

Prevalence of Sarcopenia and Malnutrition in Tymon North and the Impact of Dietetic Intervention

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Introduction

- Malnutrition and sarcopenia are two inter-related conditions that significantly impact older and are reversible with targeted interventions.
- Hence, early identification and intervention is essential to improve patient outcomes.

Aims

- To assess the prevalence of malnutrition and sarcopenia in patients referred to dietetics in Tymon North using Bioelectric Impedance Analysis (BIA), Hand Grip Strength (HGS), Body Mass Index (BMI), % weight loss and calf circumference as diagnostic parameters.
- To evaluate the impact of dietetic intervention at 4-6 weeks on these diagnostic parameters.

Methods

- All patients referred to the dietetic service over an 11 week period were included.
- Data collected included demographic information, past medical history and anthropometric measurements (BMI, weight history, % weight loss, calf circumference, HGS, BIA).
- Data analysis was completed using Microsoft Excel .

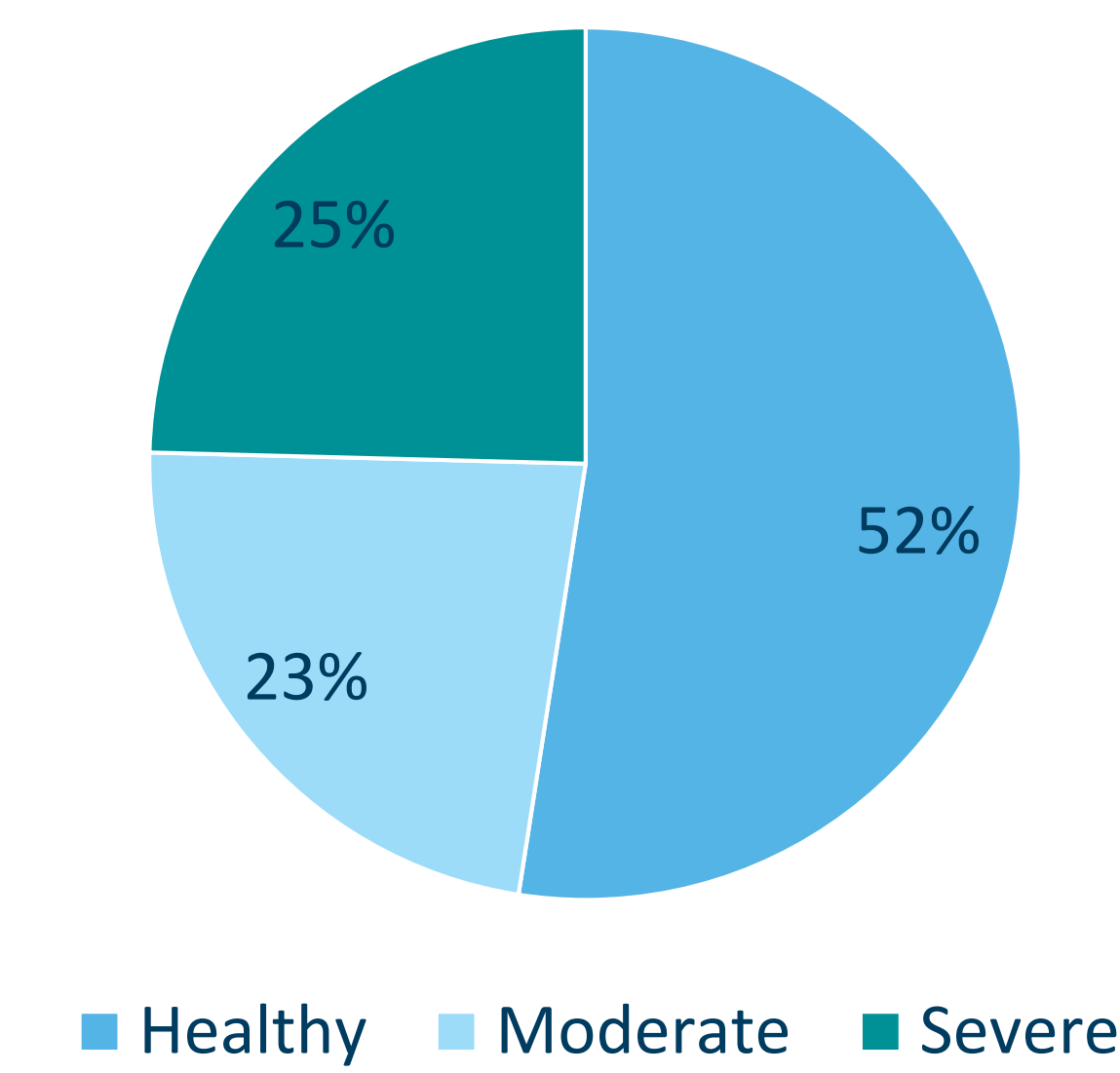
Results

61 patients were referred to the dietetic service.

