

Managing Adult Malnutrition in the Community

Care Homes

Integrating good nutrition into daily practice

A HEALTHCARE PROFESSIONAL FACT SHEET

Anne Holdoway, Consultant Dietitian
Dr Anita Nathan, GP

There are currently around 11,300 care homes looking after around 410,000 elderly residents in the UK¹. Over the past 20 years the percentage of the population aged 65 or over has increased from 15.9% to 18.3%². Not surprisingly nursing and residential homes continue to operate at full capacity and with this sector of the population projected to continue to grow to nearly a quarter of the population by 2037², the need to establish frameworks and systems to deliver good care in this vulnerable group remains paramount.

One key area of concern is poor nutritional status and malnutrition (under-nutrition) in this population. Surveys led by the charity the British Association for Parenteral and Enteral Nutrition (BAPEN) have repeatedly demonstrated that malnutrition affects up to 3 million people living in the community and nearly one in four people admitted to care homes, most of whom are at high risk³. As malnutrition contributes to physical and functional decline, poorer clinical outcomes (e.g. increased infections, wounds, complications, mortality) and subsequent increased use of health and social care services with reductions in quality of life, there is good reason to identify, treat and prevent it ⁴. There is also a common misconception that nutritional deficiencies, unintentional weight loss and frailty are an inevitable consequence of ageing and disease however if the underlying causes are addressed early, malnutrition can be reversed or slowed, thus having a positive effect on outcomes.

INDICATORS FOR NUTRITIONAL CARE

Risk of malnutrition should be considered if a resident:

- has a medium or high risk of malnutrition identified using a validated nutritional screening tool (e.g. Malnutrition Universal Screening Tool 'MUST')
- has loss of muscle mass (sarcopenia)
- has multimorbidities
- has eating problems e.g. swallowing issues, loss of dentition and functional issues
- has reduced appetite
- is depressed, suffering grief e.g. recently bereaved, socially withdrawn

KEY ACTIONS

- Screen all residents using 'MUST' (www.bapen.org.uk/pdfs/must/must_full.pdf) on initial contact with care home and at least monthly thereafter
- Initiate nutritional care plans based on malnutrition risk, include mutually agreed goals centred on the resident's desires and wishes. Build in regular reviews - see www.malnutritionpathway.co.uk/careplans for more information
- Work with relevant stakeholders/formulary committees to review care pathways so that malnutrition is appropriately managed and includes the appropriate use of oral nutritional supplements (ONS), particularly whilst awaiting dietetic review for those at risk
- Follow the 'Managing Adult Malnutrition in the Community' pathway for residents identified as 'at risk' of malnutrition which provides guidance and resources including:
 - dietary advice for residents including how to enrich (fortify) food choices and use nourishing drinks (www.malnutritionpathway.co.uk/library/pleaflet_yellow.pdf)
 - effective use of ONS for frail patients and those who are malnourished or 'at risk' of malnutrition particularly where dietary intake is restricted due to poor appetite or medical conditions. Remember ONS count as fluid as well as providing essential nutrients (www.malnutritionpathway.co.uk/library/pleaflet_red.pdf)
- Optimise nutritional intake, fortify food and encourage the consumption of snacks and nourishing drinks
- Create a positive mealtime environment make food appealing, tasty and the environment pleasurable
- Consider residents food preferences, eating issues (e.g. swallowing problems), size of appetite, need for specialist cutlery, and ensure assistance is provided to those who need it
- Liaise with your local dietitians and nutrition nurses regarding potential nutrition education for team members

Why is it important for care homes to acknowledge the problem?

• Greater healthcare needs (for example GP visits, use of antibiotics)^{4,5}

There is a considerable impact to the individual in failing to identify and treat malnutrition. Residents who are malnourished or at risk of malnutrition will typically have:

- More hospital admissions and re-admissions^{4,5}
- Increased falls risk⁵
- Poorer clinical outcomes e.g. higher mortality⁵
- Impaired immune response⁵
- Impaired psycho-social function⁵

- Longer hospital stays^{4,5}
- Impaired recovery from illness or surgery⁵
- Reduced muscle strength and frailty⁵
- Impaired wound healing⁵

The consequences of malnutrition continue to place a substantial financial burden on health and social care budgets. It is estimated that the cost of healthcare for a malnourished patient is £5,763 per annum, compared to £1,715 for a non-malnourished patient, and that social care costs will be £1,645, compared with £440 for a non-malnourished patient^{4,5}.

Why are older people and the elderly particularly vulnerable to malnutrition?

