

# Medication Reconciliation

## Organization Requirements and Cerner Tips for Providers

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# Best Possible Medication History (BPMH): Pharmacy BPMH Team

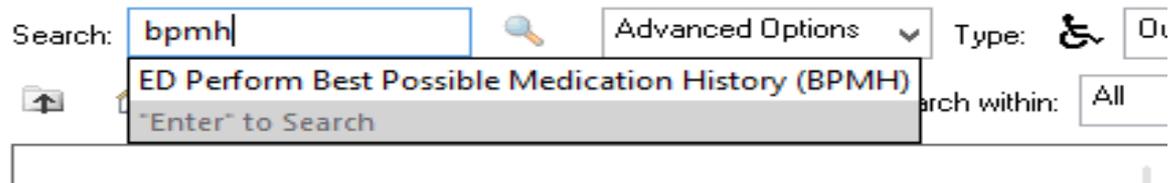
- **BPMH pharmacy team is available at:**

**VGH ED** 07-24:00 7 days a week

**Scope of Pharmacy BPMH service:**

- BPMH for patients admitted through ED only (complex patients prioritized)
- Admission MedRec is out-of-scope for Pharmacy BPMH team

- **To place a Pharmacy BPMH Consult order:**



- The admitting provider team is responsible for documenting BPMH outside of Pharmacy BPMH hours

# Best Possible Medication History (BPMH)

- BPMH must be documented on each encounter prior to completing MedRec
- Look for Reconciliation Status:
  - ❖  **Meds History** = BPMH has been documented this visit

Document Medication by Hx

Order Name	Status	Details	Last Dose Date/Time	Inform
✓ Last Documented On 10-Nov-2020 09:30 PST				
Home Medications				
methadone	Documen...	50 mg, PO, qdaily, *DWI*, drug form: oral liq, refill(s): 0		
HYDRomorphone (P...	Documen...	1-2 tab, PO, q3h, PRN other (see comment), *daily dispense ...		

- ❖  **Meds History** = BPMH not yet documented this visit

Document Medication by Hx

Order Name	Status	Details	Last Dose Date/Time	Information Source
! Medication history has not yet been documented. Please document the medication history for this patient encounter.				
Home Medications				
cyclobenzaprine (cycl...	Prescribed	1 tab, PO, TID, PRN spasm, order duration: 5 day, drug form...		
naproxen (naproxen	Prescribed	1 tab, PO, BID, PRN pain, OTC, order duration: 7 day, drug f...		

# Best Possible Medication History (BPMH)

- For patients whose BPMH is not yet documented:
  - Medications that appear on the “Document meds by hx” screen may be outdated.
    - Medication history list and prescriptions carry over in Cerner from previous encounters, and could be from months or years ago.

Document Medication by Hx

	Order Name	Status	Details	Last Dose Date/Time	Information Source
ⓘ Medication history has not yet been documented. Please document the medication history for this patient encounter.					
4	Home Medications				
➔	cyclobenzaprine (cycl...	Prescribed	1 tab, PO, TID, PRN spasm, order duration: 5 day, drug form...		
➔	naproxen (naproxen	Prescribed	1 tab, PO, BID, PRN pain, OTC, order duration: 7 day, drug f...		

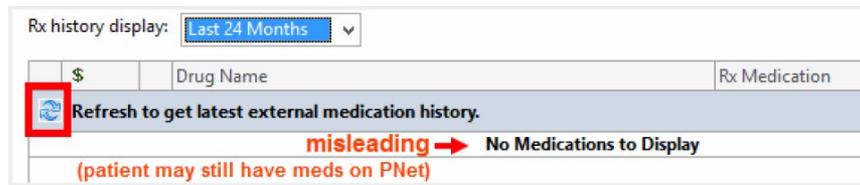
- Please verify whether the medication regimen is still current.
  - DO NOT click “document history” without verifying information.
  - Outdated entries must be updated/removed if patient is no longer taking that regimen.
  - Select “**Complete**” to remove a medication from the BPMH list. Do NOT select “Cancel/Discontinue”.