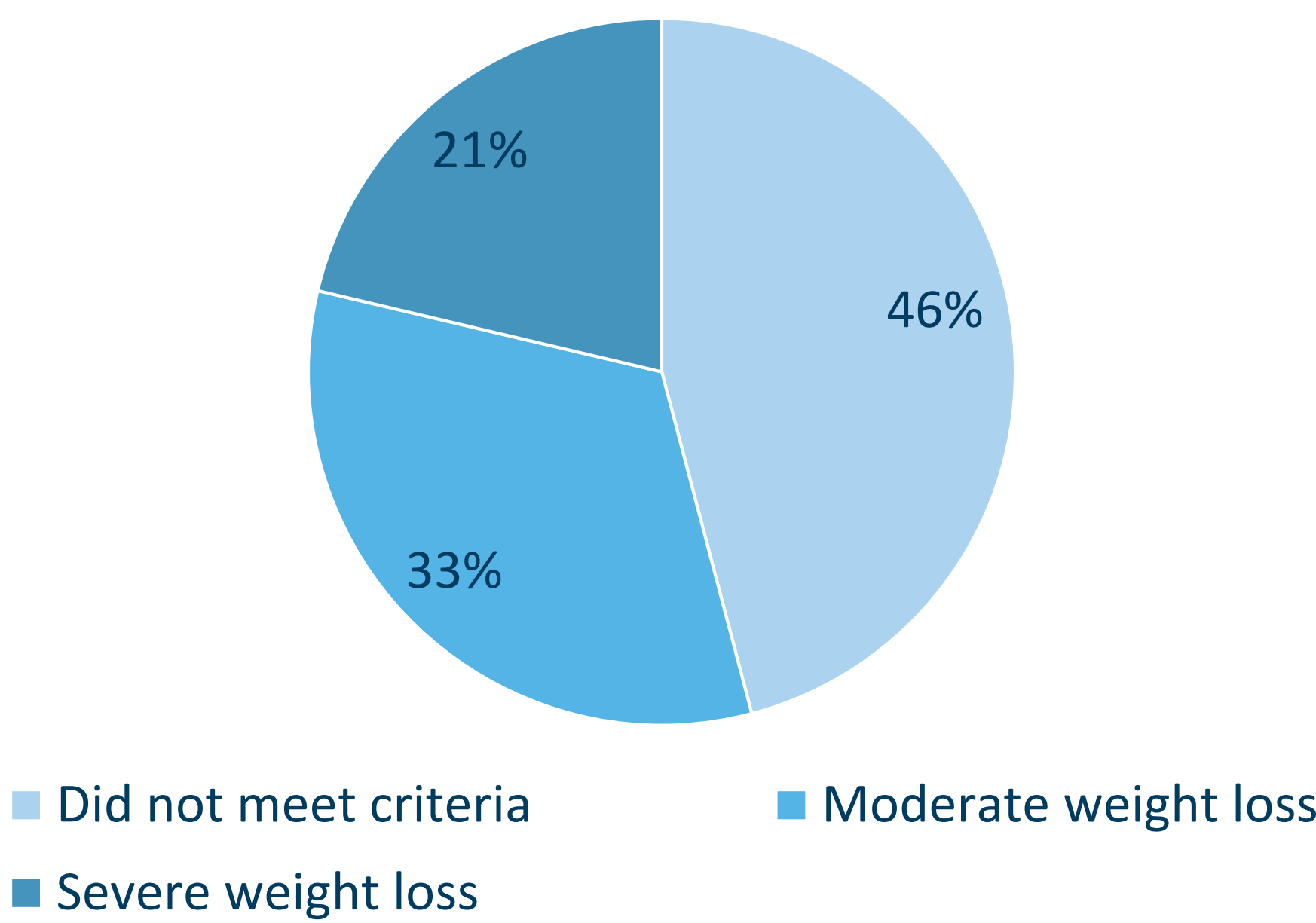
BMI & Weight Loss:

- 48% (n = 29) were considered moderately/severely underweight (Graph 1) and 54% (n = 33) had experienced moderate/severe weight loss (Graph 2), as per GLIM phenotypic criteria.

