

## APPENDIX

### Implementing a Regional Data Exchange Tool to Improve Medication Use And Safety Research Pharmacist Medication Reconciliation Procedure Guide

I. Medication reconciliation. Basic instructions are for units 7B, 7C and 8B (inpatient med-surg and telemetry). Variations for unit 6B (inpatient psychiatry) are explained in section E.

#### A. General enrollment and assignment procedures

- 1) Research assistant (RA) enrolls patient using informed consent process
- 2) RA documents study enrollment in CPRS with a progress note and names research pharmacist, principal investigator, and study group assigner as note cosigners. RA indicates RHIO enrollment in a separate progress note. RA uploads research and RHIO consent documents to CPRS.
- 3) Pharmacist receives an alert in CPRS that a patient has been enrolled in the study by being named a cosigner on the study enrollment note.
- 4) Pharmacist may receive a message, call, or email from study group assigner indicating whether patient's RHIO record should be accessed or not (e.g., if the patient was consented to RHIO prior to enrolling in this research study).

#### B. Research pharmacist's instructions for accessing system information:

- 5) Print out patient's list of inpatient medications using either CPRS or VISTA medication profile.
- 6) Use all available health record sources to generate an outpatient medication list:
  - Discharge summaries from the past year
  - List of active medications in CPRS
  - Admission note medication list
  - Most recent outpatient or primary care medication list
  - RHIO (accessible if patient is in intervention group; inaccessible if patient is in control group); if RHIO is accessible review Inpatient Meds and Outpatient Meds tabs and click Medications Query button (i.e., all 3 are necessary)
  - VISTA Web for remote (non-JJP) VA information
- 7) Time-saving tips
  - a. Review only hospital discharge summaries within 1 year prior to this admission, unless there is no outpatient information available, in which case look at older discharge summaries.
  - b. If last outpatient note is comprehensive, there is no need to look at previous notes.
  - c. For outpatient medications, focus on lists of active medications; do not spend a lot of time on lists of inactive meds and non-meds. Take note of fill date of prescriptions.
- 8) Compare inpatient list and outpatient list and identify discrepancies.

#### C. Research pharmacist's instructions for patient and caregiver interview

9) Introduce yourself to patient and caregiver. Remind patient/caregiver that medication regimen we are discussing pertains to how the patient was taking their medication prior to admission. Ask patient/caregiver if they keep a updated list of medications the patient takes. Review with patient/caregiver medication list generated from above. Note any discrepancies/non-adherence.

10) Interview tips

- a. When reviewing these data sources with the patient/family, specifically ask about differences among these different lists and clarify what the patient is actually taking.
- b. Encourage patients to use more than just their memory, i.e., use a paper list, pill bottles, etc.
- c. If patients use a list or pill bottles and seem completely reliable (and the data are not that dissimilar from the other sources, and differences can be explained), then other sources are not needed.
- d. If patients are not sure or are relying on memory only, or cannot clearly “clean up” the other sources of medication information, then move to other sources: community pharmacies, outpatient physician offices, having the family bring in pill bottles, etc.
- e. Pill bottles, reviewed with patient/family, are preferable to pharmacist refill information if available and if the review with patient/family seems reliable.
- f. It is not enough to rely on the physician’s preadmission medication list as the main source of additional information.
- g. Use an interpreter with non-English speaking patients unless you are fluent in the other language.

11) How to document non-adherence:

- a. If completely non-adherent (on purpose or because didn’t know to take medication), then leave off list and note it in general comments.
- b. If sporadically non-adherent, give general assessment of adherence in comments.
- c. If systematically non-adherent (e.g., always takes medicine once a day instead of 3 times a day), then note actual frequency taken in dose/route/ frequency section and make note of discrepancy from prescribed frequency in comments.
- d. If patient denies knowledge of a medication that is on a list (i.e., doesn’t know why not taking it), keep track of these in comments. Recheck other sources or call a provider’s office to see if the patient is supposed to be on it.

D. Research pharmacist’s instructions for documentation and communication

- 12) Compare newly reconciled outpatient medication list (List generated from EMR sources and speaking to the patient) with inpatient medication list. Use “Medication Reconciliation— Admission” note title/template to write note in CPRS documenting the two medication lists. At the top of the note, document any medication discrepancies and explanations of discrepancies.
- 13) Sign medication reconciliation note and add research coordinator as cosigner to alert her that medication reconciliation process is completed
- 14) Inform provider or team of clinically relevant discrepancies, by adding provider as a cosigner for non-urgent discrepancies, and by phone or in-person for urgent discrepancies.
- 15) The research pharmacist then completes the discrepancy tracking form (in MS Access; see section II below).

E. For unit 6B (inpatient psychiatry):

- 1) Medication reconciliation will be performed and documented by the staff pharmacist covering 6B (not the research pharmacist), as is current regular practice.
- 2) If the patient enrolled in the study is assigned to control, the research pharmacist will place an addendum to the staff pharmacist's medication reconciliation note stating the patient is enrolled in the RHIO study. The research pharmacist then completes the discrepancy tracking form (in MS Access; see section II below).
- 3) If the patient enrolled in the study is assigned to intervention, the research pharmacist will receive an alert in CPRS that a patient has been enrolled in the study by being named a cosigner on the study enrollment note
- 4) The research pharmacist will look at the information contained in the RHIO (Inpatient Meds and Outpatient Meds tabs and Medications Query button (i.e., all 3 are necessary)) and add an addendum to the staff pharmacist's medication reconciliation note documenting any new information/discrepancies revealed by the RHIO or patient interview.
- 5) The research pharmacist will sign medication reconciliation note and add the study group assigner as cosigner to alert her that medication reconciliation process is completed
- 6) The research pharmacist will inform provider or team of clinically relevant discrepancies, by adding provider as a cosigner for non-urgent discrepancies, and by phone or in-person for urgent discrepancies.
- 7) The research pharmacist then completes the discrepancy tracking form (in MS Access; see section II below).

II. Tracking tasks

Log on to research study folder on VA desktop. Open MS Access database, Pharmacist Assessments. Complete database, documenting: sources of information used, medication discrepancies found, and, for each discrepancy found: name of drug involved, type of discrepancy (Omission, Dose Change, Frequency Change, Route Change, Substitution, Non-Adherence, Addition), source of discrepancy (RHIO/non-RHIO), whether the discrepancy was intentional or non-intentional, and whether discrepancy was a result of a history error or reconciliation error.