# Best Possible Medication History (BPMH)

- PharmaNet is a dispensing record ONLY
  - Shows medications a patient filled at a BC community pharmacy
  - May not capture medications not picked up by patient, samples, verbal instructions given to patients, meds given in clinics, out of province meds, etc.
  - Fill dates and quantities helpful to assess compliance
- Long Term Care Homes/Transfer from facilities
  - PharmaNet not reliable depending on type of facility
  - Refer to facility MAR
  - Enter BPMH based on facility MAR
- Contact SPH Pharmacy Dispensary for ARVs information

# PharmaNet in Cerner

- Important takeaways when viewing PharmaNet in Cerner:
  - Click on blue arrows until there is a **green checkmark** at the top of PharmaNet screen



- Medications with same generic name are collapsed together
  - must **click on triangle** to see different dosing regimens and different formulations



- **Do NOT** use “CONVERT EXISTING SIG” when importing medications

# Medication List in Cerner

- **Default filter is “All Active Medications”:**
  - Displays active inpatient medications **and** home medications (documented and prescribed)
  - Filter can be manually changed
- **“Status” column:**
  - **“Ordered”** = active inpatient order
  - **“Documented”** = documented home medication (from BPMH)
  - **“Prescribed”** = previously prescribed medication (from BPMH)

Displayed: All Active Orders | All Active Medications

Order Name	Status	Details
Medications		
salbutamol (salbutamol 100 mcg/puff inhaler)	Documented	2 puff, inhalation, q4h, PRN shortness of
insulin glargine (insulin glargine (BASAGLAR))	Documented	15 unit, subcutaneous, qHS, drug form:
ASA (PMS-ASA 81 mg oral tablet)	Documented	1 tab, PO, qdaily, drug form: tab, refill(s)
cefTRIAxone	Ordered	2,000 mg, IV, qdaily, administer over: 20
ondansetron	Ordered	4 mg, PO, TID, drug form: tab, start: 19-I
sodium chloride 0.9% (sodium chloride 0.9% (NS) bol...	Ordered	1,000 mL, IV, qdaily, drug form: bag, first
metFORMIN	Prescribed	250 mg, PO, BID, drug form: tab, Supply
caRVEDILOI (caRVEDILOI 6.25 mg oral tablet)	Prescribed	6.25 mg, PO, BID, drug form: tab, Supply

- **Do NOT “cancel/discontinue”** items with “documented” or “prescribed” status from the medication list.
  - These are **not** active inpatient orders.
  - They are part of the patient’s medication history.

# Please review MedRec Practice Pointers to help navigate common Cerner issues related to BPMH and MedRec

## Best Possible Medication History (BPMH)

For SPH and MSJ Acute

### HOW TO REQUEST BPMH for ED patients

### BPMH TEAM AVAILABILITY

From the "Add Orders" window:

SPH ED 09-24 HR  
MSJ ED 13-21 HR

Search:

### HOW TO OBTAIN AN ACCURATE PHARMANET LIST

**TIP:** Click on "Recycle" icon until green checkmark displays

Rx history display:

S	Drug Name	Rx Medication
		No Medications to Display

*(patient may still have meds on PHet)*

A blank PharmaNet screen **does not** always indicate that a patient has no medications on PharmaNet!

**Recycle icon = list is incomplete**

Click on "Recycle" icon until the green checkmark appears.

**Green checkmark = list updated**



## DO NOT USE "CONVERT EXISTING SIG" FUNCTION

When importing from PharmaNet, **DO NOT** select "Convert Existing Sig"! Select the closest available order sentence or select "(None)". Dose and frequency may be modified if needed.

Order Sentences

Order sentences for: furosemide (Mint-Furosemid)

**DO NOT choose "Convert Existing Sig"**

choose an order sentence, or choose "(None)" and modify

Using "Convert existing sig" results in **ERRORS** for all future Admission, Transfer, and Discharge MedRec!

**TIP:** Show Individual Instances

Rx history display:

Show individual instances of external Rx medication history.

