

AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

Selected best practices and suggestions for improvement for clinicians

Hospital-Acquired Complication **13**

MALNUTRITION

HOSPITAL-ACQUIRED COMPLICATION	RATE ^a
1 Pressure injury	10
2 Falls resulting in fracture or intracranial injury	4
3 Healthcare-associated infections	135
4 Surgical complications requiring unplanned return to theatre	20
5 Unplanned intensive care unit admission	na ^b
6 Respiratory complications	24
7 Venous thromboembolism	8
8 Renal Failure	2
9 Gastrointestinal bleeding	14
10 Medication complications	30
11 Delirium	51
12 Persistent incontinence	8
13 Malnutrition	12
14 Cardiac complications	69
15 Third and fourth degree perineal laceration during delivery (per 10,000 vaginal births)	358
16 Neonatal birth trauma (per 10,000 births)	49


a per 10,000 hospitalisations except where indicated
b na = national data not available


This hospital-acquired complication (HAC) relates to malnutrition, which is a deficiency of nutrients such as energy, protein, vitamins and minerals, and causes adverse effects on body composition, function or clinical outcome.*



Malnutrition can develop through a deficiency in dietary intake, from complications associated with illnesses causing poor absorption, such as Crohn’s disease and ulcerative colitis; nutrient losses; or as a consequence of increased nutritional requirements of a disease state. The risk of malnutrition becomes more acute for patients as they age, and is associated with a range of adverse outcomes including depression of the immune system, impaired wound healing, muscle wasting, longer length of hospital stay, and higher treatment costs and increased mortality.

Why focus on malnutrition?


 **Around 5,400 hospital-acquired episodes of malnutrition** occur each year in Australian hospitals[#]

 Hospital-acquired malnutrition increases the **length of stay and the cost of admission**[§]

70.8 Highest rate of this HAC at Principal Referral Hospitals[†]

14 Aggregate rate of this HAC at Principal Referral Hospitals

Per 10,000 hospitalisations

 If all hospitals reduced their rate of this HAC to less than 14 per 10,000 hospitalisations, it would prevent at least **1,652 episodes of malnutrition**



All facilities should be working to reduce their rates of episodes of malnutrition during hospitalisation.

* The specifications for the hospital-acquired complications list providing the codes, inclusions and exclusions required to calculate rates is available on the Commission’s website: www.safetyandquality.gov.au/our-work/indicators/hospital-acquired-complications/
[#] The data used in this sheet are for hospital-acquired complications in Australian public hospitals in 2015–16. Sourced from: Independent Hospital Pricing Authority (AU). Activity Based Funding Admitted Patient Care 2015–16.
[§] Independent Hospital Pricing Authority (AU): Pricing and funding for safety and quality: risk adjustment model for hospital-acquired complications, version 3, 2018.
[†] Hospitals were classified in the Principal Referral Hospitals peer group for these purposes according to the Australian Institute of Health and Welfare’s former definition of major city hospitals with more than 20,000 acute weighted separations and regional hospitals with more than 16,000 acute weighted separations.

Top tips for prevention and management of malnutrition

The following provides key points for clinicians to consider to avoid this hospital-acquired complication.

Conduct risk assessment

- Conduct a comprehensive risk assessment
- Identify risk factors such as: increased age, frailty and impaired mobility, polypharmacy, oral dysphagia, impaired swallowing, constipation, malabsorption conditions and syndromes, Parkinson's disease, chronic disease, cognitive decline and delirium, dementia, eating dependencies and/or institutionalisation
- Identify patients who are nutritionally at risk, including those who have been admitted to hospital with poor appetites or inadequate food intakes, preceding unexplained or unintentional weight loss, physical difficulty eating and/or drinking, and/or communication difficulties
- Identify patients with high nutritional needs, including those with increased nutritional requirements, those with poor absorptive capacity, some who are malnourished and lactating women.

For a patient at risk, develop a prevention plan as part of a comprehensive care plan

Develop prevention plan

Clinicians, patients and carers develop an individualised, comprehensive prevention plan to prevent malnutrition that identifies:

- Goals of treatment consistent with the patient's values
- Any specific nursing requirements
- Any allied health interventions required
- Observations or physical signs to monitor and determine frequency of monitoring
- Laboratory results to monitor and determine frequency of monitoring
- If specialist assistance is required.

Deliver prevention plan

Where clinically indicated, deliver malnutrition prevention strategies, such as:

- Social measures to ensure provision of meals
- Help with feeding
- Food and fluid intake records
- Modified menus
- Dietetic advice and oral nutrition supplements and/or artificial nutrition support
- Patient and family input where feasible.

Monitor

- Monitor the effectiveness of any malnutrition prevent strategies, and reassess the patient if malnutrition occurs
- Review and update the care plan if it is not effective or is causing side effects
- Engage in reviewing clinical outcomes, identifying gaps and opportunities for improvement.

AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

© Australian Commission on Safety and Quality in Health Care March 2018, last updated June 2018.

All material and work produced by the Australian Commission on Safety and Quality in Health Care is protected by copyright. The Commission reserves the right to set out the terms and conditions for the use of such material.

With the exception of any material protected by a trademark, any content provided by third parties, and where otherwise noted, all material presented in this publication is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International Licence.



Enquiries regarding the licence and any use of this publication are welcome and can be sent to communications@safetyandquality.gov.au.