

# Epworth Malnutrition Prevalence and Weight Monitoring Practices Audit – A 5 year review



Epworth  
Research

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## Introduction

Malnutrition is associated with adverse clinical outcomes, an increased length of stay, increased treatment costs and financial shortfalls for the organisation. Hence, timely malnutrition screening and the provision of appropriate dietetic intervention is vital to optimise patient outcomes and minimise treatment costs.

Studies have identified malnutrition prevalence rates ranging from 6-53% in Australian hospitals and detailed the financial shortfall to healthcare organisations resulting from hospital acquired malnutrition.

Epworth protocol requires 100% of patients to be both weighed and screened for malnutrition using the Malnutrition Screening Tool (MST) on admission to hospital and weekly.

An in-depth 2017 audit indicated poor compliance with both malnutrition screening as outlined in the Nutrition Protocol and the Weighing the Patient Procedure at both Epworth Richmond acute and the Epworth Rehabilitation sites. Other sites were not included in the audit and these findings have not been re-evaluated since that time in the same thorough manner.

## Aims

This audit aims to assess compliance with the Weighing the Patient Procedure and both adherence and accuracy of Malnutrition Screening as outlined in the Nutrition Protocol at all Epworth locations.

We also aim to quantify the prevalence of malnutrition risk and incidence across Epworth Healthcare and evaluate changes to these findings in comparison to the 2017 Malnutrition Prevalence audit.

Finally, we hope to facilitate benchmarking with other acute and rehabilitation hospitals to enhance the appropriate distribution of dietetic resources and effective targeting of further malnutrition related quality improvement activities.

## Methodology

- A snapshot audit was undertaken across all 4 acute and 6 rehabilitation sites of Epworth Healthcare in November 2022, with data collection undertaken by dietetic staff and trained volunteers.
- Exclusion criteria included patients of a non-English-speaking-background where an interpreter was not available, those absent from their bed at the time of assessment, patients with confusion or delirium deemed unable to appropriately answer interview questions, and those deemed too unwell by ward staff (for example patients receiving end of life care).
- The medical records of eligible patients were examined and structured interviews were then completed with each patient.
- Compliance with the Weighing the Patient Procedure was determined by thorough review of patient files and patient interview to determine whether weight and height had been physically measured on admission and weekly.
- Auditors conducted malnutrition screening of all eligible patients and the compliance and accuracy of the nurse-completed Malnutrition Screening Tool (MST) was examined by comparison between the most recently documented MST score (if this was completed) and that of the researchers.
- Assessment of malnutrition status was undertaken on all patients who were deemed to be at risk of malnutrition (MST $\geq$ 2) by completion of the validated Subjective Global Assessment (SGA) tool.
- Any patients found to be at risk of malnutrition who had not already been referred to dietetics and those who were diagnosed with malnutrition were provided nutrition intervention in line with evidence based best practice guidelines.

## Results

### Comparison of 2017 and 2022 Audit Results

5 years after the initial 2017 Epworth Malnutrition Prevalence audit, and despite the implementation of a range of education strategies, regular compliance audits and introduction of malnutrition diagnosis stickers, there continues to be poor compliance with the Epworth Weighing the Patient Procedure and Malnutrition Screening as outlined in the Nutrition Protocol.

### Patient Demographics

- Sample size = 1136 patients
- Average age = 71 years
- Average length of stay = 8 days; 34% of patients had a length of stay over 7 days
- % of patients with dietetic involvement during admission = 24%.

## Results- Continued

### Dietetic Assessed Malnutrition Risk and Prevalence

24% of Epworth inpatients were found to be at risk of malnutrition

16% of Epworth patients were diagnosed with moderate or severe malnutrition.

Consistent with 2017 findings

### Dietetic involvement

There remains a clear underutilisation of dietetic services for at risk and malnourished patients 42% of patients diagnosed with malnutrition had not been referred to a dietitian at the time of auditing.

