

Investigating Hospital Acquired Malnutrition at Cabrini Health

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Background Malnutrition is highly prevalent in hospitalised patients and is associated with poorer patient outcomes, quality of life and higher hospital costs. It is diagnosed by dietitians using the subjective global assessment, classified as preventable or non-preventable (Cheng 2019). Across Australia, hospital acquired malnutrition (HAM) has gained prominence as a hospital acquired complication (HAC 13.1 - Malnutrition), with hospital improvements incentivised via funding penalties.

Aim To investigate all coded cases of HAM at Cabrini Health in 2025 to determine:

- Coding accuracy of HAC 13.1 and HAM diagnosis
- Counts of preventable and non-preventable HAM
- Factors associated with HAM diagnosis.

Method Retrospective audit all cases of coded HAM as HAC 13.1 -Malnutrition by Health Information Services (HIS) in 2025. Data collection via WebPAS and patient medical records.

Results Thirty-seven cases of HAM were coded in 2025. Of these 89% (33/37) were correctly coded by HIS and 97% (32/33) accurately diagnosed by dietitians. HAM was considered preventable in 89% (29/33) of cases. Thirty percent were moderate malnutrition. The median time to dietetic referral was 3 days (0-34), median time to diagnosis was 20 days (5-71), and median LOS 29 days (9-140). Colorectal surgery (CRS) accounted for 37% (12/33) of cases of which all were considered preventable.

Variable	Preventable HAM (n=29)	Non-preventable HAM (n=3)	P-value* (<0.05)
LOS, median (range)	29 (9-64)	29 (20-140)	0.560
Charlson Score, median (range)	5 (0-15)	12 (4-13)	0.192
Days between admission to referral, median (range)	3 (0-34)	1 (0-1)	0.035*
Days from admission to assessment, median (range)	7 (1-35)	2 (0-4)	0.037*
Days from admission to HAM diagnosis, median (range)	20 (5-71)	16 (9-60)	n/a
Male sex, n (%)	22 (75.9)	2 (66.7)	1.00
Mild HAM, n (%)	22 (75.9)	1 (33.3)	0.225
Moderate HAM, n (%)	7 (24.1)	2 (66.7)	0.225

Footnote: 1 case of PEM incorrectly diagnosed as HAM was excluded from analysis.

Conclusion In 2025, most HAM cases at Cabrini Health were considered preventable, highlighting opportunities for practice changes in accordance with a systems approach. Opportunities to improve coding accuracy exists. Earlier identification of malnutrition risk and proactive nutrition intervention to ensure nutritional requirements are met would result in reductions in preventable HAM. Further research into screening, diagnosis, and preventative strategies is planned, alongside the consideration of individual and hospital level interventions for systems change (Baird 2026). Additional statistical analysis is underway.

References J. Cheng et. al. (2019) *Defining and quantifying preventable and non-preventable hospital acquired malnutrition-A cohort study*. Nutrition & Dietetics. 76(5): 620-627;
J. Baird, K. Desneves, B. Chapman, R. Hughes, and C. Tuck, (2026) “ *Addressing Malnutrition in Australian Hospitals: A Scoping Review to inform Systems Thinking,*” *Journal of Human Nutrition and Dietetics* e70230.