

5.4 Percentage of patients discharged on warfarin that receive written information regarding warfarin management prior to discharge

Purpose

This indicator assesses the effectiveness of processes intended to ensure that patients and their caregivers receive adequate information for safe and effective medication management after discharge.

Background and evidence

Warfarin is a widely used medicine with serious and potentially fatal side effects. Appropriate warfarin education is integral to effective warfarin management. Problems occur in communication along the continuum of care.¹ There is considerable risk of medicine and food interactions and regular monitoring is mandatory. Patient understanding of the medication regimen, and involvement in the therapeutic plan, may minimise the risks of adverse events with warfarin administration. However, research shows that provision of written information to patients is suboptimal in content, especially with regard to daily warfarin management.² Patients state they want “detailed information to increase their confidence in therapy, including better explanations of the reasons for taking warfarin, how it works, how dose adjustments are made, and observed phenomena (e.g. bruising, variable INR results)”.³ Although this information is most important when warfarin is initiated, it is appropriate to provide written medicine information at every opportunity. The information provided should be targeted to individual patient needs and be appropriate to age, language and cognition.

Key definitions

Discharged on warfarin refers to all patients who will continue taking warfarin following discharge from hospital. This includes patients whose therapy is newly initiated as well as those who were established on warfarin prior to hospital admission.

Written information regarding warfarin management could take a number of forms and is dependent on the patient’s circumstances. Written medicine information could include the following:

- provision of a warfarin booklet for tracking warfarin therapy and INR results
- update of an existing warfarin booklet to record INR results during the hospital stay
- instructions for INR testing and review after discharge
- other purpose-designed educational tools.

Provision of written warfarin information must be explicitly documented in the medical record and/or the appropriate space on the National Inpatient Medication Chart or other medication chart endorsed by the drug and therapeutics committee.

Prior to discharge means that the patient received the information at some stage during the current admission. Ideally information will be provided prior to the point of discharge so that patients and carers have adequate time to read and clarify information provided.

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 18 years and over who are prescribed warfarin on discharge from hospital.

Exclusion criteria: Nil.

Recommended data sources: Medical records and medication charts.

The data collection tool for QUM Indicator 5.4 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 discharged on warfarin that receive written information regarding warfarin management prior to discharge

Denominator = Number of patients discharged on warfarin in sample

Limitations and interpretation

This indicator does not assess the patient's understanding regarding their warfarin therapy, or the adequacy or appropriateness of the written information provided.

This indicator relies on documentation in the medical record that relevant written information was provided. Good documentation supports quality patient care³ and is a critical component of management with potentially toxic medicines such as warfarin. Poor communication can result in adverse medicine events.⁴ Thus it is assumed that absence of explicit documentation means no written information was provided.

Further information

Medication Safety Self Assessment for Antithrombotic Therapy in Australian Hospitals⁵ (MSSA-AT) can help identify potential strategies for improvement with this and other indicators. MSSA-AT encourages development of robust systems for safe prescribing, dispensing, administration and monitoring of antithrombotic therapy. MSSA-AT is available at 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, 1.8.2, 1.18.1], Standard 4 [items 4.1.2, 4.2.2, 4.5.1, 4.5.2, 4.11.1, 4.12.4, 4.13.1, 4.13.2, 4.14.1] and Standard 6 [items 6.1.1, 6.2.1, 6.3.1, 6.4.1].⁶

References

1. Guiding Principles to Achieve Continuity in Medication Management. Australian Pharmaceutical Advisory Council, 2005.
2. Stafford L, van Tienen EC, Peterson GM, et al. Warfarin management after discharge from hospital: a qualitative analysis. *J Clin Pharm Ther* 2012; 37(4): 410-414.
3. The Good Clinical Documentation Guide. National Centre for Classification in Health, Commonwealth of Australia, 2003.
4. MacKinnon NJ, ed. Safe and Effective: The Eight Essential Elements of an Optimal Medication-use System. Canadian Pharmacists Association, 2007.
5. Medication Safety Self Assessment for antithrombotic therapy in Australian Hospitals: Institute for Safe Medication Practices USA (Adapted for Australian use by NSW Therapeutic Advisory Group and the Clinical Excellence Commission), 2007.
6. Australian Commission on Safety and Quality in Health Care. National Safety and Quality Health Service Standards. Sydney, ACSQHC, 2012.