

The Malnutrition Pathway

CASE STUDY SERIES:

MALNUTRITION IN WOUND HEALING



This case study illustrates how the **Managing Adult Malnutrition in the Community** pathway guides assessment, intervention, and monitoring for patients at risk of malnutrition.

Maya, 81, female - presents to GP for review of her slow-healing grade 2 pressure ulcer

Social History:

- Lives alone, bereaved 1 year ago – feeling lonely and isolated since
- Retired office worker
- In recent months has felt fatigued and ‘not right’ in her self

Medical History:

- Discharged from hospital 6 weeks ago following a 2-week admission for a lower respiratory tract infection
- Grade 2 pressure ulcer developed during admission
- On inspection, the pressure ulcer is stable but is not healing despite standard medical management including regular community nursing input
- Moderately constipated since starting Oramorph
- Other diagnoses include:
 - Obesity
 - Hypertension
 - Dyslipidaemia
 - CKD 3 (eGFR relatively stable at 48mL/min/1.73m²)
 - Type 2 diabetes mellitus (HbA1c 52mmol/mol 6 months ago; 42mmol/mol last week)

Medications:

- Metformin and Dapagliflozin (Dapagliflozin started 6 months ago)
- Ramipril
- Amitriptyline (started 6 months ago for low mood)
- Oramorph (started during recent admission for pressure ulcer-related pain)
- Omeprazole
- Lactulose (started during recent admission)

Nutritional Status:

- Height: 5'4" (1.625m)
- Weight 6 months ago: 82kg
- Weight today: 73kg (27.6kg/m², representing a 11% weight loss)
- Less interested in food and less inclined to cook following bereavement

Due to clinical concern regarding Maya's weight loss, the **Managing Adult Malnutrition in the Community** pathway is initiated

STEP 1: Nutritional screening

Malnutrition Universal Screening Tool (MUST)

- BMI >20kg/m² – Score 0
- Unplanned weight loss >10% - Score 2
- Acute disease effect – Score 0 (rarely applies outside of hospital)
- Total ‘MUST’ score of 2 (high risk of malnutrition)

STEP 2: Identify causes of malnutrition

- Recent acute illness (respiratory infection) with hospital admission
- Less interest in food since bereavement – doesn't see the point in cooking for one
- Previous dietary restrictions for hypertension and dyslipidaemia maintained including use of very low-fat foods (compromising energy) intake and low salt (compromising taste)
- Poorly managed constipation potentially interfering with appetite
- Polypharmacy (potential cause), with exacerbation of nutritional deficits from Dapagliflozin

STEP 3: Identify treatment goals and optimise nutritional intake

Treatment Goals

- Optimise wound healing
- Prevent further weight loss and preserve function
- Prevent constipation

Optimising Nutritional Intake

- The importance of a high calorie, high protein diet was explained, encouraged to relax previously imposed dietary restrictions encouraging healthy fats and nutritious snacks
- Encouraged fibre rich foods and snacks to minimise constipation e.g. nuts, ready to eat prunes
- Address causes of malnutrition linked to social circumstances – encourage eating with friends, dining club, social support, help from friends and family e.g. batch cooking
- Supporting resources provided (i.e. Your Guide to Making the Most of Your Food leaflet).
- OTC multivitamin and mineral supplement to support micronutrient status following period of poor intake

Structured Medication Review

- Undertaken by the Practice Pharmacist to rationalise medications with a focus on frailty prevention – including optimisation of constipation medication

Social Prescriber Input

- Maya referred to the local community lunch club

STEP 4: Monitoring:

2-week follow-up to re-assess pressure sore

- Further reduction in weight: 72kg (-1kg)
- Modest reduction in wound size observed
- Due to ongoing weight loss and wound healing needs, ONS samples (powdered sachets and ready-to-drink high-protein 200ml bottles) were sent to Maya and she was told to take them twice-daily and feedback with her preferences
 - a. Maya was signposted to the Nutrition Drinks leaflet for advice on incorporating ONS into the diet
 - b. Ready-to-drink bottles were more practical and were well-tolerated, agreed to a month's prescription of two bottles per day, providing an additional 600 Calories, 40g protein to the diet

4-week follow-up to re-assess pressure sore

- Pressure sore almost completely healed
- Weight stable at 73kg (+1kg)
- Weaning plan made for ONS: prescribed 14 more bottles of ONS, to take once daily over the next 2 weeks – once course complete, to replace this with a homemade nourishing milky drink
- Maya to monitor her weight at home long-term – contacting the practice if a downward trend is noticed or weight drop beneath 70kg