and resolving any discrepancies on this current medication list, and then using this medication list to continue providing appropriate medications for patients anywhere in the health care system.

Why is Med Rec important?

- Accurate and complete reconciliation of medications across the continuum of care is a National Patient Safety Goal of The Joint Commission.
- Transitions of care, including admission and discharge, are vulnerable to medication errors. This may be due to discontinuity of providers and information, changes in medication regimens, discharge processes often being rushed, and inadequate or ineffective caregiver counseling.
    - Medication errors due to differences in documented medication regimens between sites of care at admission or discharge occur in up to 70% of patients.
    - Preventable medication errors impact > 7 million patients and cost ~$21 billion annually across care settings.
    - ~30% of hospitalized patients have at least one discrepancy on discharge Med Rec.
    - 80% of serious medical errors involve transfer miscommunication between caregivers.

Steps involved in In-patient Med Rec:

- **Verification** for every transfer patient of a complete and accurate medication history to create a "home medication list" from appropriate sources (i.e. transfer hospital providers/documents, transport team/documents).
    - Home medication list should include the following components:
        - Medication name
        - Concentration or strength
        - Formulation
        - Dose
        - Route
        - Frequency and time of administration

- Duration, if applicable
- Time of last dose, if applicable

- **Clarification** of accuracy and appropriateness of all aspects of the medication regimens on the home medication list.
- **Documentation** of the home medication list in the electronic health record once it has been obtained, verified and any discrepancies have been resolved, to be easily visible to all disciplines providing care.
- **Reconciliation** of the home medication list with any new medications ordered during transition periods of the hospital stay, most notably admission and discharge.

Common Discrepancies and Errors seen during Med Rec:

- Omission- the patient is currently taking a medication that is not listed.
- Commission- a medication is listed but the patient is currently not taking it.
- Different dose, formulation, route, frequency or due time.
- Therapy lacking indication.
- Therapeutic duplication.

Med Rec Tips:

- If possible, begin Med Rec before the patient arrives in the unit.
- Med Rec should be performed by a provider who has protected time for this function.
- It is essential to slow down during Med Rec and verify all aspects of the patient's medication history, including:
  - Dosing units (i.e. mg versus mg/kg; mg/kg salt versus mg/kg elemental ferrous sulfate).
  - Medication formulation (i.e. conventional versus liposomal amphotericin B).
- If outside hospital is in the Partner's system, their MAR can be seen in Epic at BWH. This may assist in verifying medication regimens and times of last administration.
- Caution that electronic health records from outside hospitals may look different than our own.
- All transfer documents, including discharge summaries from outside hospitals, should be viewable in Epic under Chart Review tab then Media tab.
  - These documents are scanned into Epic at 6am each morning by Medical Records staff.
- Utilize the 'echo technique' to repeat back the medication regimen fully, including dosing units, medication formulation and time of last administrations.
- Consistency is key. Consistently perform a thorough Med Rec on every transfer patient.

3. Procedures and Policies

Which patients should receive Med Rec in the BWH NICU?

- Every patient transferred in from an outside hospital/location via MedFlight or from Boston Children's Hospital team.

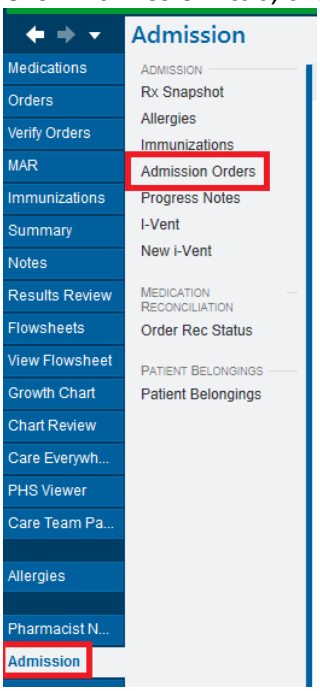
Staff Roles & Responsibilities:

Outside hospital provider (sign-out provider or transport team)

