

## 5.9 Percentage of patients who receive a current, accurate and comprehensive medication list at the time of hospital discharge

### Purpose

This indicator addresses the effectiveness of processes that promote continuity of care in medication management and aim to minimise adverse medicine events when care is transferred.

### Background and evidence

Adverse medicine events are commonly caused by lack of effective communication about medicines, especially in the transitions between hospital and community settings.<sup>1</sup> Provision of an accurate, comprehensive medication list to the patient or his/her caregiver at hospital discharge helps to promote continuity in medication management.<sup>2</sup> Medication lists improve patients' ability to understand and manage their own medicines and may reduce the risk of adverse outcomes due to medication errors.<sup>3</sup> However, studies have shown that unintended discrepancies in the medication information provided on discharge are common.<sup>4,5</sup> The process of medication reconciliation reduces opportunities for medication discrepancies and helps to ensure that the information provided to the patient at discharge is verified and accurate.<sup>6</sup>

### Key definitions

**Patients** refers to all patients admitted for at least 24 hours whose care is transferred from the hospital inpatient setting to home or a community-based care facility.

**Medication list** refers to a list of the medicines provided to the patient or carer, which includes the following information:

- all medicines to be taken by the patient, including the dose, frequency and indication for each medicine. All prescription, over-the-counter, and complementary medicines should be included, as well as all regular, intermittent and "as required" medicines. The list should include medicines to be taken by all routes i.e. oral, topical, parenteral etc.
- information about changes to therapy, including dose changes, new medicines and ceased medicines
- any medicines NOT to be taken by the patient, including those causing allergies/adverse drug reactions.

Active ingredient name should be provided for each medicine and brand names should be listed as appropriate. The list must be in a format that is easily understood by lay persons and should not contain medical terminology or jargon.

**Current, accurate and comprehensive** means that the discharge medication list contains all the information required for the patient or their caregiver to understand their medication regimen and effectively and safely manage their medicines after discharge.

To determine whether the medication list is accurate and comprehensive, the auditor should compare the list with the:<sup>6</sup>

- medicines prescribed on all current medication charts at the point of discharge. All medicines, doses and frequencies should match up, taking into consideration, the documented discharge plan, including medicines started, ceased or altered on discharge
- patient's admission medication history to check that any medicines withheld on or during admission have been included where appropriate and that all changes can be accounted for.

Any discrepancies that cannot be accounted for by the auditor should be taken to mean that the discharge medication list is not accurate and comprehensive.

**At the time of** means the medication list is produced and provided to the patient within 24 hours prior to or at the patient's discharge.

**Hospital discharge** means transfer of care from an inpatient facility to home or another site of community-based care, such as a residential aged care facility, but not transfer to another acute care facility.

## Data collection for local use

Please refer to the section *Using the National Quality Use of Medicines Indicators for Australian Hospitals* for guidance on sample selection, sample size, measurement frequency and other considerations.

**Inclusion criteria:** Adult, paediatric and neonatal patients admitted to hospital for greater than 24 hours who are taking one or more medicines on discharge from hospital.

**Exclusion criteria:** Patients transferred to another acute care facility; patients cared for only in the emergency department i.e. not admitted.

**Recommended data sources:** Patient medication lists, discharge documentation including dispensing information and discharge summaries, medication charts, medication management plans or reconciliation forms and medical records.

The data collection tool for QUM Indicator 5.9 assists data collection and indicator calculation.

## Data collection for inter-hospital comparison

This indicator may be suitable for inter-hospital comparison. In this case, definitions, sampling methods and guidelines for audit and reporting need to be agreed in advance in consultation with the coordinating agency.

## Indicator calculation

$$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$$

**Numerator** = Number of patients who received a current, accurate and comprehensive medication list at hospital discharge

**Denominator** = Number of discharged patients taking medicines in sample

## Limitations and interpretation

There may be a number of ways to identify a sample of patients taking medicines at discharge. Certain sampling methods may lead to inadvertent exclusion of some patients. For example, the use of pharmacy dispensing records will exclude those patients who did not have their discharge medication dispensed by the hospital. It is recommended that patients be identified using inpatient medication charts and/or medication management plans in combination with the medical record.