### Compliance with Weighing the Patient Procedure

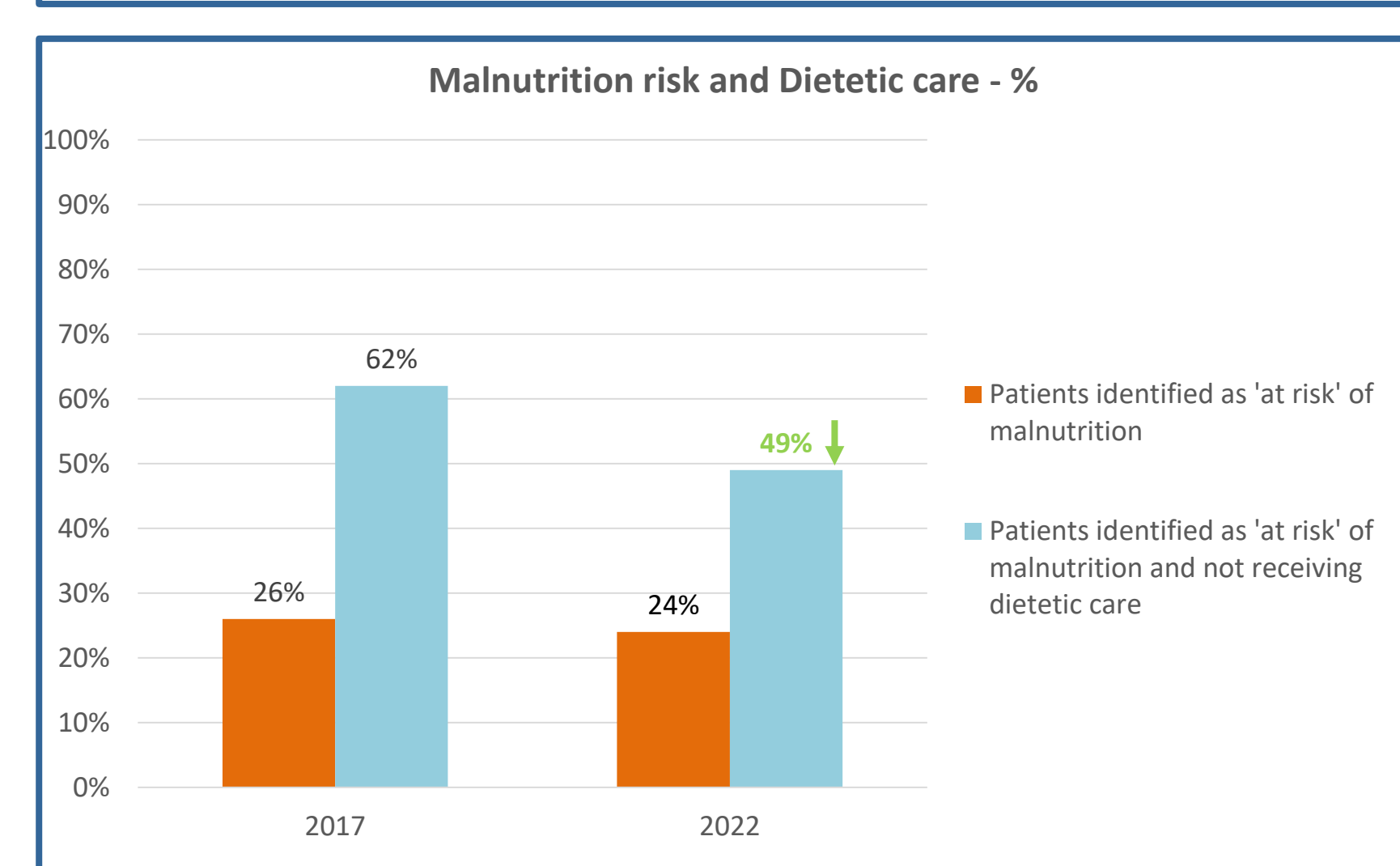