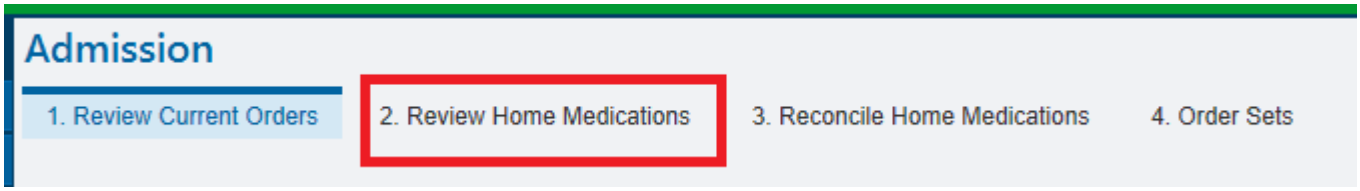
- Communicate current medication regimens during verbal sign-out and/or on paper documentation.
- Verify accuracy upon BWH provider read-back.

Provider (MD, NP, PA)

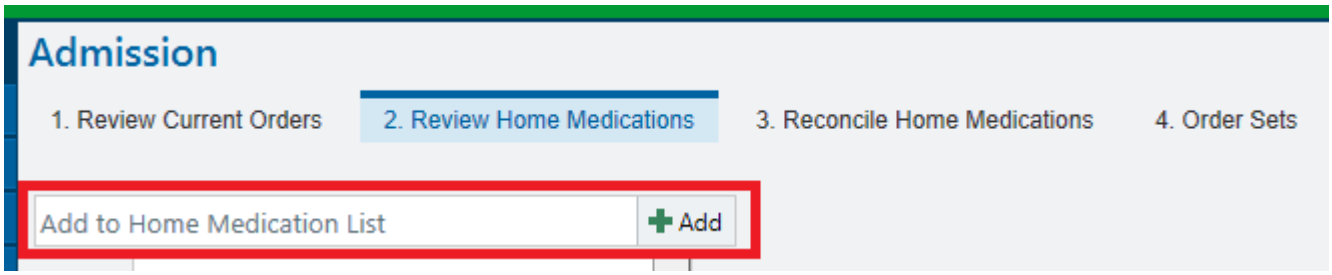
- Perform Med Rec on every patient transferred from an outside facility.
  - See above for steps to performing Med Rec.
- Document the accurate and complete home medication list.
  - Click 'Admission' tab, then click 'Admission Orders':



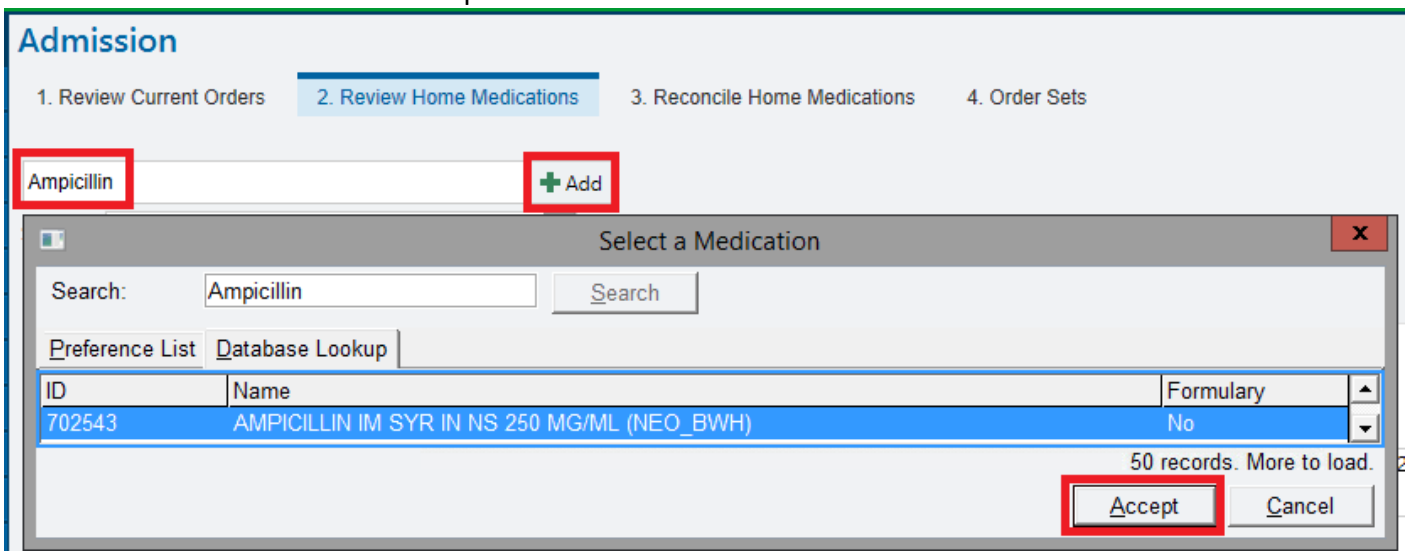
  - Then click 'Review Home Medications':