Graph 1: Weight status as per GLIM on Initial Assessment (n= 61)



Graph 2: BMI status as per GLIM on Initial Assessment (n= 61)



- 16 (73%) of the 22 patients followed up had no further weight loss post 4-6 weeks of dietetic intervention.

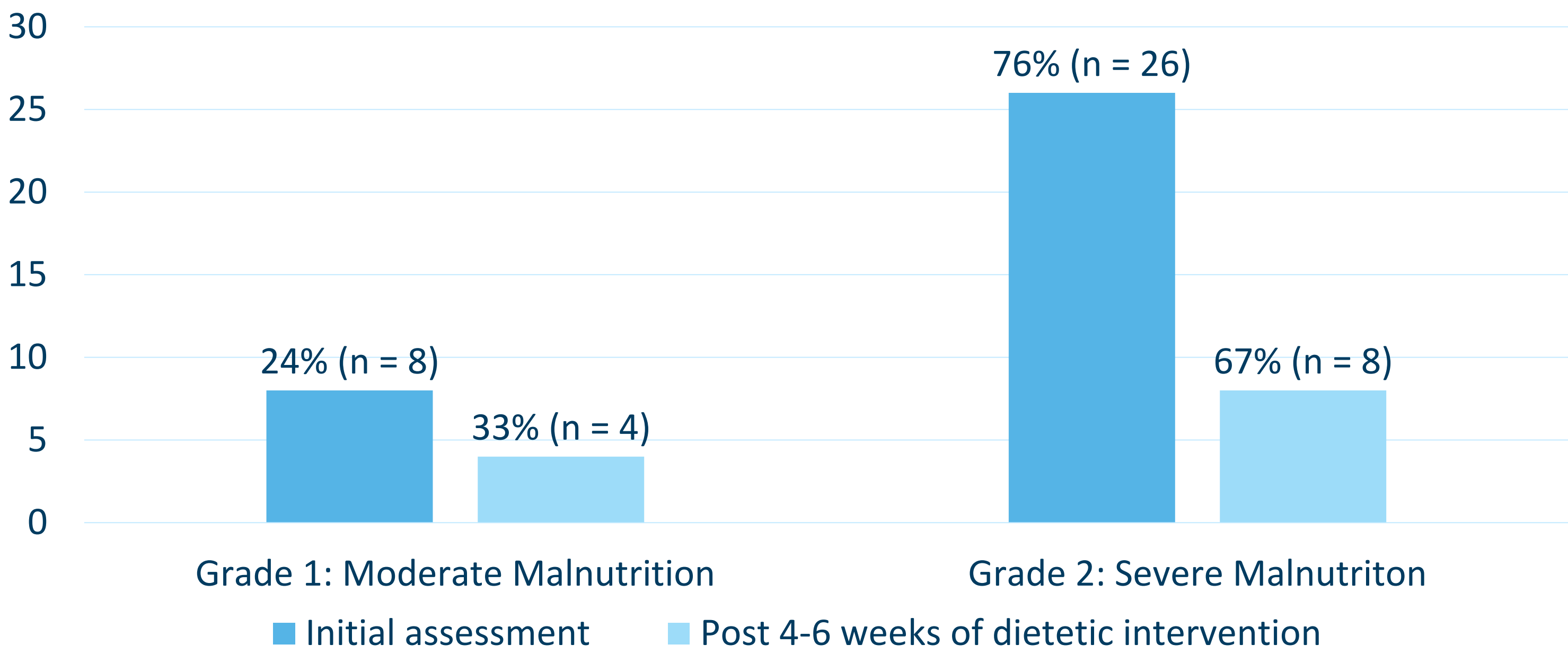
Muscle Mass:

- 68% (n=40) were considered to have severely reduced muscle mass and 20% (n =12) had moderately reduced muscle mass on initial assessment.
- 84% (n = 16) had improvements in calf circumference measurement post 4-6 weeks.

