

The logo for SQUIRE features the word "SQUIRE" in a bold, red, sans-serif font. A silver quill pen is positioned diagonally across the letters, with its tip pointing towards the top-left corner. The quill is partially obscured by the letters, appearing to pass through them. The letters have a slight drop shadow, giving them a three-dimensional appearance.

SQUIRE

Every Clinician · Every Patient · Every Time

SQUIRE Guide

Medication Reconciliation

as at January 2009

Medication Reconciliation

GOAL: TO PREVENT ADVERSE DRUG EVENTS BY IMPLEMENTING MEDICATION RECONCILIATION

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- Reconciliation Process on Discharge or Transfer
- Measurement Methods and Tools

Resources

Some of these resources may be protected by copyright, please ensure all copyright requirements are met prior to their use.

- This initiative has been modelled on the Safer Systems Saving Lives Toolkit for Preventing Adverse Drug Events. The associated Victorian Government website provides excellent information, invaluable tips, lessons from success, and measurement and data collection tools that can be used or adapted if desired: <http://www.health.vic.gov.au/sssl/interventions/adverse.htm>
- Useful supplementary resources include the 'How-to' Guides and websites of:
- Institute for Healthcare Improvement (IHI) 5 Million Lives campaign: <http://www.ihl.org/nr/rdonlyres/98096387-c903-4252-8276-5bfc181c0c7f/0/adehowtoguide.doc>
- Safer Healthcare Now! Campaign: <http://www.saferhealthcarenow.ca/ViewResource.aspx?resourceId=486>
- Medication reconciliation is also a key component of the WA Pharmaceutical Review Policy (March 2007) <http://www.health.wa.gov.au/circularsnew/attachments/284.pdf>

Eligible Patient Populations

- All hospital inpatients are eligible for inclusion.
- When estimating spread, coverage of the program may be different for measure 1 and 2. Two estimates of spread are requested for this CPI target - firstly, the

proportion of inpatient beds that are in areas where medication reconciliation processes on *admission* are being actively improved and monitored, and secondly, the proportion of inpatient beds in areas where medication reconciliation on *discharge or transfer* are being actively improved and monitored.

- Sampling is an appropriate means to monitor improvement for measure 1 and 2 and the same patients / patient population does not have to be included in both measures.

Example

One medical ward is the focus of reconciliation on admission activities (25% of inpatient beds), one psychiatric ward is the focus of reconciliation on discharge activities (20% of inpatient beds).

- Demonstrating improved outcomes is likely to support sustained improvement and greater clinical engagement. Where resources permit, we encourage use of outcome measurement using the IHI Trigger Tool for Adverse Drug Events [http://www.ihl.org/IHI/Topics/PatientSafety/MedicationSystems/Tools/Trigger%20Tool%20for%20Measuring%20Adverse%20Drug%20Events%20\(IHI%20Tool](http://www.ihl.org/IHI/Topics/PatientSafety/MedicationSystems/Tools/Trigger%20Tool%20for%20Measuring%20Adverse%20Drug%20Events%20(IHI%20Tool)

MEASURE 1 - COMPLIANCE WITH THE MEDICATION RECONCILIATION PROCESS AT ADMISSION

This measure has been modelled on:

- Victorian Government Department of Human Services. Preventing Adverse Drug Events Toolkit <http://www.health.vic.gov.au/sssl/interventions/adverse.htm>
- IHI 5 Million Lives Campaign How-to-Guide Prevent Adverse Drug Events Medication Reconciliation <http://www.ihl.org/nr/rdonlyres/98096387-c903-4252-8276-5bfc181c0c7f/0/adehowtguide.doc>
- Safer Healthcare Now! Campaign Medication Reconciliation Getting Started KIT <http://www.saferhealthcarenow.ca/ViewResource.aspx?resourceId=486>
- NSW Therapeutic Advisory Group Inc, 2007. Indicators for Quality Use of Medicines in Australian Hospitals.
- Medication reconciliation is also a key component of the WA Pharmaceutical Review Policy, with “Medication reconciliation on admission” the second Standard of the policy.

