

A MUST to improve patient outcomes; a multidisciplinary approach to improving nutrition

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PROBLEM

If MUST scores are inaccurate, patients at risk of malnutrition will miss out on referrals to the dieticians.

BACKGROUND AND EVIDENCE

A MUST score helps calculate the risk of malnutrition in patients and takes into account BMI, % unplanned weight loss in the past 3-6 months and whether the patient is acutely unwell. (1,2)

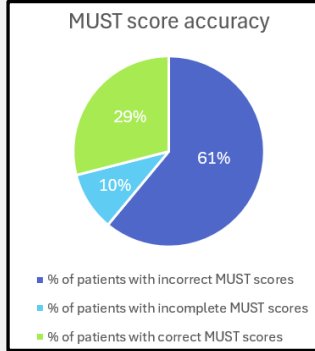
A score of 2 or more indicates a high risk of malnutrition and should prompt a dietician referral. (3)

Patients with dementia or cognitive impairment are at particularly high risk of malnutrition (4,5) and therefore accurate MUST scoring in this population takes on extra importance.

DIAGNOSTICS 1 – Accuracy of MUST score recording across 4 Elderly Medicine Units

Methods:

- We examined the EPR records for all patients ≥ 75 years across four complex medicine units (60 patients).
- 46 of these patients had a diagnosis of dementia, delirium or cognitive impairment in their latest clinical note.
- We identified which of these patients had either **incomplete** or **inaccurate** MUST scores.



71% of patients did not have a reliable MUST score

Impact:

- We found that **67%** of patients with an inaccurate MUST score met the criteria for dietician referral based on a corrected MUST score.
- However, only **33%** of this patient group were ever referred to the dieticians.
- This implies that a significant proportion of patients were missing out on timely referral to the dieticians, increasing their risk of malnutrition.

DIAGNOSTICS 2 – why were MUST scores left incomplete or incorrect?

- MUST scores were left incomplete due to palliation (17%), absence of measured weight (33%), no previous weight in last 3-6 months (50%).
- MUST scores were calculated incorrectly due to unrecognised weight loss in preceding 3-6 months (88%) and an absence of a measured weight (12%).

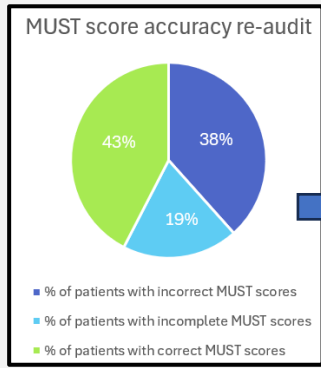
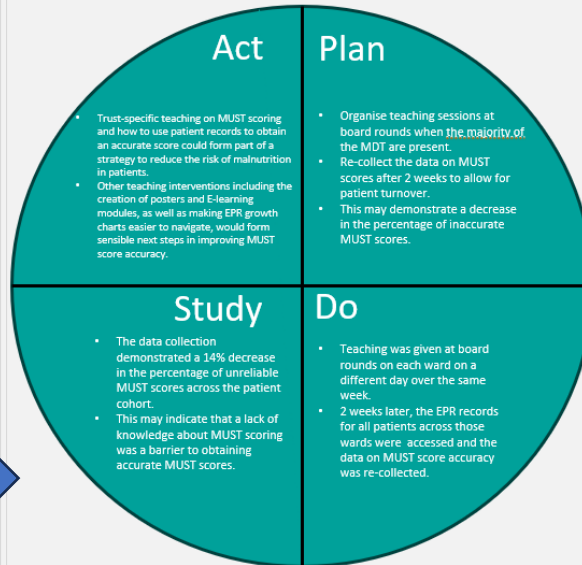
Key issues:

Misunderstanding of how to calculate % weight loss over last 3-6 months

No indication on growth chart about measured vs working weights

Patients not being weighed promptly during admission

PDSA and INTERVENTION



The % of patients with inaccurate MUST scores fell by 14% post-intervention

REFLECTIONS AND LEARNING

- Malnutrition is a significant and often overlooked issue in the elderly population, particularly in those with some form of cognitive impairment.
- We found that inaccuracies in MUST score recordings were due to a combination of factors including a misunderstanding about how to correctly use the growth chart to calculate % weight-loss, not weighing patients during their admission or an absence of measured weights on previous admissions.
- Interventions aimed at improving knowledge of MUST score calculation and the importance of this for the patient, may help us use this simple tool to increase the recognition of malnutrition in this vulnerable patient population.

CHANGE IDEAS

Intervention for this cycle: teaching in board rounds regarding importance of MUST and how to use growth chart to calculate % weight loss over last 3-6 months.

Interventions for future cycles:

- Posters and an E-learning module on MUST scores and how to calculate them accurately.
- Investigate the usefulness of technology designed to make weighing immobile patients easier for the nursing team.
- Contact the electronic patient records team to see whether the growth chart can be re-designed to make interpretation easier.

REFERENCES

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