Optimising Rehabilitation Potential Through Community Malnutrition Screening & Collaborative Working

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Background

The negative impact of malnutrition on individuals' health and quality of life (QOL) has been evidenced in health care research; with malnourished individuals requiring more health and social care resources [1]. Community settings have the highest estimated prevalence of malnutrition (93%) [2]. The estimated costs of malnutrition is £23.5 billion in the UK (15% of the total costs for health and social care) [1]. Timely nutrition support is recommended to tackle malnutrition and optimise rehabilitation outcomes. The National Institute of Health and Care Excellence (NICE) advises malnutrition screening by appropriately trained healthcare professionals within community services to ensure timely interventions for those at risk of malnutrition [3].

Quality Improvement Pilot Aims

- Pilot a collaborative working approach with the Domiciliary Physiotherapy Team (Physios), to see if a process of Physios undertaking nutrition screening assists in the early identification and treatment of patients at risk of malnutrition.
- Pilot a pathway for direct referrals from Physios to Dietetics.

Methods

The pilot was conducted over 6 months. New patients assessed by the Physios were screened using an adapted malnutrition universal screening tool (see Figure 1) [4].

Patients identified as high risk or medium risk with additional health concerns, were directly referred to Dietetics. First line dietary advice was also provided by the Physios to patients scoring medium and high risk of malnutrition.

Step 1: Calculate Body Mass Index (BMI)

BMI kg/m^2	Significance	Score
>20	normal variation	0
18.5-20	of concern	1
<18.5	of significance	2

Step 2: Unintentional weight loss over 3-6 months

Percentage Weight Loss	Significance	Score
<5% body weight	normal variation	0
5-10% body weight	of concern	1
>10% body weight	of significance	2

Figure 1 – Shows the adapted Malnutrition Universal Screening Tool (MUST) [4].

Results

Of the 131 patients screened:
- 50 (38%) were male and 81 (62%) were female
- 21 (16%) patients were residents in care homes
- 27 patients (20%) were identified as high risk of malnutrition
- 21 (16%) were referred dietetics (1 patient declined input and 1 died)

Figure 2:

Overall, 35% of those screened were identified as being at nutritional risk (20% high risk and 15% medium risk)

Of the 21 Dietetic referrals:
- 7 of 21 (33%) had a BMI <18.5kg/m2
- Physios provided food first dietary advice to 8 patients (38%)
- 12 (57%) patients required prescribed high protein/energy nutritional drinks

Age Ranges for Patients	MUST Scores of all Patients		
	0	1	2 or more
18-65	8	1	2
65-80	27	7	11
>80	49	12	14
Total	84 (64%)	20 (15%)	27 (20%)
Risk	Low	Medium	High

Figure 2 – Highlights malnutrition screening risk results.

Conclusion

The pilot was successful in identifying patients at risk of malnutrition by the Physios (35%). This enabled timely Dietetic intervention and food first dietary advice by Physios to optimise rehabilitation potential.

The pilot highlights the importance of nutritional screening in the community and the potential role for community health and social care teams to be routinely involved in malnutrition screening and treatment.

Recommendations

- Embed routine malnutrition screening practice and first line dietary advice into community services

- Ensure sufficient staffing and resources for training and equipment to facilitate malnutrition screening

- Increase Dietetic resources to facilitate direct referral pathways from community teams/AHPs and enable timely intervention at the time of rehabilitation. This may optimise outcomes and reduce the need for referrals to primary care services (GPs)

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