Reconciliation Process at Admission

Medication reconciliation at admission is the formal process of:

1. Medication history - obtaining a complete and accurate medication history of each patient's current home medications (details to include generic medication name, dosage, frequency and route).
2. Confirmation - confirming with the patient and (where possible) a second source of information that the details obtained in the medication history are correct. If clinical judgement determines this is not necessary, this decision should be explicitly documented.
3. Reconciliation - comparing the clinician's admission orders to the medication history and ensuring that any discrepancies are brought to the attention of the prescriber and, if appropriate, changes are made to the orders.

NOTE: At admission means this documentation is completed by the end of the next calendar day after admission. Reconciliation performed at a pre-admission clinic is acceptable.

- While the measure reported refers to the overall process of medication reconciliation, the measurement of each of the individual aspects will assist hospitals to identify problem areas requiring a more targeted approach. Reporting of this stratified data to OSQH is however not required.
- In line with the recommendations in the IHI guideline, hospitals should choose the most appropriate methods and definition of medication reconciliation for their target patient population, and measure compliance against this agreed operationalised definition of this measure.
- In line with Standard 2 in the Pharmaceutical Review Policy, that medication reconciliation should be conducted 'ideally within 24 hours of admission for high-risk patients' hospitals may wish to audit the time taken for medication reconciliation on admission.

Measurement Methods and Tools

- Frequent monitoring of this measure should be undertaken to guide the improvement process. A purpose-designed form may facilitate documentation.
- Selection of a random sample of current inpatients is recommended. Sample size will depend on available resources and facility size, but the following recommendations are based on the number of beds included in the program:

Number of inpatient beds in current implementation area/areas	Sample size
150 or more	20% of patients
30-149	30 patients
Less than 30	Actual number of beds

Measure 1 calculation:

$\frac{\text{Number of patient records with all three steps of medication reconciliation documented by the end of the next calendar day after admission}}{\text{Number of patient records reviewed}} \times 100 = \text{\% of patients who receive the full three-step process of medication reconciliation at admission by the end of the next calendar day after admission}$
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MEASURE 2 - MEDICATION RECONCILIATION ON DISCHARGE OR TRANSFER

This measure has been modified from:

- Victorian Government Department of Human Services. Preventing Adverse Drug Events Toolkit <http://www.health.vic.gov.au/sssl/interventions/adverse.htm>
- IHI 5 Million Lives Campaign. How-to-Guide: Prevent Adverse Drug Events Medication Reconciliation <http://www.ihl.org/nr/rdonlyres/98096387-c903-4252-8276-5bfc181c0c7f/0/adehowtguide.doc>
- Safer Healthcare Now! Campaign: Medication Reconciliation Getting Started Kit <http://www.saferhealthcarenow.ca/ViewResource.aspx?resourceId=486>
- Medication reconciliation is also a key component of the WA Pharmaceutical Review Policy, with patient education and communication during the discharge process forming the third and fourth Standards of the policy.

Reconciliation Process on Discharge or Transfer

Medication reconciliation on discharge or transfer is the formal process of:

1. Reconciliation - comparing the clinician's discharge or transfer orders to the medication history and ensuring that any discrepancies are brought to the attention of the prescriber and, if appropriate, changes are made to the orders.
2. Medication liaison - ensuring that frequent and accurate communication about the patient's medications occurs between all clinicians involved in the patient's care and relevant information is also communicated to the patient and/or carer.

- While the measure reported refers to the overall process of medication reconciliation, the measurement of each of the individual aspects might assist hospitals to identify problem areas requiring a more targeted approach.
- In line with the recommendations in the IHI guideline, hospitals should choose the most appropriate methods and definition of medication reconciliation for their target patient population, and measure compliance against this agreed process for this measure.

Measurement Methods and Tools

Monthly reviews of the implementation process should use a sample current inpatients to assess whether they have medication reconciliation on discharge or transfer documented.

Suggested sample size is listed below:

Number of inpatient beds in current implementation area/areas	Sample size
150 or more	20% of patients
30-149	30 patients
Less than 30	Actual number of beds

Measure 2 calculation:

$\frac{\text{Number of patient records with the two steps of medication reconciliation upon discharge or transfer documented}}{\text{Number of patient records reviewed}}$	$\times 100 =$	$\% \text{ of patients who receive the full two-step process of medication reconciliation at the time of the patient's physical discharge or transfer}$
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