

5.7 Percentage of patients receiving sedatives at discharge that were not taking them at admission

Purpose

This indicator addresses the effectiveness of processes for discharge medication reconciliation and review of medicines intended for temporary symptom management.

Background and evidence

Problems arising from the use of benzodiazepines include overdose, particularly from the use of benzodiazepines together with other sedative drugs, and dependence as a result of long-term use. Benzodiazepine dependence rarely develops in patients taking normal therapeutic doses of these drugs for short periods (eg 1 to 2 weeks). Anyone on long-term benzodiazepine therapy is at risk of becoming dependent, the risk increasing with the duration of treatment.¹ Newer sedatives such as zolpidem have been associated with reports of bizarre sleep-related behaviour and deaths from injury have been reported in Australia.²

Key definitions

Patients receiving sedatives includes patients receiving sedatives regardless of destination after discharge (home, residential care or another hospital). Psychiatric patients and those undergoing detoxification regimes are excluded.

Sedatives refer to the following oral medications indicated for treatment of insomnia:³

Medication class	Individual medications
Benzodiazepines	Flunitrazepam, nitrazepam, oxazepam, temazepam, triazolam
Other medications	Diphenhydramine, zolpidem, zopiclone

Data collection for local monitoring

Recommended sample selection: Random sample of patients discharged on sedatives. Patients may be identified from medication charts, discharge prescriptions or other pharmacy records. Specific groups such as elderly patients may be targeted if desired.

Recommended sample size: 30 patients receiving sedatives at discharge over a one month period (or all patients if less than 30 patients are identified). Collecting a larger sample where possible will increase the sensitivity of the data.

Recommended methodology: Review of medical records including discharge documentation.

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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 receiving sedatives at discharge that were not taking them at admission

Denominator = Number of patients receiving sedatives at discharge in sample

Limitations and interpretation

This indicator relies on documentation of accurate medicines information in the medical record. Good documentation supports quality patient care⁴ and is a critical component of management of adverse drug reactions. Poor communication can result in adverse drug events.⁵

Appropriate medication management at the time of discharge or transfer 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 medications at admission. It may be useful to collect this indicator concurrently with the indicator *3.1 Percentage of patients whose current medications are documented and reconciled at admission* and the indicator *5.3 Percentage of discharge summaries that include medication therapy changes and explanations for changes*

Further information

The *Medication Safety Self Assessment for Australian Hospitals*⁶ (MSSA) can help identify potential strategies for improvement with this and other indicators. The MSSA encourages development of robust systems for safe prescribing, dispensing, administration and monitoring of medications. The MSSA is available at www.ccc.health.nsw.gov.au

References

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3. Australian Medicines Handbook: Australian Medicines Handbook Pty Ltd, 2007.
4. The Good Clinical Documentation Guide: National Centre for Classification in Health, Commonwealth of Australia, 2003.
5. Safe and Effective: The eight essential elements of an optimal medication-use system. In: MacKinnon N, ed: Canadian Pharmacist's Association, 2007.
6. Medication Safety Self Assessment for Australian Hospitals: Institute for Safe Medication Practices (Adapted for Australian use by the NSW Therapeutic Advisory Group and the Clinical Excellence Commission), 2007.