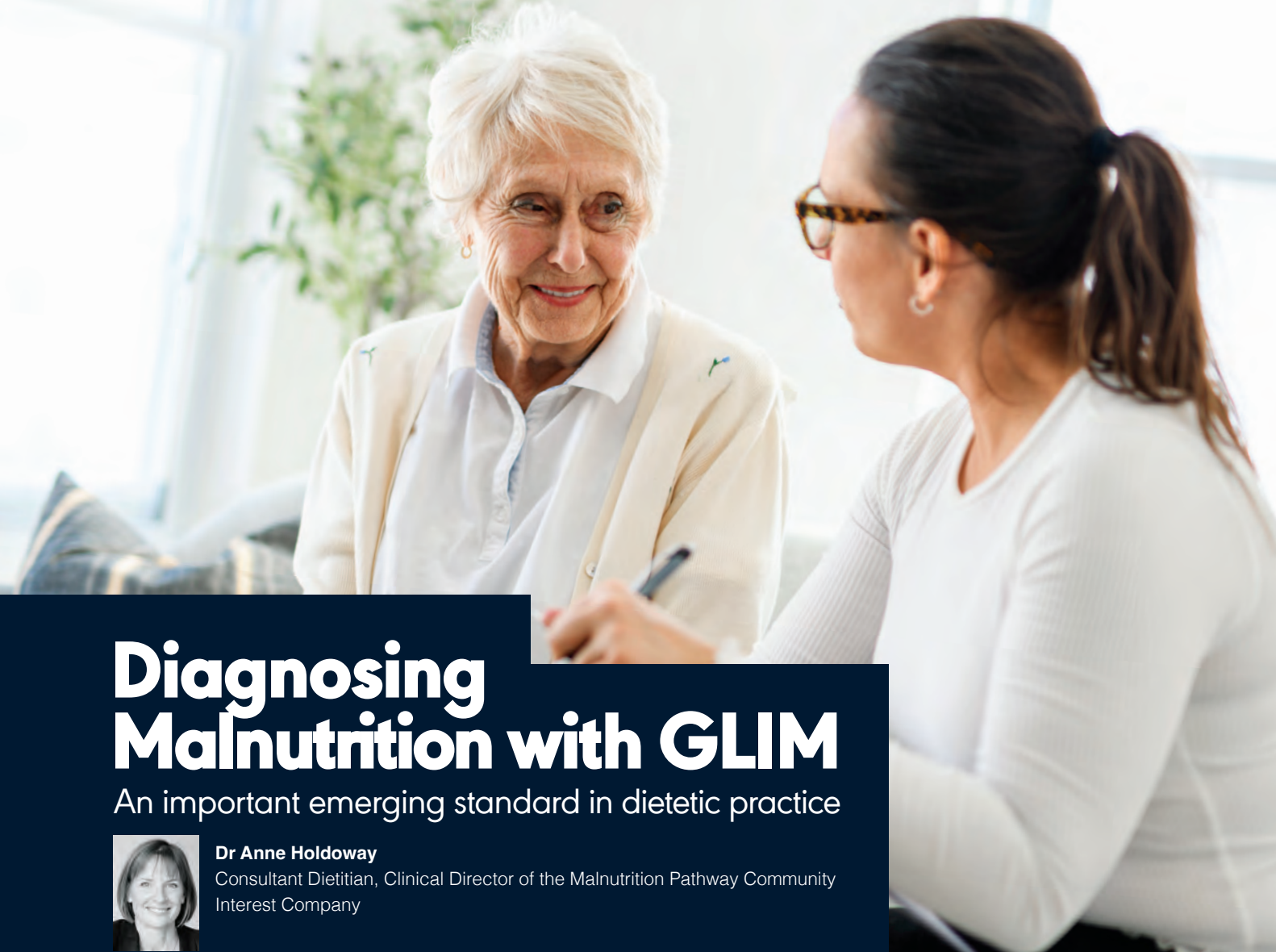




Diagnosing Malnutrition with GLIM

An important emerging standard in dietetic practice



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More than three million people in the UK are malnourished or at risk of malnutrition, costing health and social care services an estimated £23.5 billion each year.*¹ Beyond the numbers, malnutrition is both a cause and a consequence of disease and ill health.^{1, 2} Malnutrition arising from disease, especially that with an inflammatory component, can be a major driver of loss of muscle and muscle strength, increasing the risk of frailty, loss of independence and slowing recovery.¹ In addition, the illness or injury and its treatment can further exacerbate malnutrition due to increased requirements arising from altered metabolism or malabsorption, at a time when appetite is impaired and intake compromised.^{1, 3, 4}

