Medication Reconciliation on the Mental Health Unit, Central Newfoundland Regional Health Centre.

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CSHP Objective 1.1
In 100% of hospitals and related healthcare settings, pharmacists will ensure that medication reconciliation occurs during transitions across the continuum of care (admission, transfer and discharge).

I currently work as the clinical pharmacist assigned to our mental health unit at the Central Newfoundland Regional Centre, in Grand Falls-Windsor, NL. Our inpatient unit consists of 20 beds, and we have five staff psychiatrists. My duties include attending multidisciplinary team rounds with our psychiatrists and the mental health care team and completing an assigned section of the Minimum Data set-Mental Health (MDS-MH). The MDS-MH is a standardized assessment tool that is used by mental health professionals to describe client performance and capacity. It enables a service provider to assess key domains of function, mental and physical health, social support and service use (Canadian Institute for Health Information definition). Finally, I play a key role in facilitating the medication reconciliation process on admission, transfer and discharge.

In 2006, we identified that medication reconciliation was going to be a required operational practice for accreditation. The mental health unit was identified as an ideal location to begin implementation as it had a dedicated pharmacy presence (myself), who had an established relationship with psychiatrists and nursing, and a patient population whose "non-psychiatric" medications were at risk of being overlooked on admission. Baseline data was obtained February 8, 2006 to May 12, 2006 (n=129), which determined the following:

- Mean # of undocumented intentional discrepancies: 1.51
- Mean # of unintentional discrepancies: 0.52
- Medication reconciliation success index: 64%

Based on the collected data, we were clearly not meeting generally accepted targets. Consequently, I assembled the Mental Health Med Rec team, consisting of the unit team leader, a psychiatrist (ad hoc), a staff nurse, the Safer Healthcare Now coordinator, two staff pharmacists, and myself and the unit nursing manager as the team's co-chairs. We created a Med Rec Improvement Charter, and established our target values:

- Decrease the number of intentional and undocumented discrepancies by 75 %
- Decrease the number of unintentional discrepancies by 75%
- Increase the success index to ≥95 %

To achieve these goals, the team utilized the Communities of Practice on the Safer Healthcare Now website, and created a "Best Possible Medication History and Admission Medication Orders" form, which enables the "proactive" approach to medication reconciliation (see below).

Central Health

BEST POSSIBLE MEDICATION HISTORY & ADMISSION MEDICATION ORDERS

Patient Label/Addressograph

ALLERGIES:

This form serves as the physician's admitting orders.

1. **Check ONE of Continue, Discontinue, or Change In Dose, Route and/or Dosing Interval for each medication listed in the left-most column.**
2. **Write a Reason Code(s) (see shaded area below) for any Discontinuations or Changes, in the second right-most column.**
3. **Write medication changes in Dose, Route and/or Dosing Interval in the right-most column.**
4. **New admission medications must be written on a separate Physician Order Sheet.**

Source of Medication Information *(Check ALL that apply; to be completed by Medication Reconciliation Pharmacist or Nursing)*

❑ Review of patient medication list ❑ Review of medication vials ❑ Review previous hospital records ❑ Family Physician list
❑ Patient recall ❑ Family/caregiver recall ❑ MAR from another facility ❑ Other:_____
❑ Community pharmacy list – *Pharmacy Name*:

Best Possible Medication History (completed by Med Rec Pharmacist or Nursing)				Physician Admission Orders				
				Check ONE				
Medication Name & Strength *(List all prescriptions and regularly taken OTC & PRN medications prior to admission).*	**Dose**	**Route**	**Dosing Interval**	**Continue**	**Discontinue**	**Change in Dose, Route and/or Dosing Interval**	**Reason Code(s) for Discontinue or Change 1-7 (see below)**	**Medication Order Changes in Dose, Route, and/or Dosing Interval**

Reason Codes for Discontinuation or Changes:

1. Inadequate response 2. Adverse effect 3. Duplication of therapy 4. No indication
5. Drug-Drug Interaction 6. Drug-Disease Interaction 7. Other (Specify reason in progress notes or H&P)

