

8.7 Percentage of older patients who receive a current, accurate and comprehensive medication list, including explanations for any medication changes and, if applicable, details of a deprescribing plan, at the time of hospital discharge.

Purpose

This indicator addresses the effectiveness of processes intended to ensure that patients and their carers receive adequate medicines information for safe and effective medication management after hospital discharge, and to promote continuity of care in medication management, with the aim to minimise adverse medicine events when care is transferred.

Background and evidence

Communicating medicines information is one of the Australian Pharmaceutical Advisory Council's *Guiding Principles to Achieve Continuity in Medication Management*. This indicator provides a measure of compliance with these guidelines.¹

Adverse medicine events are commonly caused by lack of effective communication about medicines, especially in the transition between the hospital and community settings and older patients are especially at risk of this harm due to the large number of medicines they are frequently prescribed.^{2,3} When older patients are transferred between hospitals or to their home or residential care facility, healthcare professionals must ensure that the healthcare professional taking over the patient's care is supplied with an accurate and complete list of the patient's medicines, including explanations for any medication changes and, if applicable, details of a deprescribing plan.¹ However, studies have shown that unintended discrepancies in the medication information provided on discharge are common with one study showing only 1 in 5 changes made to the medication regimen during hospital admission were explained in the discharge summary.² The process of medication reconciliation reduces opportunities for medication discrepancies and helps to ensure that the information communicated to ongoing care providers at discharge is verified and accurate.⁴

The National Safety and Quality Health Service (NSQHS) Standards 2nd edition, Medication Safety Standard, specifically actions 4.6 and 4.12 require that health service organisations have processes in place to reconcile medications at transitions of care and also distribute the current medicines list including any reasons for changes to receiving clinicians at transitions of care (respectively) as well as provide patients on discharge with a current medicines list and the reasons for any changes.⁵

Key definitions

Older patients refers to all patients aged 65 years and over.

Note: Other age definitions may be appropriate for some high risk patient groups e.g. 50 years and older for Aboriginal and Torres Strait Islander people, residents of aged care facilities or patients with low literacy skills.^{6,7}

Medication list refers to a list of the medicines provided to the patient or carer that includes the information outlined in Box 1.

Box 1: Details of the medication list that should be documented

- All on-going medicines to be taken by the patient by all routes i.e. oral, topical, parenteral etc., including for each medicine the:
 - dose
 - frequency (including time if applicable)
 - indication
- All prescription, over-the-counter, and complementary medicines
- All regular, intermittent and "when necessary" medicines
- Any allergies and intolerances (including if no known allergies).

The 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 carer to understand their medication regimen and effectively and safely manage their medicines after hospital discharge.

To determine whether the medication list is current, accurate and comprehensive, the auditor should compare the patient discharge medication list with the:

- 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 at time of discharge (i.e. medication therapy changes, see below for definition); AND
- patient's admission medication history/list of medicines taken prior to presentation to hospital to check that any medicines withheld on or during admission have been included where appropriate and that all changes can be accounted for.

All medicines, doses and frequencies should match. Any discrepancies that cannot be accounted for by the auditor should be taken to mean that the discharge medication list is not current, accurate and comprehensive.

Medication therapy changes refers to changes to the patient's pre-admission medication regimen that are intended to continue after discharge. Differences between admission and discharge medicines should be assumed to represent medicine therapy changes.

Changes may include:

- any amendments to the dose, frequency, form or route of a medicine taken prior to admission
- weaning of a medicine following a hospital-based medication review with a view to stopping the medicine following hospital discharge
- withholding of a medicine that was taken prior to admission
- cessation of a medicine that was taken prior to admission
- initiation of a new medicine
- commencement of a medicine that was intentionally withheld prior to admission.

If there are no changes to the patient's pre-admission medication regimen as a result of hospital admission, this should be explicitly documented.

To determine preadmission medications in circumstances where there is no documented Best Possible Medication History available, the auditor should use the medication list documented by a clinician on admission, and if this is also not available then the first medications prescribed on admission may be used. It is recommended that auditors record the source of admission medications in these circumstances.

Note: Medication therapy changes does not include medications that are only prescribed while the patient is an inpatient such as venous thromboembolism prophylaxis and perioperative antibiotics.

Explanations for changes should include sufficient detail to inform future management decisions and should be explicitly documented in the discharge summary or discharge letter.

Specific details should be provided on the:

- medicine(s) involved;
- intended action to be undertaken regarding these medicine changes (e.g. wean, cease etc.);
- time frame of when these actions should occur/over what time period;
- rationale for these changes; and
- patient or carer consent or agreement (if applicable).