Although in the last two decades nutrition screening has been widely adopted in many healthcare settings around the world, no global consensus existed until recently on how to make a malnutrition diagnosis. Furthermore, the evolving recognition of the role of disease and inflammation highlighted inconsistencies on how malnutrition was classified and managed in existing frameworks.³

To address the lack of a global standard for malnutrition diagnosis, several international parenteral and enteral nutrition societies (ASPEN^a, ESPEN^b, FELANPE^c, and PENSA^d) came together to collectively develop a consensus-based framework for diagnosing malnutrition in adults.^{3, 5} Known as the Global Leadership Initiative on Malnutrition (GLIM), the framework provides an internationally standardised, clinically relevant, minimum set of practical indicators that can be used across a diverse range of healthcare settings by any healthcare professional, building on validated screening tools, to diagnose malnutrition and grade severity.^{3, 5} This article

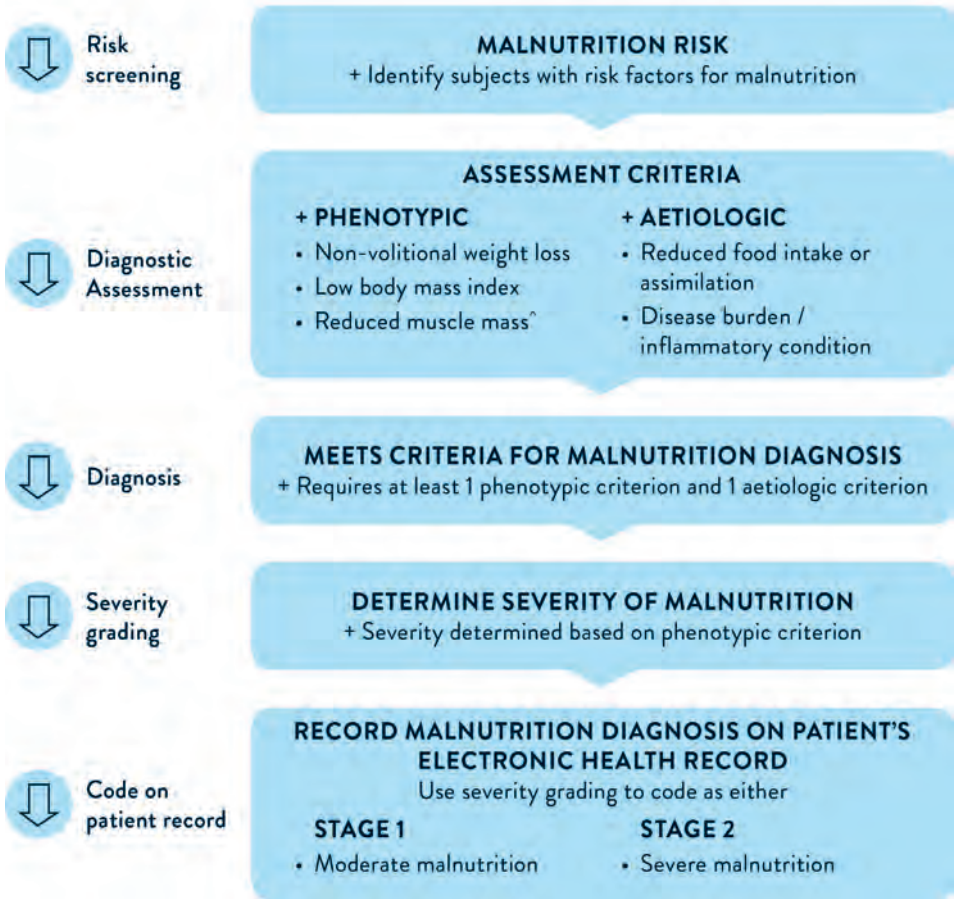
provides a succinct summary on the GLIM framework and how it can be applied in clinical practice.