History obtained by: _____ (signature/status) **Date:** _____ **Time:** _____

Prescribing Physician: _____ (signature) **Date:** _____ **Time:** _____

Nurse: _____ (signature) **Date:** _____ **Time:** _____

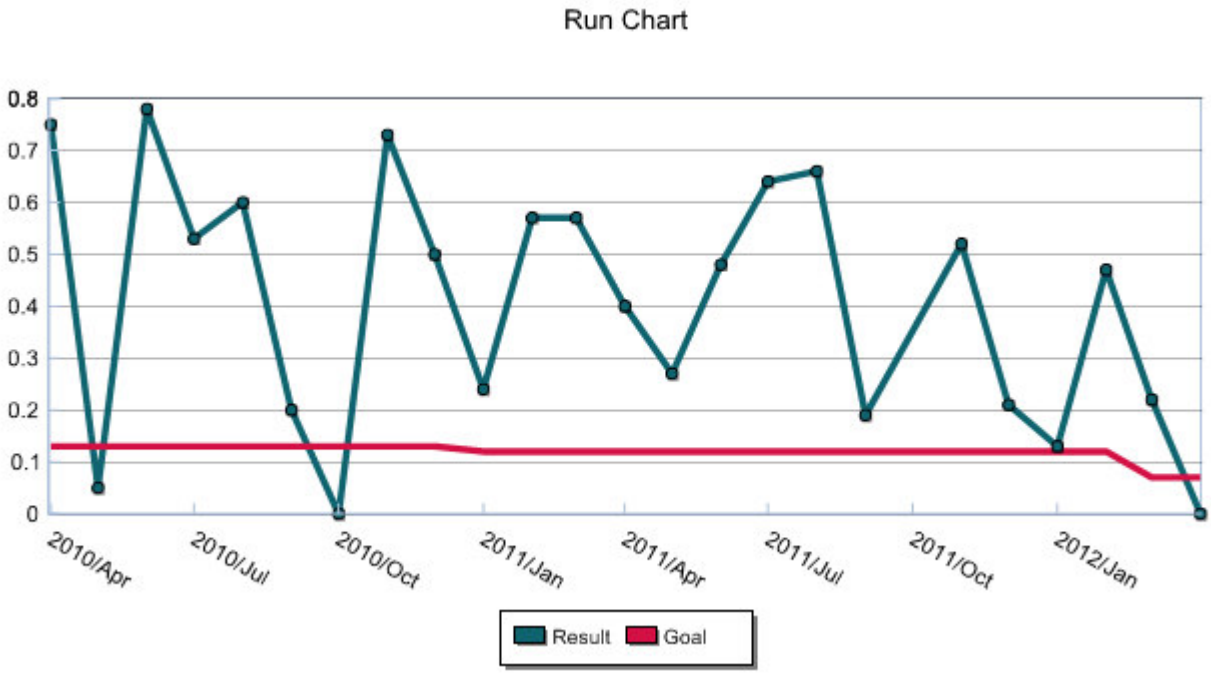
Checked by (Nurse): _____ (signature) **Date:** _____ **Time:** _____

Top Copy: Patient Chart Bottom Copy: Pharmacy (when signed by Physician)

As the majority of patients admitted to our unit already have admission orders written before the medication process can be conducted, most of our medication reconciliation occurs "retroactively". I perform the medication reconciliation process on admission exclusively at the present time.

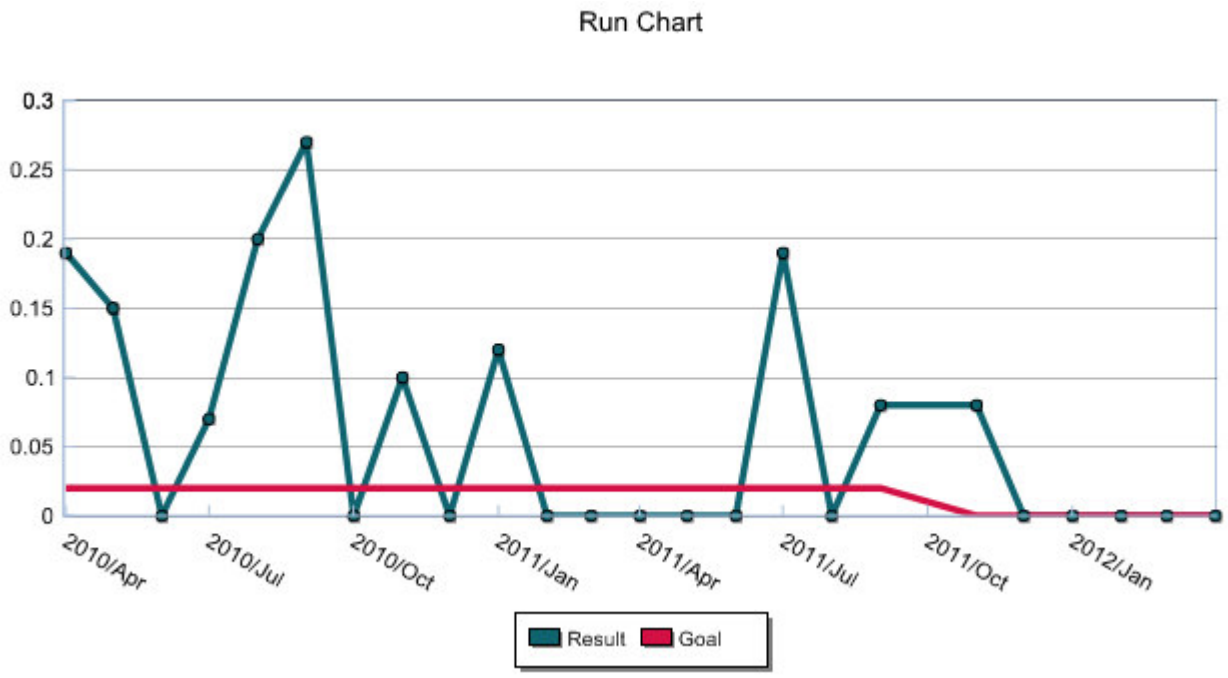
I also collect and submit our data to the Safer Healthcare Now website on a quarterly basis. Running charts can then be printed and shared with the team (see below).