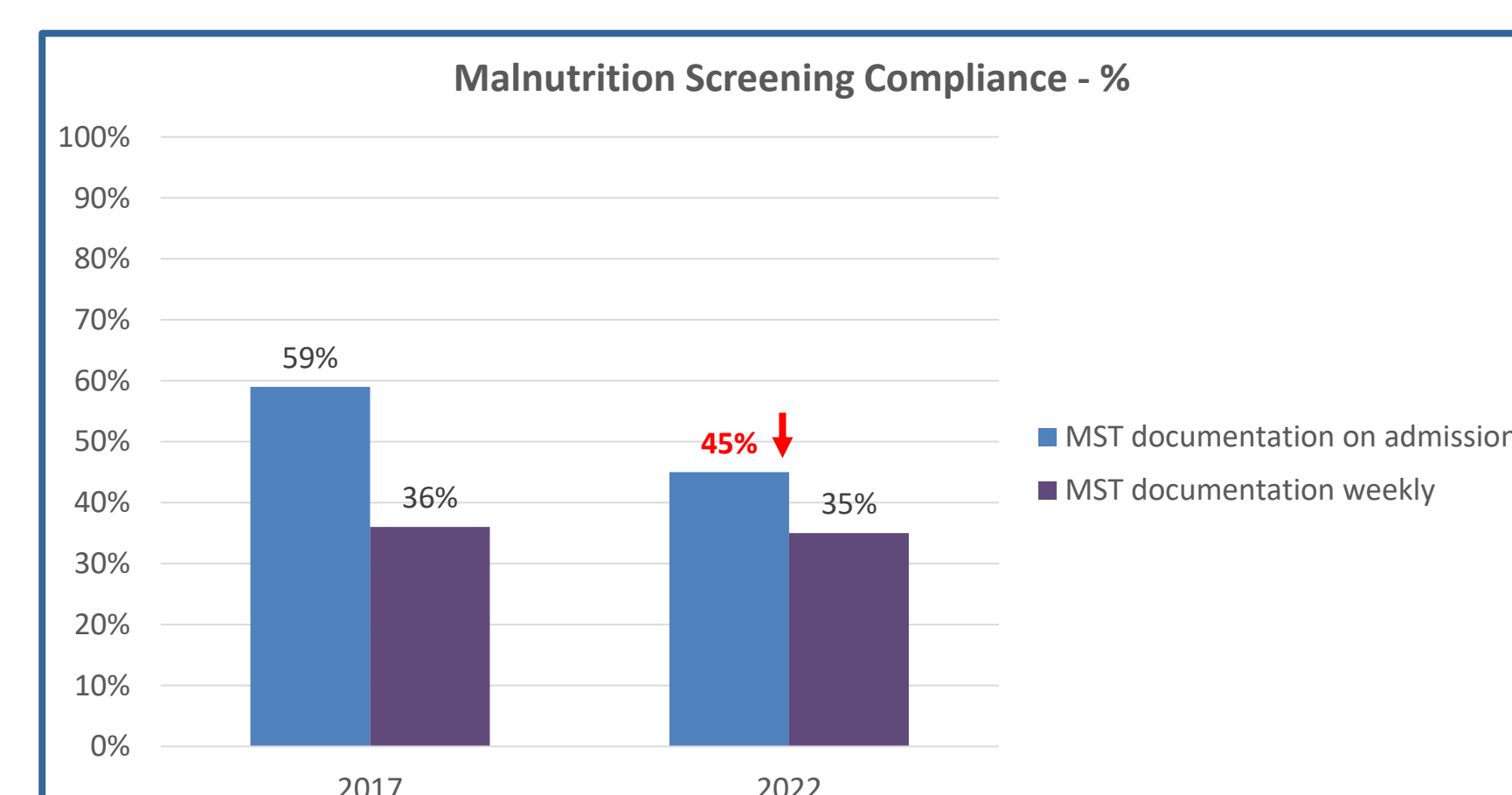
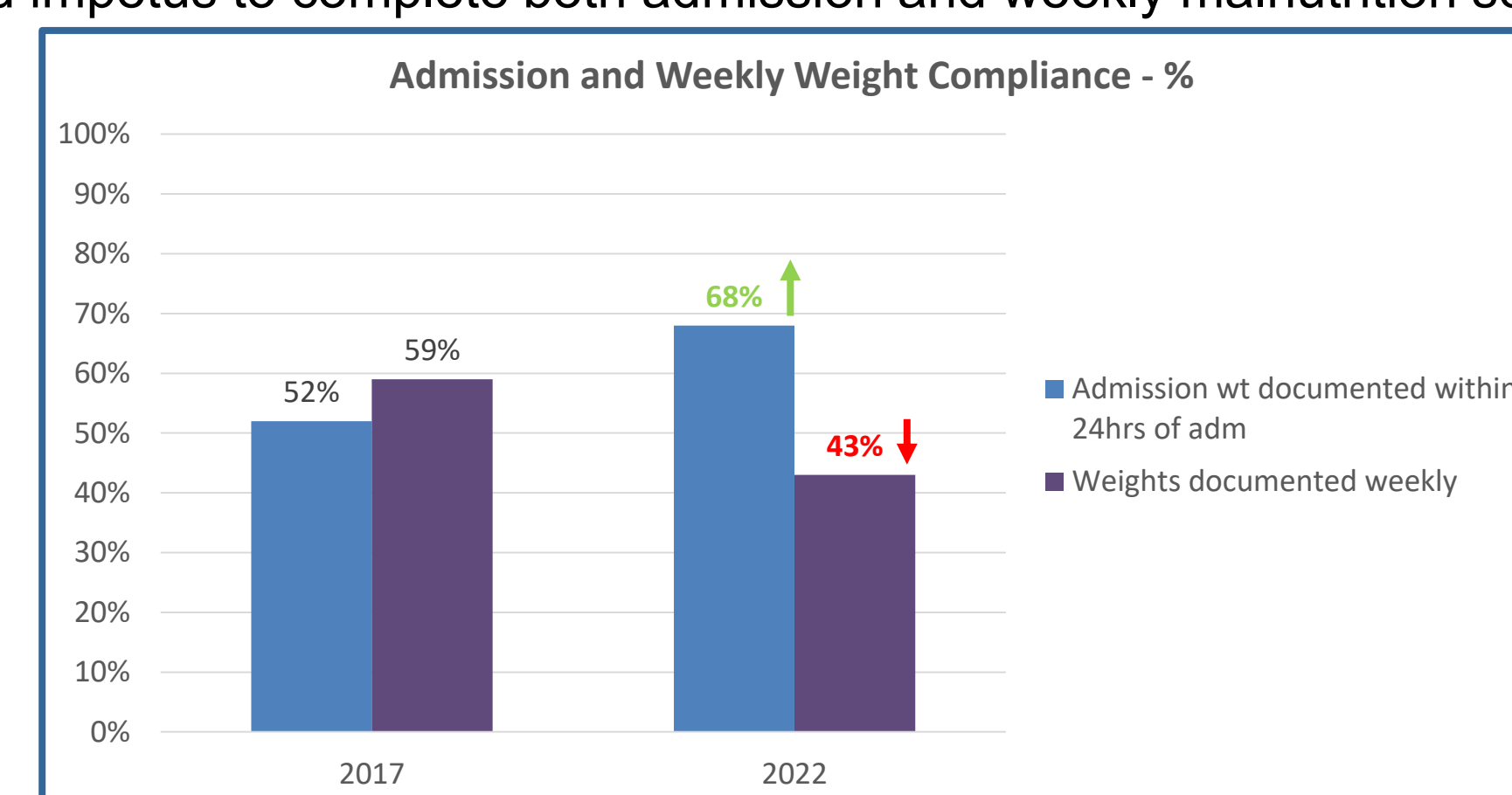
Continued poor compliance