S	Drug Name	Rx Medication
✓	21-Aug-2020 08:48:52 PDT	
(23)	warfarin	WARFARIN SODIUM 4 MG TABLET TABO PHARM
(14)	HYDROMORPHONE	(Discontinued) HYDROMORPHONE HCL/PF 50 MG/ML VIAL ST

Click to show all dosage forms and strengths

**TIP:** Show More Medications

If "Show More Medications" is blue, click until it turns grey

Show More Medications...

Close

Show individual instances of external Rx medication history.

Rx Medication
MWV SOFT GELS - CYSTIC FIBROSIS UNKNOWN
MEDTRONIC PARADIGM P RESERVOIR UNKNOWN
MEDTRONIC PARADIGM QUICKSET IN UNKNOWN
AZITHROMYCIN 250MG TABLET SANS HEALTH
CALCIUM TABLETS - CYSTIC FIBROSIS UNKNOWN
VITAMIN E 400 - CYSTIC FIBROSIS UNKNOWN

Show More Medications

Close

Rx history display:

Show individual instances of external Rx medication history.

S	Drug Name	Rx Medication
✓	21-Aug-2020 08:48:52 PDT	
	warfarin	WARFARIN SODIUM 4 MG TABLET TABO PHARM
	warfarin	WARFARIN SODIUM 3 MG TABLET TABO PHARM
	warfarin	WARFARIN SODIUM 1 MG TABLET TABO PHARM

Results for: multivitamin (vitamin B with C renal (RENAVITE or REPLAVITE EQUIV) tab)

Details | Order Management | Compliance

Dose	Route of Administration	Frequency	Duration	Dispense	Refill

PHN:

Drug Form:

Start Date/Time:  PDT

Special Instructions: TAKE ONE TABLET ONCE DAILY

Type Of Therapy:

Supplies:

"Convert existing sig" brings the details inappropriately as text into the "Special Instructions" section. It does not fill out the "dose", "route" and "frequency" fields. **These fields are required in order to complete MedRec.**

## Tips for Updating Existing BPMH Entries

Check the Med History status icons to confirm whether BPMH has been documented for the current encounter.

 Meds History = BPMH has been documented for the current encounter

Document Medication by Hx

Order Name	Status	Details	Last Dose Date/Time	Info
Home Medications		 Last Documented On 10-Nov-2020 09:30 PST		
methadone	Documented	50 mg. PO. adaly. "DWI". drug form: oral liq. refills: 0		

 Meds History = BPMH has NOT been documented on the current encounter

Document Medication by Hx

Order Name	Status	Details	Last Dose Date/Time	Information Source
Home Medications		 Medication history has not yet been documented. Please document the medication history for this patient encounter.		
cyclobenzaprine (cyclobenzaprine)	Prescribed	1 tab. PO. TD. PRN (exam order duration: 3 day drug form...		

Medications appearing in BPMH list may not be the patient's current home medications.

BPMH medications carry over from previous encounters and may be months or years out-of-date.

Please verify the information with the patient.

Outdated entries must be updated/removed if the patient is no longer taking the regimen.

**DO NOT** click "Document History" without verifying the information.

If the patient is not taking the medication as it appears on the BPMH list:



If it appears as a "scroll":

Select the entry, right click, "Modify", and make the necessary changes in each field.

To remove an entry, right click and select "Complete"



If it appears as a "pill bottle":

Select the entry, right click, and select "Complete" to remove the medication from the list.

Then, re-enter the medication by importing through PharmaNet or adding manually.

If a patient is no longer taking a medication:

If on hold temporarily with intention to restart:

Right click, Modify Compliance, in the "Status" drop down menu select "on hold", and

indicate the date/time of the last dose in the "Last Dose" field.

If stopped by a provider (with no intention to restart):

Right click, and select "Complete".

\*Note: if the previous medication entry is incomplete (i.e. missing dose/route/frequency fields), you will need to fill in the missing fields before the system will allow you to "Complete" the order.

## Entering Non-Formulary and Combination Products

Patients may report taking medications that are not on PharmaNet or cannot be imported from PharmaNet (eg. over-the-counter and compounded products).