Deprescribing plan describes documented guidance on how to withdraw (wean or cease) any inappropriate medicines identified from the hospital-based medication review under the supervision of a health care professional with the goal of managing polypharmacy and improving outcomes.

The deprescribing plan should:

- take into account the patient's preferences and document their agreement with the plan.
- be clearly and consistently documented in the patients' medical record (as per local policy) with appropriate amendments on the patient's medication chart.
- be documented in the discharge summary/letter (including any amendments already made to the medication regimen) and medicine list to ensure continuity of care.

Resources to support implementation of deprescribing plans including guides and consumer information leaflets are available via:

<http://www.nswtag.org.au/deprescribing-tools/>.

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: Patients aged 65 years and over, or other ages for high risk groups as appropriate, admitted to hospital for greater than 24 hours who are taking one or more medicines at discharge.

Exclusion criteria: Patients transferred to another acute care facility; patients cared for in the emergency department.

Recommended data sources: Medical records, medication charts, medication management plans or reconciliation forms, hospital-based medication reviews, discharge summaries, discharge prescriptions, copies of medication lists issued (if applicable). Differences between admission and discharge medicines should be assumed to represent medicine therapy changes.

The data collection tool (DCT) for NSW TAG QUM Indicator 8.7 assists data collection and provides automatic indicator calculation.

A summary of documentation requirements for the medication list to meet NSW TAG QUM Indicator 8.7 is shown below in Box 2 to assist data collection.

Box 2: Requirements to meet NSW TAG QUM Indicator 8.7 specifications

The discharge medication list provided to patients or carers should explicitly document:
<ul style="list-style-type: none"> all on-going medicines to be taken by the patient, including the dose, frequency and indication for each medicine (see Box 1); AND
<ul style="list-style-type: none"> allergies and intolerances (including if no known allergies); AND
<ul style="list-style-type: none"> medication therapy changes OR absence of medication therapy changes; AND
<ul style="list-style-type: none"> explanations for any medication therapy changes (if applicable); AND
<ul style="list-style-type: none"> a deprescribing plan (if applicable).

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 older patients who received a current, accurate and comprehensive medicines list, including explanations for any medication changes and, if applicable, details of a deprescribing plan, at the time of hospital discharge.

Denominator = Number of older patients taking medicines at discharge 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 medicines 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.

There may be variation in local practices regarding medication lists e.g. the location of documented evidence regarding distribution of medication lists or whether copies of patient medication lists are kept for record keeping purposes. It is recommended that sites determine useful local data sources prior to data collection and consider collecting data about the location of this documentation to inform quality improvement as well as any future repeat auditing.

When it is not possible to provide discharge patient medicine lists to all discharged patients, patients should be prioritised according to their risk. Health service organisations should implement policies to determine which patients are provided with discharge medication lists, 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 or as identified by an appropriate health professional as requiring one on discharge. When using this indicator, organisations may wish to select specific patient groups to audit in accordance with their local policy. Reasons why a patient medicine list is not supplied may be collected for further information.

The patient medicine list should also document the indication, intended duration of treatment (if applicable) and specific administration advice for each medicine. 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 medicine list.

Performance against this indicator is likely to be improved if patient discharge medicine 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. Sites may wish to collect data for the number of discrepancies that cannot be accounted for by the auditor.

Documenting reasons for all medication therapy changes is facilitated by a process of medication reconciliation at discharge. This in turn is dependent on having an accurate medication history and list of current medicines at admission. It may be useful to collect this indicator concurrently with *National QUM Indicator 3.1 Percentage of patients whose current medicines are documented and reconciled at admission*.

Details of (or reference to) the deprescribing plan should also be provided in the medicine list. This may include provision of a separate patient specific deprescribing plan in conjunction with the medicine list (e.g. consumer information leaflets available via: <http://www.nswtag.org.au/deprescribing-tools/>).

Collecting data for different patient groups (e.g. patients admitted to specific wards such as geriatric wards, orthopaedic wards; or patients admitted under a specific team/specialty; or those admitted due to medication-related harm) may inform post-audit interventions (this may be documented in the 'Comments' column of the DCT).

Some performance monitoring and/or quality improvement projects may wish to include additional risk criteria or limit the patient sample e.g. patients with specific conditions, prescribed certain medication classes, or under the care of a specific specialty.

It is recommended that this indicator be read and measured in conjunction with *NSW TAG QUM Indicator 8.6 Percentage of older patients whose discharge summaries contain a current, accurate and comprehensive list of medicines, including explanations for any medication therapy changes and, if applicable, details of a deprescribing plan*.

Available here: <https://www.nswtag.org.au/qum-indicators/>

References

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