- 22% of patients had no weight documented in their medical file
- 32% of patients had no weight documented within 24 hours of admission
- 57% of patients were not weighed weekly when length of stay was greater than 7 days
- 16% decline in weekly weight documentation from 2017 to 2022 (59% vs 43%).

### Compliance with Malnutrition Screening (as outlined in the Nutrition Protocol)

Continued poor compliance

- 55% of patients were not screened for malnutrition on admission in 2022 vs 41% in 2017
- 65% of patients were not screened for malnutrition weekly in 2022 vs 64% in 2017
- 64% accuracy of malnutrition screening completion vs screening completed by dietetic auditors
- Epworth Geelong and Epworth Eastern, which were not included in the 2017 audit, had significantly worse malnutrition screening rates than all other sites (5% at EG and 6% at EE). These sites do not utilise the same risk assessment forms as other sites which results in reduced impetus to complete both admission and weekly malnutrition screening.



## Conclusions

The completion of weight monitoring and malnutrition screening at Epworth Healthcare continues to sit well below the national (100% of patients) compliance target.

The results of the 2022 Epworth group-wide audit are either unchanged, or in some areas inferior to those of the 2017 audit. This has potential serious consequences for patient outcomes and safety in addition to significant financial implications for Epworth.

### Recommended group-wide approaches include:

- Implementation of mandatory annual evaluated training of all nursing staff (e-Learn).
- Inclusion of the MR40E (Weight Chart) in all patient files to facilitate measurement and documentation of height and weight both on admission and weekly.
- Dietetic staff to facilitate annual Epworth Malnutrition Awareness Fortnights in partnership with nursing staff to enhance staff education and knowledge.
- Implementation of a consistent mandatory approach to malnutrition risk screening and documentation group wide.
- Measurement and documentation of patient weights in Epworth DOSA and emergency departments.
- Screening for malnutrition in all Epworth day oncology, radiotherapy and dialysis units.
- Appropriate equipment for measuring weight and height to be made available across all Epworth sites, including hoist scales.
- Continued regular auditing of protocol compliance.