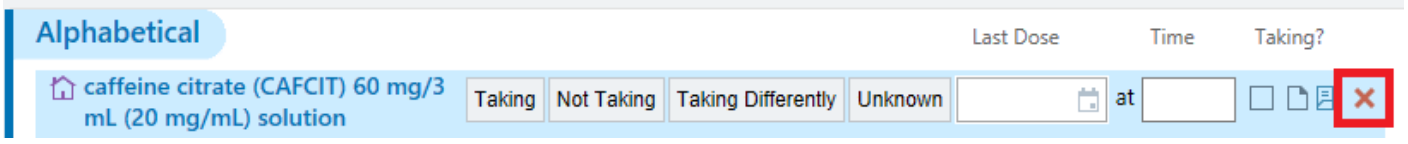
  - To add new medications, click in the box labeled 'Add to Home Medication List':



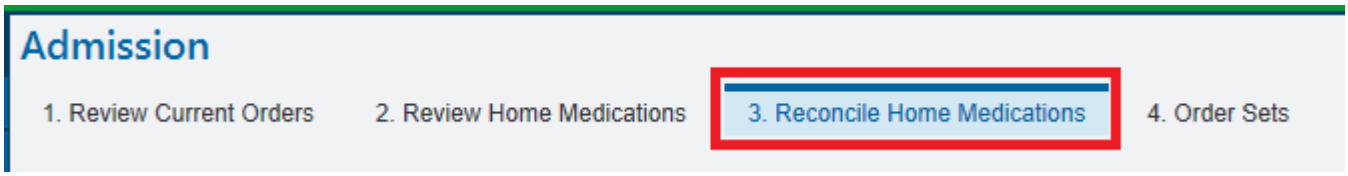
- Type the medication name and click 'Add' to search. Find the correct medication and formulation and click 'Accept' to add:



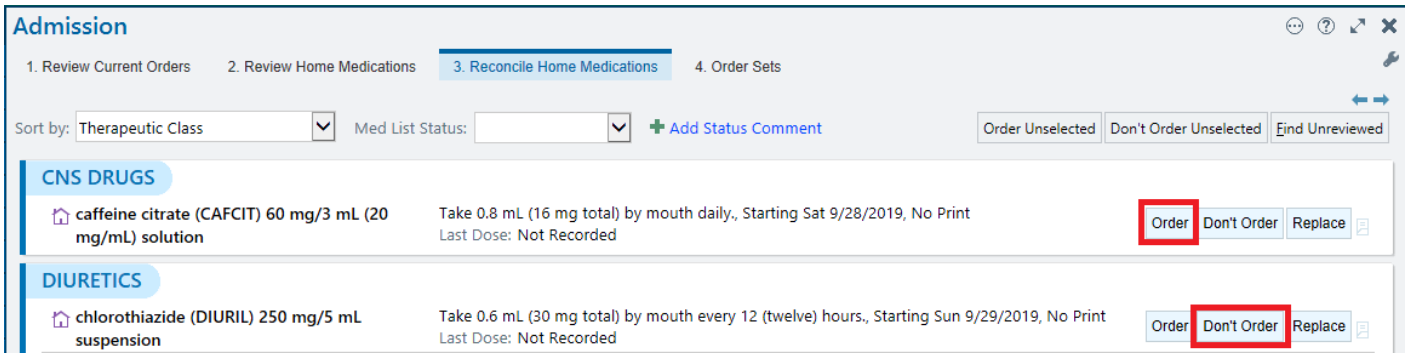
- To remove a medication, click the red 'X' to the right of the medication name and select 'Delete':