- Many elderly are affected by multiple morbidities making this group particularly 'at risk' of malnutrition
- Many chronic conditions can affect the ability or desire to eat, predisposing individuals to malnutrition
- Ageing and frailty can affect our activities of daily living and mealtime routines which can lead to a reduced nutritional intake
- Eating and drinking may become more difficult due to physical challenges for example the ability to cook, use cutlery, chew, swallow or see food and drink In frail older people and in chronic disease the amount of protein
- Appetite and taste sensations alter as we age, food and drinks may begin to taste less palatable and less pleasurable
- Satiety, the feeling of fullness, occurs earlier as we age⁶
- Nutritional requirements alter as we age:
 - protein requirements are higher in older adults and those who are unwell⁷ (see table below) however intakes in this group are often lower. The requirement equates to around 20-30g of protein per meal
 - deficiencies of micronutrients are common and

are part of malnutrition - many older individuals living in residential care have been found to have biochemical deficiencies of vitamins or minerals despite the fact that their food supply appeared to contain sufficient amounts8

These multiple factors conspire to reduce appetite and food consumption - intakes of energy, protein, vitamin C, vitamin D, folate, iron, zinc and fibre are of most concern in this group⁹.

	Protein requirements per kg body weight per day ⁷	Daily protein requirements based on average weight of a male and a female 70kg male 55kg female	
		70kg Illale	33kg lelliale
Healthy older people	1.0 - 1.2g	70-84g	55-66g
Older people who are malnourished or have an acute/chronic condition	1.2 - 1.5g	84-105g	66-83g
Those with severe illness/injury	>1.5g	>105g	>83g

Examples of 20 grams of protein

Good nutritional care

Investing time and resources in screening, assessment and appropriate nutritional care is crucial if we are to reduce the financial burden to health and social care and improve health outcomes for older people. There are several key guidelines that care home staff should be aware of in relation to nutrition and hydration (see appendix).

Screening for malnutrition

Screening should be undertaken by a trained professional using a validated tool such as the Malnutrition Universal Screening Tool ('MUST'):

 every care home resident should be screened on first contact with the care home and at least monthly thereafter to assess and monitor their malnutrition risk¹⁰

Management of malnutrition

A clear nutritional care plan should be put in place which:

- takes account of the residents' nutritional needs
- gives the resident access to support from a dietitian where needed
- provides the necessary support at mealtimes
- includes resident centered goals
- is reviewed regularly

Meal times, snacks and food fortification

The importance of food and the social interactions associated with meal times should not be underestimated. Food is more than nutrients, we associate it with pleasure,

or soorer of the condition requires

If more specialist support is required.

If the Malnutrition Universal Screening Tool (*Malnutrition Universal Screening Tool (*M

Managing Malnutrition According to Risk Category using 'MUST'*³ − Management Pathway

Example care plans for those at high, medium and low risk of malnutrition can be found at www.malnutritionpathway.co.uk/careplans

company, it can break up the day, provide structure and companionship. The environment food is served in is therefore crucial, as is the presentation:

- chefs and catering staff should strive to ensure that the meals, including their
 presentation are tasty, attractive, of suitable portion size (too large a portion can
 be overwhelming and deter intake) and meet the nutritional standards¹¹
- whilst some residents may wish to eat alone, the majority should be encouraged
 when possible to eat in a pleasant dining area, where there are minimal
 interruptions or unnecessary distractions but opportunity to mix and socialise
 and benefit from the company of others
- food and drink should be placed where it can be easily reached by the resident
- assistance should be offered to residents who need it ensure sufficient staff,
 assistants, trained volunteers, family members are available to support those who need help with eating.
 Assistance might be needed in the form of spoon feeding, chopping and loading food onto cutlery, or
 gentle encouragement to eat

Residents with smaller appetites and eating problems may prefer to receive smaller amounts of food more regularly. Consider options to help them meet nutritional requirements and prevent malnutrition developing:

- encourage small frequent meals and snacks with a focus on nutrient rich foods and fluids
- fortify food by adding extra butter, cream, cheese or milk powder. 'A Guide to Making the Most of Your Food', provides some simple ideas on fortifying foods -

www.malnutritionpathway.co.uk/library/pleaflet_yellow.pdf



Oral nutritional supplements (ONS)

For some residents, despite best efforts to maximise food intake, ONS may be needed in addition to food to improve dietary intake. There is good quality evidence to support their use^{12,13} in older people in care homes.

Care home staff may also receive residents into their care who have been discharged from hospital on ONS but information to assist in the decision-making regarding on-going use, management and intended goals may not always be passed on or evident.