The GLIM criteria explained

GLIM provides a two-step approach to diagnosing malnutrition (see **Figure 1**):^{6, 7}

1. **Identify subjects at risk of malnutrition**
2. **Diagnostic assessment** – confirming malnutrition when at least one phenotypic criterion (weight loss, low BMI [body mass index], or reduced muscle mass) and one aetiological criterion (reduced intake/assimilation or disease burden/inflammation) are present.

Figure 1: GLIM diagnostic process^{7, 8}



Source: Figure predominantly adapted from Cederholm, 2019³

Malnutrition severity is graded as moderate or severe according to phenotypic thresholds.⁷ Unlike screening tools that determine the risk of malnutrition, GLIM provides a malnutrition diagnosis that can be coded on the patient's electronic health record, using the phenotypic criteria to determine severity, as outlined in **Figure 2.**^{7, 8}

Beyond BMI: Capturing the complexity of malnutrition

While malnutrition identification and management strategies often focus on BMI and weight loss, they may only tell part of the story. Patients may appear to have a 'healthy' body weight, yet experience significant muscle wasting, reduced strength and loss of function. Amongst those who are overweight or obese, the high body mass index can mask malnutrition resulting in their nutritional needs being overlooked.⁸

With disease burden and inflammation acting as critical drivers of malnutrition and sarcopenia (loss of muscle mass and strength), acute illness, chronic disease and ongoing inflammatory processes further exacerbate the problem.^{3, 6, 10}

Figure 2: Grading malnutrition severity⁷

PHENOTYPIC CRITERIA	 UNINTENTIONAL WEIGHT LOSS (%)	 LOW BMI (KG/M ²)	 REDUCED MUSCLE MASS
STAGE 1: Moderate Malnutrition Patient requires 1 phenotypic criteria that meets this grade	• 5-10% in 6 months; or • 10-20% in more than 6 months	• <20 if <70 years; or • <22 if ≥70 years	Muscle mass loss is present
STAGE 2: Severe Malnutrition Patient requires 1 phenotypic criteria that meets this grade	• >10% in 6 months; or • >20% in more than 6 months	• 18.5 if <70 years; or • <20 if ≥70 years	Muscle mass loss is present

Source: Figure adapted from Cederholm 2025⁷

“...GLIM provides a malnutrition diagnosis that can be coded on the patient’s electronic health record, using the phenotypic criteria to determine severity...”

“At a system level, diagnosis informs healthcare planning, resource allocation and research, contributing to advances in medical knowledge.¹²”

References: **1.** Malnutrition Pathway (2021). Managing Adult Malnutrition in the Community. Accessed online: www.malnutritionpathway.co.uk/library/managing_malnutrition.pdf (Sep 2025). **2.** NICE (2024). Adult Malnutrition. Accessed online: <https://cks.nice.org.uk/topics/adult-malnutrition> (Sep 2025). **3.** Cederholm T, et al. (2019). GLIM criteria for the diagnosis of malnutrition – A consensus report from the global clinical nutrition community. J Cachexia Sarcopenia Muscle.; 10(1): 207-217. **4.** Saunders J, Smith T (2010). Malnutrition: Causes and Consequences. Clin Nutr.; 10(6): 624-627 **5.** de van der Schueren MAE, et al. (2019). Global Leadership Initiative on Malnutrition (GLIM): Guidance on validation of the operational criteria for the diagnosis of protein-energy malnutrition in adults Clin Nutr.; 39(9): 2872-2880. **6.** ESPEN (2023). A Global Leadership Initiative on Malnutrition (GLIM): A Framework for Diagnosing Adult Malnutrition. Accessed online: www.espen.org/files/GLIM-2-page-Infographic.pdf (Sep 2025). **7.** Cederholm T, et al. (2025). The GLIM consensus approach to diagnosis of malnutrition: A 5-year update. Clin Nutr.; 49: 11-20. **8.** NHS Digital (2025). SNOMED CT Browser. Accessed online: <https://termbrowser.nhs.uk/?perspective=full&conceptId1=2492009&edition=uk-edition&release=v20241120&server=https://termbrowser.nhs.uk/sct-browser-api/snomed&langRefset=999001261000000100,9990006910000001104> (Sep 2025). **9.** Deutz NEP, et al. (2019). The Underappreciated Role of Low Muscle Mass in the Management of Malnutrition. J Am Med Dir Assoc.; 20(1): 22-27. **10.** Stumpf F, et al. (2023). Inflammation and Nutrition: Friend or Foe? Nutrients; 15(5): 1159. **11.** Balogh EP, et al. (2015). Improving Diagnosis in Health Care. National Academies Press (US); 2: 31-69. **12.** Jain D. (2023). The Art of Diagnosis: Unveiling the Path to Effective Medical Assessment. J Pharmaceut Res Clin Prac.; 6(3): 74-77. **13.** Jensen GL, et al. (2025). GLIM consensus approach to diagnosis of malnutrition: a 5-year update. J Parenter Enteral Nutr.; 49: 414-427. **14.** Data on File. Abbott Laboratories Ltd, 2025 (GLIM UK Survey).