- Click on 'Reconcile Home Medications' to order home medications that should be continued:



- Select 'Order,' 'Don't Order' or 'Replace' for each medication:

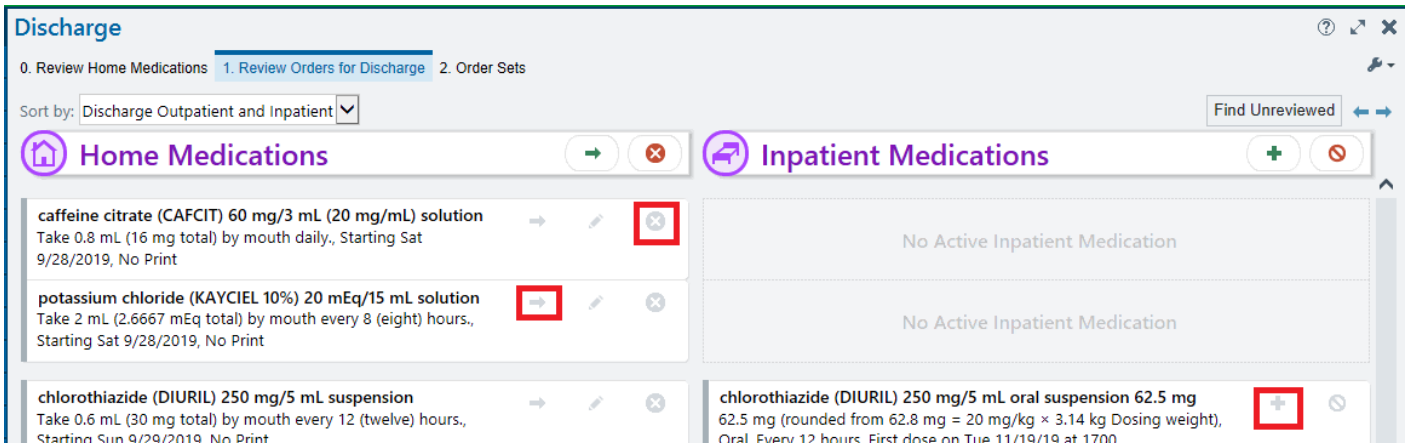


- Click 'Review and Sign' then click 'Sign'.

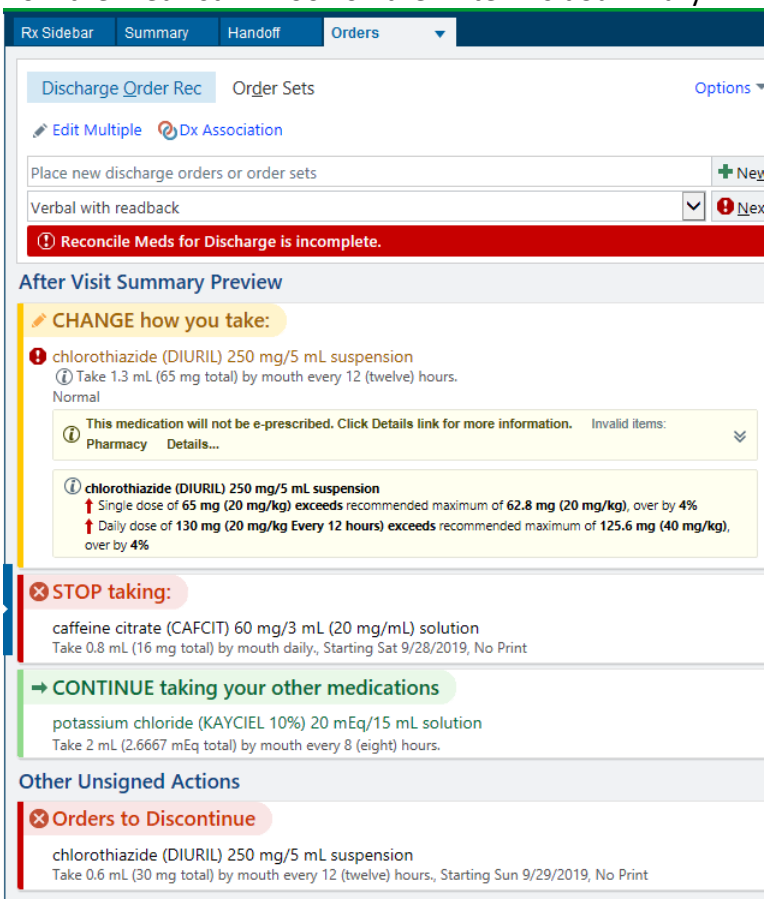
- Ensure home medication list in outside hospital discharge summary is placed in "skinny chart" and given to Medical Records staff to be scanned into Media tab in Epic as soon as possible.
- If available, use Haiku app on phone to take picture/s of home medication list in outside hospital discharge summary, then upload to 'Media' tab in Epic.