How to add medications manually:

To add a medication to the BPMH that is not on PharmaNet, select **+ Add** from top of the screen, type the medication name, and select the correct medication.



If the drug does not appear, then enter medication by typing "*non-formulary*" and manually enter the dose, route, frequency, and drug name.



Enter combination products and compounded preparations using generic names

Combination products should be manually entered by typing in the brand name or a generic component and selecting the correct medication.

Compounded preparations (eg. customized cream formulations) should be manually entered as "non-formulary" as above.

**Example:** "Polysporin" (a combination product) can be entered by typing "Polysporin" and selecting the correct product. It will appear on the BPMH list as "bacitracin-Polymixin B".



**DO NOT** enter medications as "Other Prescription (Compounded Prescription)"

Some medications display as "Other Prescription (Compounded Prescription)" when you click the  button. When this happens, click "Cancel" and enter the medication as "non-formulary".

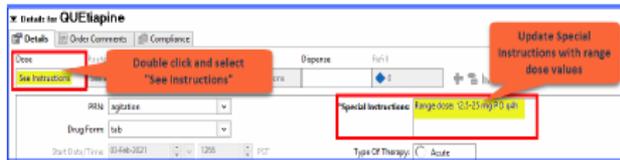
**DO NOT** enter a medication into BPMH using the "Other Prescription (Compounded Prescription)" box, as Cerner is unable to recognize this medication.



# Best Possible Medication History (BPMH) and Medication Reconciliation Tips for Medications with Range Dosing

## To enter a range dose on the patient's Medication History:

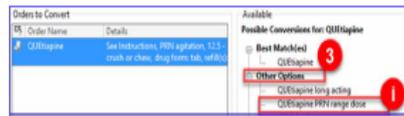
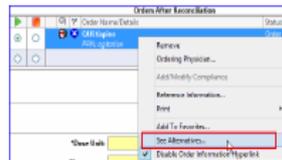
- 1) Import the medication from PharmaNet, or use + Add to manually add the medication.
- 2) Modify the following medication details:
  - i) Dose: select "See Instructions" from the drop down list.
  - ii) Special Instructions: enter the range dose values.



## To continue a range dose medication on Admission Medication Reconciliation (MedRec):

Inpatient range orders are only permitted for select PRN medications in Cerner.

- 1) Select Continue to continue the medication as an inpatient order.
- 2) Right click on the order in the right side column, select "See Alternatives" from the drop down list.
- 3) Click "Other Options".  
If range dose is permitted for the medication, there will be a "PRN range dose" option.



a) If a range dose order is permitted for the medication:

- i. Select the "PRN range dose" option.
- ii. Select the desired order sentence.
- iii. Click OK.
- iv. Enter the minimum and maximum values for the range in Order Details.



Note: Only the higher dose in the range is displayed in the order but full order details will include the range

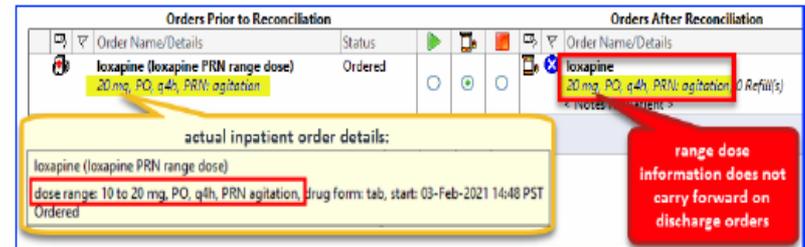


## To continue a range dose medication on Admission MedRec (continued):

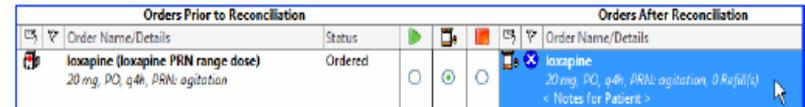
- b) If a range dose order is not permitted for the medication:
  - i. Under "Other Options", there will not be a "PRN range dose" option available.
  - ii. Provider must choose a specific dose for that medication order and cannot order a range dose.