Footnotes: a. ASPEN - American Society for Parenteral and Enteral Nutrition; b. ESPEN - European Society for Clinical Nutrition and Metabolism; c. FELANPE Federaci on Latinoamericana de Terapia Nutricional, Nutrici on Clínica y Metabolismo; d. PENSA - Parenteral and Enteral Nutrition Society of Asia.

*Based on prevalence figures and the associated costs for both health and social care.

^In the absence of knowledge/availability of advanced technical devices, then acceptable methods for GLIM implementation also include practical measures such as calf muscle mass assessment.

Whilst screening tools, such as the 'Malnutrition Universal Screening Tool' ('MUST'), are widely used in the UK to identify malnutrition risk and activate dietetic input, they are not considered a diagnostic tool as they do not take into account functional changes, such as muscle health or dietary intake. In addition, if the risk tool focuses on weight loss in the last 3-6 months, it may fail to capture patients with slow but consistent weight loss over longer periods of time that increase the likelihood of malnutrition.

Moving beyond body size and weight, GLIM integrates phenotypic and etiological criteria³ alone to capture the underlying complexity of malnutrition and enable a standardised diagnosis.

Why diagnosis matters

Diagnosis is considered the foundation of effective healthcare because it transforms uncertain symptoms into an actionable understanding of a patient's problem, guiding all subsequent treatment and care decisions. When clinicians reach an accurate and timely diagnosis, patients benefit from appropriately targeted therapies and improved health outcomes.^{11, 12}

An accurate diagnosis in conjunction with education empowers patients with knowledge and understanding, enabling them to actively participate in their care. At a system level, diagnosis informs healthcare planning, resource allocation and research, contributing to advances in medical knowledge.¹²

“When it comes to malnutrition, GLIM diagnosis builds on these general principles by assessing factors such as inflammation, muscle loss, disease burden and food intake. Taking these causal factors into account not only ensures the right diagnosis of malnutrition for each patient but also supports the development of an individualised care plan that can guide effective treatment.”

GLIM in practice

Since its introduction, GLIM has gained traction worldwide. More than 400 peer-reviewed studies have now been published, including systematic reviews and meta-analyses validating the framework across a range of populations and settings.¹³ A global survey of over 1,500 clinicians reported implementation or active adoption across six continents, with formal endorsement in some regions.¹³ Together, these developments point to GLIM's growing status as the international reference standard for diagnosing malnutrition.

In the UK, little is currently known about GLIM's adoption. However, findings from an ongoing national survey of dietitians and other healthcare professionals suggests awareness and adoption is growing and early benefits are being recognised. Respondents have highlighted that GLIM supports more reliable diagnosis, improved care planning and better communication between healthcare professionals. Responses have also pointed to the importance of diagnosis coding, noting that GLIM provides a way to capture malnutrition more consistently within electronic health records, supporting both individual interventions and wider care planning.¹⁴

Final thoughts: Looking forward

The introduction of GLIM marks a turning point in how malnutrition is identified and managed. For dietitians, it offers:

- A consistent, internationally recognised diagnostic framework.
- A bridge between screening and diagnosis.
- A route to coding malnutrition within electronic health records.

Findings from the ongoing UK survey suggest that awareness is increasing and early benefits are already being seen in practice, with dietitians reporting greater diagnostic reliability and improved care planning.

The direction of travel is clear: GLIM is becoming embedded as the international standard for diagnosing malnutrition and grading severity.

As dietitians, we are well placed to lead this change, ensuring malnutrition receives the same diagnostic rigour as other conditions and that patients receive the right care, at the right time.



Be part of shaping the future of nutrition in clinical practice. Scan the QR code to take part in the UK GLIM Survey.