- Order inpatient medications throughout hospital stay.
- Reconcile medication list at discharge.
  - Click 'Discharge' tab, then click 'D/C Order Rec':

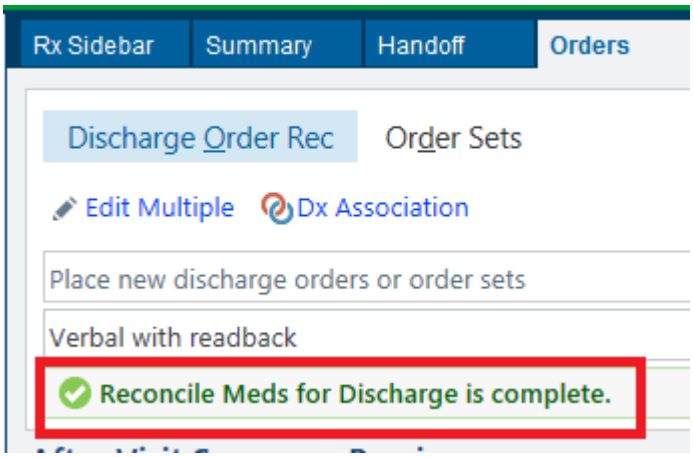
  - For Home Medications, choose arrow icon to continue, pencil icon to change/new prescription or 'X' to stop. For Inpatient Medications, choose plus sign to prescribe and stop sign for do not prescribe:



- As you complete the discharge Med Rec, the window on the right will provide a preview of how the med list will look on the 'After Visit Summary':



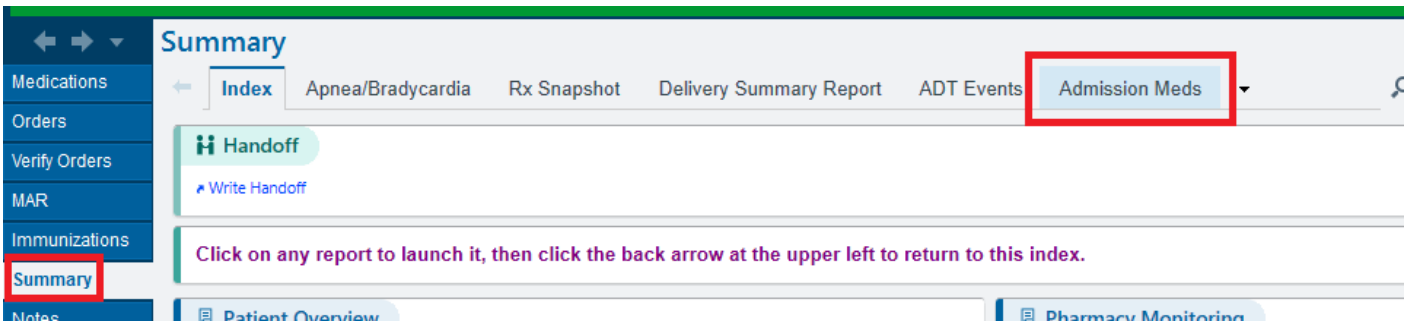
- When all orders are reconciled, the flag at the top right will turn green:



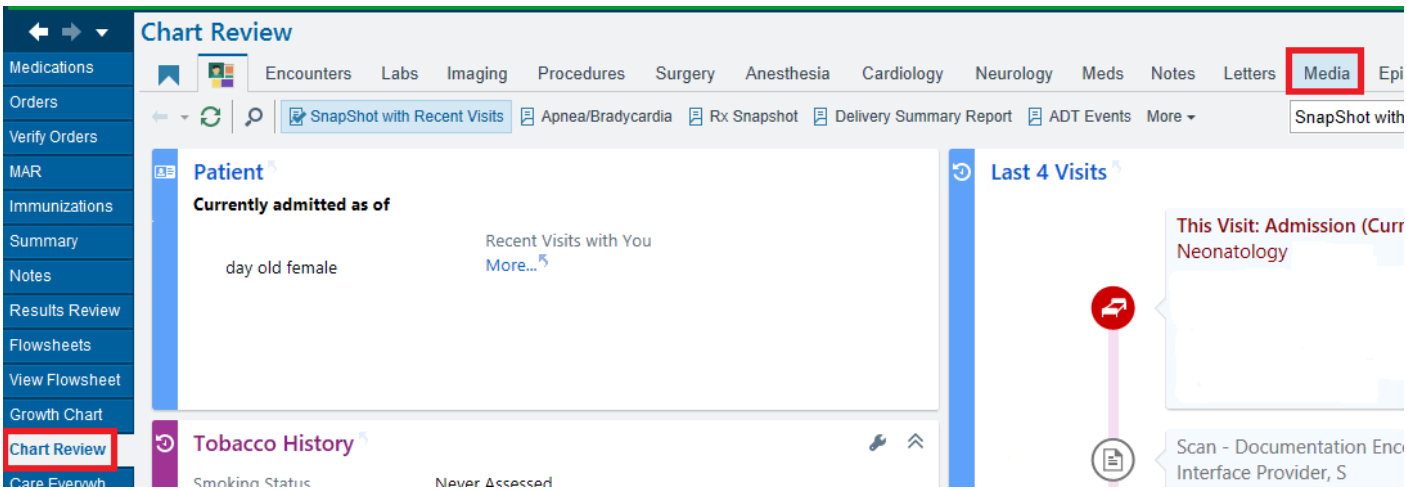
- Carefully review all actions and click 'Sign.'

Pharmacist

- Verify admission orders against 'Admission Meds' and scanned medication lists under 'Media' tab (including medication name, concentration/strength, formulation, dose, route, frequency, duration of therapy and time of last dose, if applicable).
    - Click 'Summary' tab, then click 'Admission Meds' tab:



    - Click 'Chart Review' tab, then click 'Media' tab:

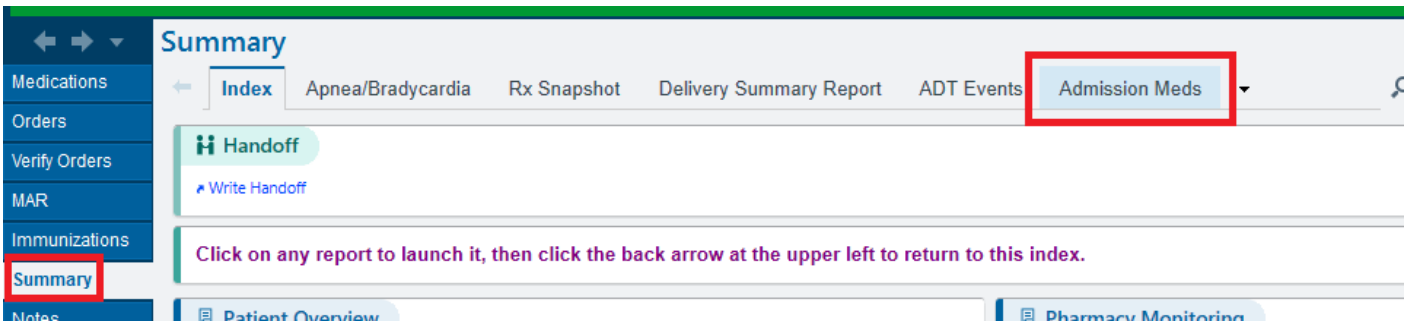


        - Identify any discrepancies and communicate with provider to resolve.