## To continue a range dose medication on Discharge MedRec:

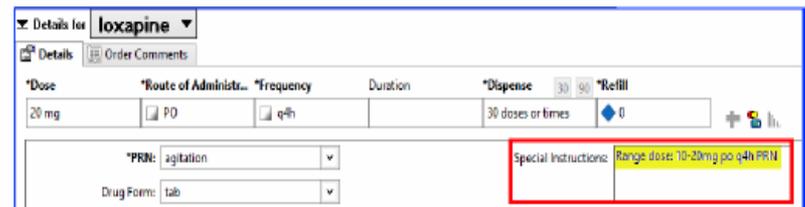
In Cerner, the highest dose of a range order auto-populates as the default dose in Discharge MedRec. Range dose information must be manually entered by the provider in Discharge MedRec.



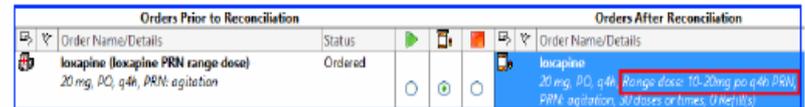
1) Click/highlight the medication with range orders that needs to be reconciled.



2) Indicate the proper dose range in the Special Instructions field. Ensure all other fields are correct.



The range should now properly display in the right side column.



3) Complete the remainder of Discharge MedRec and Sign.

# ADMISSION MEDICATION RECONCILIATION

For SPH and MSJ Acute



## WHO IS RESPONSIBLE FOR ADMISSION MED REC?

The **Most Responsible Provider** (MRP) is responsible.

Admission MedRec is out of scope for the BPMH Pharmacy Service and nursing staff.



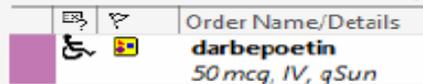
## WHEN TO COMPLETE ADMISSION MED REC?

Upon admission. It is recommended to have Admission MedRec complete prior to entering admission orders and PowerPlans.



## WHY ARE SOME MEDICATIONS FLAGGED IN PURPLE?

Orders from another encounter are identified with a purple band:



Continuing a "Purple Banner" medication on Admission MedRec creates an order on the inpatient encounter.

Selecting "Stop" will not create an order on the inpatient encounter.

	Order is from a different inpatient encounter	Order is from an ambulatory encounter
Continue the order	The order on the other encounter will be discontinued.	The order on the ambulatory encounter will remain active.
Do not continue the order	The order on the other encounter will remain active.	The order on the ambulatory encounter will remain active.

(As detailed above, these actions will have varying effects on orders from the other encounter, depending on the encounter type)

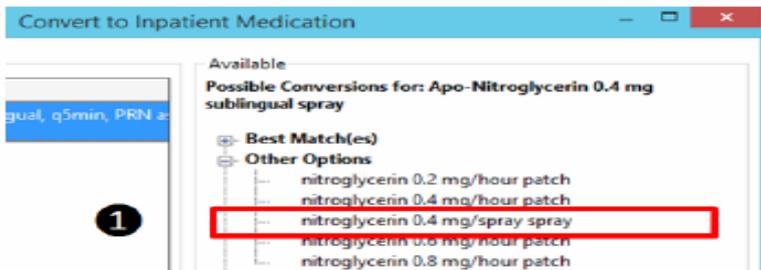


## MANUALLY CONVERTING MEDICATIONS

Some medications may not convert automatically to the correct product on MedRec. If CST Cerner cannot identify the correct product, a **Convert to Inpatient Medication** window opens.

Orders Prior to Reconciliation

Order Name/Details	Status		
<b>Medications</b>			
metFORMIN 500 mg, PO, BID with food	Ordered		
nitroglycerin (Apo-Nitroglycerin 0.4 mg sublingual spray) 1 spray, sublingual, q5min, PRN: as needed for chest pain, 4.9 g, 0 Refill(s)	Documented		



Read this window carefully and choose the most accurate match (1).

If the product is not available, use the template for **non-formulary (TNF) medication** (2).