Chart #1 Medication Reconciliation on Admission – Mental Health Unit
Mean Number of Undocumented Intentional Discrepancies per Patient



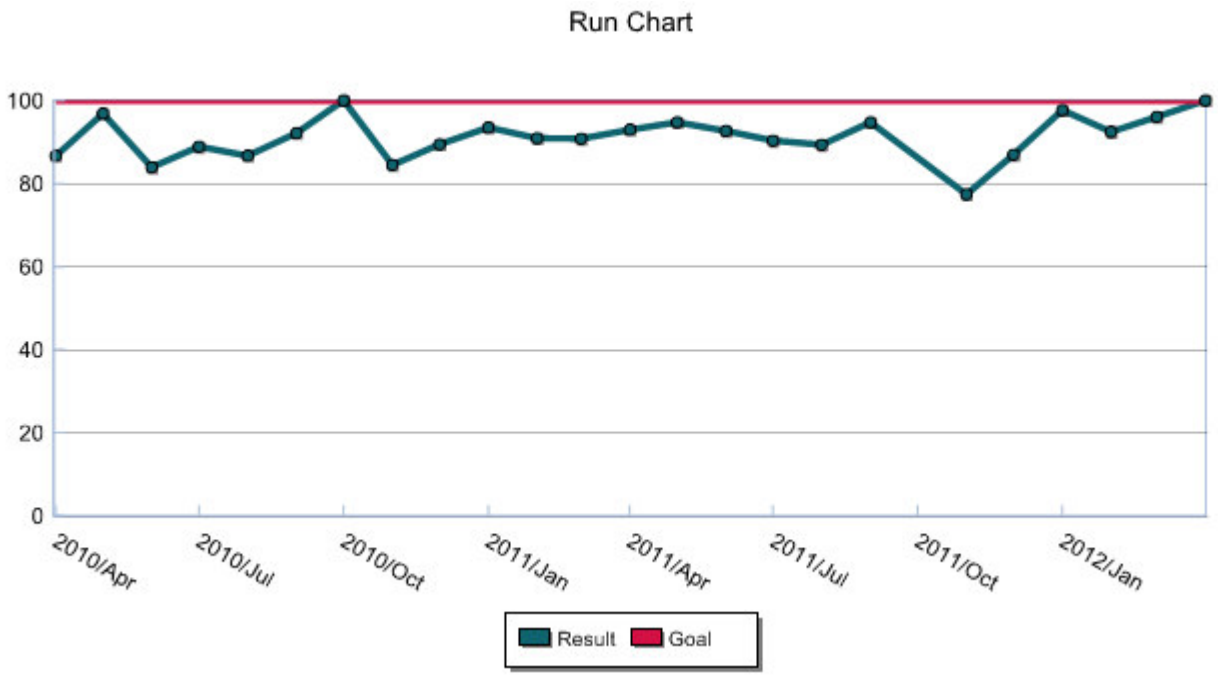
Results: The red line represents the goal determined by our baseline data. The green line represents the mean number of undocumented intentional discrepancies per patient. It was determined that to attain our goal, changes made to a patient's drug regimen on admission must be better documented, which may require additional education for our psychiatrists.

Chart #2 Medication Reconciliation on Admission – Mental Health Unit
Mean Number of Unintentional Discrepancies per Patient



Results: The red line represents the goal determined by our baseline data. The green line represents the mean number of unintentional discrepancies per patient. There were no unintended changes (i.e., errors) between home medications and admission orders for medications on admission since December 2011. Thus, our goal has been reached at the present time.