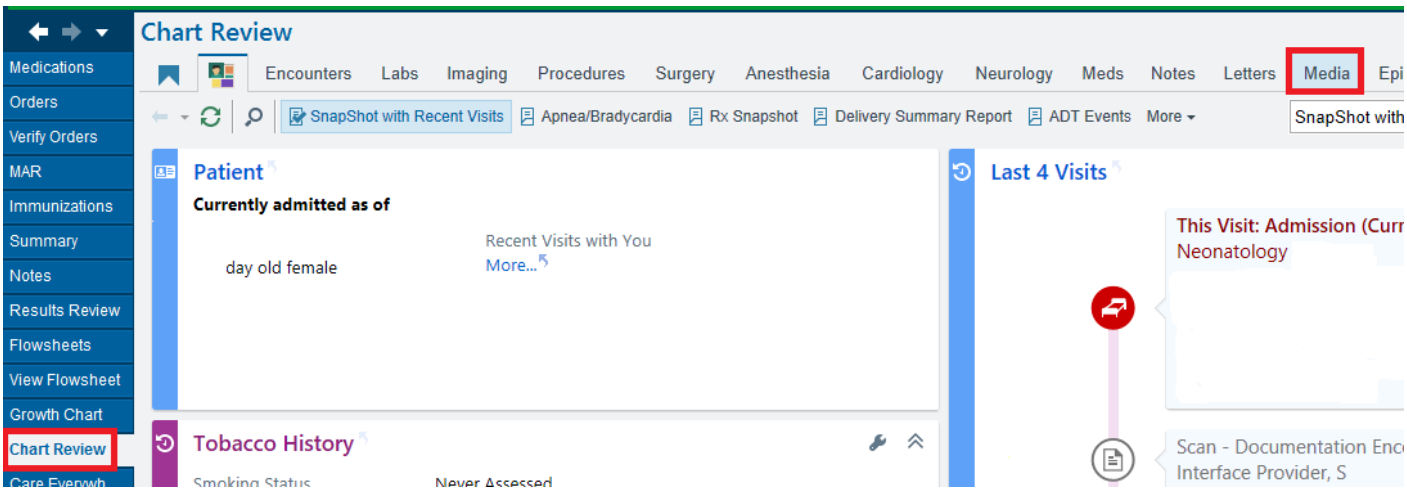
- Verify inpatient medication orders throughout hospital stay; identify any discrepancies and communicate with provider to resolve.

Nurse

- Before administering medications, verify orders against 'Admission Meds' and scanned medication lists under 'Media' tab (including medication name, concentration/strength, formulation, dose, route, frequency, duration of therapy and time of last dose, if applicable).
    - Click 'Summary' tab, then click 'Admission Meds' tab:



    - Click 'Chart Review' tab, then click 'Media' tab:



- Administer inpatient medications throughout hospital stay.
- Review discharge medications with caregiver/s, provide discharge education and perform teach-back with caregiver/s.

References

American Society of Health-System Pharmacists. Medication reconciliation guidance document for pharmacists. Updated July 2018. https://www.ashp.org/-/media/assets/pharmacy-practice/resource-centers/ambulatory-care/medication-reconciliation-guidance-document-for-pharmacists.ashx?la=en&hash=8E66CC1F528D577B650D3B19F4A2EE310E68A75B Accessed September 2019.

Mueller SK, Kripalani S, Stein J, Kaboli P, Wetterneck TB, Salanitro AH, et al. A toolkit to disseminate best practices in inpatient medication reconciliitation: multi-center medication reconciliation quality improvement study (MARQUIS). *Joint Commission Journal on Quality and Patient Safety* 2013;39(8):371-82.

Ross SM. Best practices to improve your medication reconciliation now. Updated 2018. https://blog.cureatr.com/best-practices-to-improve-your-medication-reconciliation-now Accessed September 2019.