# TRANSFER MEDICATION RECONCILIATION

## For SPH and MSJ Acute



**WHEN?** Transfer MedRec is **required** when there is a **change in level of care** within the same facility (ie. from ICU/OR/PACU/HAU/CICU/CSICU to general unit)

**WHO?** Shared responsibility between transferring and receiving providers

- Follow the workflow of each critical care unit
- Should be done **before** transfer or upon patient's arrival to receiving unit
- If not signed before patient arrives on the general unit, it is the responsibility of the **receiving provider** to sign the Transfer MedRec ASAP

**WHY?** If the Transfer MedRec is not signed:

- changes to orders are not active
- patient may continue to receive critical care medications that are inappropriate
- providers will not be able to start Discharge MedRec

Orders Prior to Reconciliation		Orders After Reconciliation	
Order Name/Details	Status	Order Name/Details	Status
metFORMIN 500 mg, PO, BID with food	Ordered	metFORMIN 500 mg, PO, BID with food	Ordered
nitroglycerin (Apo-Nitroglycerin 0.4 mg sublingual spray) 1 spray, sublingual, q5min, PRN: as needed for chest pain, 4.9 g, 0 Refill(s)	Documen...		

0 Missing Required Details | 1 Required Unreconciled Order(s) | Reconcile and Plan Sign

*Tip: If there are any "Required Unreconciled Order(s)" (1), the SIGN option will not be available (2) until an action is selected for each order.*

*The receiving provider should SIGN (and not plan) the Transfer MedRec.*



## DO NOT USE "MANAGE PLANS" FUNCTION

The "Manage Plans" function in Transfer MedRec **does not work**. Discontinuing PowerPlans using this function would cause all PowerPlan medications to **continue**.

**There are two options for discontinuing PowerPlans upon patient transfer:**

- Discontinue PowerPlans **prior** to completing Transfer MedRec
- Discontinue each individual order of the PowerPlan on Transfer MedRec



## ▶ Transfers from General Unit ➡ OR/PACU ➡ General Unit

- Surgical provider SIGNS** the Transfer MedRec prior to patient leaving OR

## ▶ Transfers from ICU/Medical HAU ➡ General Unit

- Intensivist PLANS** the Transfer MedRec.
- Receiving provider SIGNS** the Transfer MedRec.\*  
\*During handover, intensivist and receiving teams should confirm that receiving team will sign the MedRec.  
If the receiving team is not available to sign prior to patient transfer out of ICU (eg. all members of receiving surgical team is in OR), receiving team may ask intensivist team to sign the Transfer MedRec.
- If not signed before patient arrives on the general unit, it is the responsibility of the receiving provider to sign the Transfer MedRec ASAP.**

# DISCHARGE MEDICATION RECONCILIATION

## For SPH and MSJ Acute



### WHEN IS IT NEEDED?

Discharge to home or another facility

**Exception:** SPH <—> MSJ Acute  
(considered as one site)



### PARENTERAL INFUSIONS

Cerner does not allow infusions to be acted upon on Discharge MedRec. If infusions are to be continued on discharge, please specify this in the **Discharge Summary**.

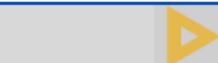


### TAPERING DOSES, START AND STOP DATES

The "tapering dose" functionality for medications is unavailable when creating a prescription in Cerner. Inpatient medication taper orders do not populate correctly to prescriptions on Discharge MedRec.

#### To prescribe a tapering regimen on Discharge MedRec:

- **Prescribe** the **first** order of the tapering regimen. Enter the taper instructions manually into the **special instructions** field on this prescription.
- **Discontinue** all subsequent orders in the tapering regimen



### DUPLICATE ENTRIES

On Discharge MedRec, these items may appear as duplicates:

- Inpatient orders
- Documented (home) medications
- Prescribed (outpatient) medications

When true duplicates occur (ie. identical regimens), you should **continue** (or prescribe) the **documented** ( ) or **prescribed** ( ) medication and **discontinue** the inpatient order ( ).