Where it is not possible to provide discharge medication lists to all discharged patients, patients should be prioritised according to their risk. Hospitals should implement policies to determine which patients are provided with discharge medication lists,<sup>7</sup> for example, patients over 65 years of age, taking multiple medicines, with changes to their medicines during the admission, suspected of non-adherence or taking high-risk medicines. When using this indicator, organisations may wish to select specific patient groups to audit in accordance with their local policy. Reasons why a medication list is not supplied may be collected for further information.

The medication list should also document the indication, intended duration of treatment (where applicable) and specific administration advice for each medicine.<sup>7</sup> Although equally important, these additional details are not audited in this indicator. The indicator does not assess the patient's understanding of the information provided in the medication list.

Performance against this indicator is likely to be improved if discharge medication lists undergo a process of medication reconciliation. Medication reconciliation is an essential component of effective clinical handover and involves matching the medicines that the patient should be prescribed with those that are actually documented and resolving any discrepancies. This process helps to prevent harm by improving continuity of care and reducing the opportunity for medication errors.

Concurrent measurement of the following indicators will provide a comprehensive measure of the organisation's performance at continuity of medication management:

- *Indicator 3.1: Percentage of patients whose current medicines are documented and reconciled at admission*
- *Indicator 5.3: Percentage of discharge summaries that include medication therapy changes and explanations for changes*
- *Indicator 5.8: Percentage of patients whose discharge summaries contain a current, accurate and comprehensive list of medicines.*

## Further information

The Australian Commission on Safety and Quality in Health Care medication reconciliation web page includes information on the process of medication reconciliation, tools to support its implementation and links to other useful web resources, and is available from [www.safetyandquality.gov.au/our-work/medication-safety/medication-reconciliation](http://www.safetyandquality.gov.au/our-work/medication-safety/medication-reconciliation)

Medication Safety Self Assessment for Australian Hospitals<sup>8</sup> (MSSA) can help identify potential strategies for improvement with this and other indicators. MSSA encourages development of robust systems for safe prescribing, dispensing, administration and monitoring of medicines. MSSA is available at [www.cec.health.nsw.gov.au](http://www.cec.health.nsw.gov.au)

This indicator can be used to assist hospitals in meeting the National Safety and Quality Health Service Standard 1 [items 1.2.1, 1.2.2, 1.5.2, 1.6.1, 1.6.2, 1.18.1], Standard 4 [items 4.1.2, 4.2.2, 4.5.1, 4.5.2, 4.7.2, 4.12.1, 4.12.2, 4.12.4, 4.13.1, 4.15.1] and Standard 6 [items 6.1.1, 6.2.1, 6.3.1, 6.4.1, 6.5.1].<sup>9</sup>

## References

1. Second National Report on Patient Safety- Improving Medication Safety. Australian Council for Safety and Quality in Health Care, 2002.
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5. Kripalani S, LeFevre F, Phillips C, et al. Deficits in Communication and Information Transfer: Implications for Patient Safety and Continuity of Care Between Hospital-Based and Primary Care Physicians. *JAMA* 2007; 297: 831-841.
6. Society of Hospital Pharmacists of Australia Committee of Speciality Practice in Clinical Pharmacy. Chapter 2. Medication Reconciliation. *SHPA Standards of Practice for Clinical Pharmacy Services*. *J Pharm Prac Res* 2013; 43 (2): s6-s12.
7. National Safety and Quality Health Service Standard 4: Medication Safety, Safety and Quality Improvement Guide. Australian Commission on Safety and Quality in Health Care, 2012.
8. Medication Safety Self Assessment for Australian Hospitals: Institute for Safe Medication Practices USA (Adapted for Australian use by the NSW Therapeutic Advisory Group and the Clinical Excellence Commission), 2007.
9. Australian Commission on Safety and Quality in Health Care. National Safety and Quality Health Service Standards. Sydney, ACSQHC, 2012