Malnutrition Diagnosis (Graph 3):

- 56% (n = 34) were malnourished on initial assessment.
- 18% (n =4) of patients were found to have improvements in malnutrition staging post 4-6 weeks of dietetic input.
- 54% (n = 12) remained malnourished on discharge.**

Graph 3: GLIM Staging of Malnutrition on Initial Assessment & Post 4-6 Weeks of Dietetic Intervention



HGS and BIA:

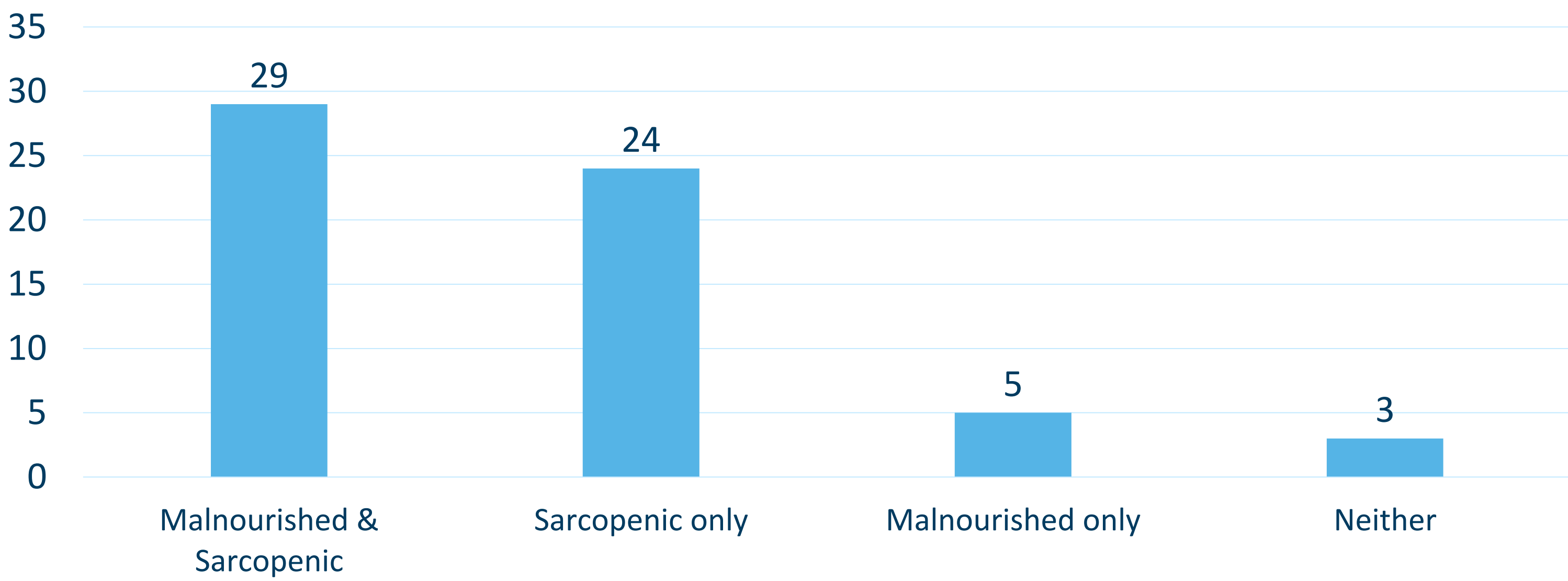
- 91% (n = 53) were considered to have probable sarcopenia by HGS on initial assessment.
- 8 of the 25 patients eligible to complete the BIA on initial assessment were confirmed sarcopenic.
- 43% (n = 9) had improved HGS post 4-6 weeks of dietetic intervention.

Over 90% of patients remained sarcopenic (HGS +/- BIA) on discharge.

Malnutrition & Sarcopenia (Graph 4):

- 54.7% (n = 29) of patients had a diagnosis of both malnutrition and sarcopenia on initial assessment. Of which 79.3% (n = 23) were classified as severely malnourished.

Graph 4: Prevalence of Malnutrition and Sarcopenia on Initial Assessment (n = 61)



Conclusion

- Malnutrition and sarcopenia are two highly prevalent conditions affecting those referred to the dietetic service at Tymon North.
- Findings show the benefit of dietetic intervention and the **importance of dietetic follow-up.**
- Early identification and treatment through targeted interventions is crucial to improve patient outcomes.

1. Cederholm T, Jensen GL. To create a consensus on malnutrition diagnostic criteria: A report from the global leadership initiative on malnutrition (GLIM) meeting at the ESPEN Congress 2016. Clin Nutr. 2017;36(1):7–10. doi:10.1016/j.clnu.2016.12.001.
2. Sayer AA, Cruz-Jentoft A. Sarcopenia definition, diagnosis and treatment: Consensus is growing. Age Ageing. 2022;51(10):afac220. doi:10.1093/ageing/afac220.