Orders Prior to Reconciliation			
Order Name/Details	Status		
cholecalciferol (vitamin D3) 1,000 unit, PO, qdaily with supper	Documented		
cholecalciferol (vitamin D3) 1,000 unit, PO, qdaily with supper	Ordered		

This will ensure that medications will populate appropriately into the "Home Medications - Continue Taking" section of the Discharge Summary and Patient Handout.

Note: Start dates do not print on prescriptions.

For prescriptions with future start dates, or specific stop dates: **enter the intended start/stop date in "special instructions" field of the prescription.**



### PRINTING PRESCRIPTIONS

Order Name	Start	S.D.	Details	Status
salbutamol	25-Jul-2020 09:57 POT	2	5 mg, in.	Discontinued
iprotropium	24-Jul-2020 09:57 POT	2	500 mc.	Discontinued
HYDROchlorothiazide	24-Jul-2020 09:08 POT	20	1 mg, P.	Discontinued
MORPHine	25-Jul-2020 22:36 POT	~	400 mg.	Discontinued
salbutamol (salbutamol 100 mcg/puff inhaler)	25-Jul-2020 22:36 POT	24	600 mc.	Discontinued
salbutamol (Salbutamol...)	27-Jul-2020 14:52 POT	2	pufl, I.	Prescribed
fluticasone (fluticasone...)	27-Jul-2020 14:52 POT	1	tab, P.	Prescribed
iprotropium (iprotropium...)	27-Jul-2020 14:51 POT	2	pufl, I.	Prescribed
acetaminophen (acetaminophen...)	27-Jul-2020 14:49 POT	500	mg.	Prescribed
ASA (ASA EC 31 mg...)	27-Jul-2020 14:49 POT	1	tab, P.	Prescribed
ASA (ASA EC 31 mg...)	27-Jul-2020 14:49 POT	1	tab, P.	Prescribed

Ensure your filters are set to include "Prescribed Medications"

Double check printed prescriptions to ensure all prescriptions were printed!

If more than one medication is prescribed, they are sometimes routed to different printers due to the workstation's settings.

#### Reprinting prescriptions:

From the "Medication List" menu,

- Right-click over the prescription order in PowerChart
- Select **Print Rx**

To select multiple prescription orders, press and hold the **Ctrl** key on your keyboard and click on each order to highlight. Then reprint as above.

## MEDICATION CHANGES AFTER DISCHARGE MEDREC IS COMPLETED

For medication changes made after Discharge MedRec has been signed, the changes must be reflected using the Discharge MedRec function as follows:

### Example:

*Discharge MedRec originally completed with furosemide 20mg PO BID prescribed for discharge. Decision made after Discharge MedRec was completed to increase furosemide to 40mg PO BID. Patient to continue furosemide 40mg PO BID upon discharge.*

### Steps:

1. Return to the Discharge MedRec screen.

Orders Prior to Reconciliation				Orders After Reconciliation			
 	Order Name/Details	Status	  	 	Order Name/Details	Status	
4 Continued Home Medications							
	furosemide 40 mg, PO, BID	Ordered	  		furosemide (furosemide 20 mg oral tablet) 20 mg, PO, BID, 30 day, 0 Refill(s) < Notes for Patient >	Prescribed	

2. Review medications on the left column "Orders Prior to Reconciliation" AND the right column "Orders after Reconciliation".
3. i) Select **Discontinue**  to discontinue the medication regimen the patient should no longer receive (regardless of whether it is in the left or right column), AND  
ii) Select **Prescribe**  to generate a new prescription for the medication regimen the patient should continue upon discharge.

Orders Prior to Reconciliation				Orders After Reconciliation			
 	Order Name/Details	Status	  	 	Order Name/Details	Status	
	furosemide 40 mg, PO, BID	Ordered	  	  	furosemide (furosemide 20 mg oral tablet) 20 mg, PO, BID, 30 day, 0 Refill(s)	Discontinue	
			  	  	furosemide (furosemide 40 mg oral tablet) 40 mg, PO, BID, 30 day, 0 Refill(s) < Notes for Patient >	Prescribe	

4. SIGN the Discharge MedRec.
5. Update the Discharge Summary and Patient Discharge Handout to reflect the medication changes.