Chart #3 Medication Reconciliation on Admission – Mental Health Unit
Medication Reconciliation Success Index



Results: The red line represents the goal determined by our baseline data. The green line represents the success index. Since January 2012(and even prior to that month) >90% of all medication orders have no discrepancies between the home medications and admission orders and/or the orders are clearly documented as to the reason for the change; a 100% success index was attained in October 2010 and in April 2012.

Once the process of medication reconciliation was established for admission, our attention was focused on discharge. In April 2011, a survey was FAXed to all community pharmacies (27) within our health authority region, to get an idea of their expectations for a patient's seamless discharge into the community. Only 7 pharmacies replied, but a common theme was their desire for information regarding which medications were discontinued in hospital, and which medications were changed.

Med Rec Survey for Community Pharmacies

MedRec at Discharge Survey

This survey will take less than 10 minutes. At Central Health we are working to improve our patient's discharge processes. We wish to ensure that patient medication information and instructions are adequate to meet your needs.

How often do you receive medication information from the Central Newfoundland Regional Health Centre to adequately care for your patient?

- ❑ Every time
- ❑ Very Often
- ❑ Occasionally
- ❑ Never

Comments:

_____

1. How often do you receive the medication information **in time** from our hospital?
   - ❑ Every time
   - ❑ Very Often
   - ❑ Occasionally
   - ❑ Never

   Comments:

   _____
2. When would you like to receive the discharge medication information for your patients/residents/clients?
   - ❑ With the patient/resident/client at the transfer
   - ❑ 24 hours prior to discharge
   - ❑ Other

   _____
3. Do you find any discrepancies between the discharge prescription and your information that you found confusing or requiring follow-up?
   - ❑ Yes
   - ❑ No

   Comments:

   _____
4. Do you have general feedback to help us improve our process? Or any other comments?

5. Would you be interested to being part of a working group to help us improve our MedRec at discharge process? (optional)
   - ❑ Yes
   - ❑ No

Thank you for your time. Please do not hesitate to call me if you have further comments or suggestions – we welcome your feedback!
My contact information is: John Bautista, 709-292-2657.

In response to the survey results, a “Best Possible Medication Discharge Plan” was created using the Communities of Practice and with input from all members of the Mental Health Med Rec team (see below):

Central Health

Best Possible Medication Discharge Plan (BPMDP)

PRESCRIPTION(S)

ADDRESSOGRAPH

This form serves as the discharge medication plan as well as the physician's prescription for discharge medications. See reverse for instructions on completion of this form. Use additional forms if necessary.

Note: NARCOTIC prescriptions are to be written on the usual *tamper-resistant* prescription pad

Drug Allergies: _____

List of Discharge Medications Include all medications patient is to take upon discharge **PRESS FIRMLY-** **THIS IS A FOUR PAGE CARBON FORM**	**Reconciliation** Compare List of Discharge Medications to Admission Medications or Best Possible Medication History (BPMH) taken on admission and check appropriate column				**Quantity in Days and Repeats**	
Medication Name / Dose / Route / Frequency or Time of Day *Use only approved abbreviations*	Unchanged ✓	Changed ✓	New ✓	Reason for drug addition/change	Days supply	Repeats

Medications Discontinued in Hospital	**Reason for Discontinuation**

Prescriber Signature: _____ Office Phone: _____

Prescriber Name: _____ License No: _____ Date: _____

White copy - Patient/Community Pharmacy **Yellow Copy** – Client Chart **Pink Copy** – Family Physician **Gold Copy**: _____ (destroy if unused)

This form also serves as the patient's discharge prescription. The psychiatrist must now document the medication changes that occurred while in hospital so that this information can be conveyed to the community pharmacy. In addition, a copy is also sent to the patient's family doctor, and the patient's psychiatrist in the community, thus keeping all of the patient's healthcare providers "in the loop". This form has now replaced the usual hospital discharge prescription, so we have 100% adherence to medication reconciliation of discharge.

Although we don't have a formal medication reconciliation form for transfer, patients who are admitted to our unit from another service or facility have their medications reconciled by the mental health pharmacist on transfer.

Our medication reconciliation process on our mental health unit can certainly be considered a success story. Since inception, we have decreased the number of unintentional medication changes to zero, and we have met the expectations of our community counterparts with respect to discharge prescriptions. I hope that the success on our unit will serve as an example and model to the rest of our health care facilities.