Screening and using the Malnutrition Pathway algorithms and resources, can guide the appropriate management, use of ONS, monitoring, escalation management (including referral to a dietitian) and when to stop ONS. For further information see:

- 'Nutrition Drinks (known as Oral Nutritional Supplements)' Advice for patients and carers www.malnutritionpathway.co.uk/library/pleaflet_red.pdf
- 'Managing Malnutrition with Oral Nutritional Supplements (ONS)' www.malnutritionpathway.co.uk/library/ons.pdf a quick guide to
 the different types of ONS available to treat malnutrition, which includes
 information on which product category is suitable for which patient as well as
 styles, flavours and formats (e.g ready to use or powdered)



A team approach

Providing good nutritional care for the elderly is rarely one person's responsibility, it is therefore important that team members across an organisation are actively engaged and involved in the care of malnourished residents (that includes the care home staff, relatives, caterers, dietitians, GPs and speech and language therapists):

- working with registered dietitians to cater for specific, and at times, complex nutritional needs can bring considerable benefit¹¹
- with more than 50% of over 65's having swallowing problems¹⁴ it is important to note whether a
 modified texture diet is required and whether it requires fortification seeking advice from speech and
 language therapists may be necessary for some residents (see www.malnutritionpathway.co.uk/
 dysphagia.pdf for further information on dealing with patients with dysphagia)
- taking the time to get to know residents' food preferences, swallowing and eating abilities. At mealtimes consider enabling staff/family to eat alongside residents and seating residents according to physical and cognitive abilities so they are able to be supported by each other
- pharmacists, dietitians and GPs are available to advise on the management of malnutrition including the use of prescribable ONS for residents. They may also work with local commissioners to agree thresholds for dietetic referral and where ONS should sit on pathways of care
- www.malnutritionpathway.co.uk/tipsheets/tipsheet_carehomes.pdf gives ten top tips for those working in care homes on the identification and management of malnutrition, including the implementation of care plans and engagement with other care home personnel, to create an environment that prevents malnutrition

Education and training should be considered for all team members – contact your local dietetic service for advice or try on-line training tools, such as:

- BAPEN Virtual Learning Environment: www.bapen.org.uk/e-learning-portal/nutritional-screening-using-must/virtual-learning-environment
- Royal College of General Practitioners (RCGP) website: https://www.rcgp.org.uk/clinical-and-research/resources/a-to-z-clinical-resources/malnutrition-and-nutritional-deficiency.aspx

Appendix - National Guidance

National Institute for Health and Care Excellence Quality Standard 24 $^{\tiny{10}}$

https://www.nice.org.uk/guidance/qs24 states that people:

- in care settings should be screened for the risk of malnutrition using a validated screening tool
- who are malnourished or at risk of malnutrition should have a management care plan that aims to meet their nutritional requirements
- who are screened for the risk of malnutrition should have their screening results and nutrition support goals (if applicable) documented and communicated in writing within and between settings

National Institute for Health and Care Excellence Clinical Guideline 32¹⁵ https://www.nice.org.uk/guidance/cg32 recommends:

- widespread screening to identify those at risk of malnutrition
- the need for training and systems to manage appropriately when identified and prevent where possible
- oral nutrition support to manage malnutrition (Grade A evidence) two common oral nutrition support strategies are: dietary advice to increase nutrient content of diet and ONS

Care Quality Commission Regulations for Service Providers and Managers: Meeting Nutrition & Hydration Needs¹⁶

https://www.cqc.org.uk/guidance-providers/regulations-enforcement/regulation-14-meeting-nutritional-hydration-needs

The purpose of this guidance is to make sure that people who use services have adequate nutrition and hydration to sustain life and good health and reduce the risks of malnutrition and dehydration while they receive care and treatment. Providers must make sure that (where it is part of their role) people have:

- enough to eat and drink to meet their nutrition and hydration needs and receive the support they need to do so
- their nutritional needs assessed and food is provided to meet those needs including the use of prescribed nutritional supplements, tube feeding and/or parenteral nutrition
- preferences, religious and cultural backgrounds taken into account

Managing Adult Malnutrition in the Community⁵

https://www.malnutritionpathway.co.uk

- Includes an overview of the costs and consequences of malnutrition in the UK
- Provides advice on identification and management including screening using 'MUST'
- Incorporates a pathway for the appropriate use of ONS in individuals:
 - who have recently been discharged from hospital with ONS, or who require short term ONS until oral intake is adequate
 - with chronic conditions or those with longer term ONS requirements to enable appropriate monitoring, escalation and cessation of the intervention

References

- Care homes market study: summary of final report. 2017. https://www.gov.uk/government/publications/care-homes-market-study-summary-of-final-report Accessed 12/09/19
- 2. Office for National Statistics. Overview of the UK Population August 2019. https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/articles/overviewoftheukpopulation/august2019 Accessed 12/09/19
- 3. Elia M and Russell CA. Nutrition Screening Surveys in Care Homes in the UK. BAPEN. 2015 https://www.bapen.org.uk/pdfs/nsw/care-homes/care-homes-uk.pdf
- Stratton R, Smith T and Gabe S. Managing malnutrition to improve lives and save money. BAPEN. 2018. https://www.bapen.org.uk/pdfs/reports/mag/managing-malnutrition.pdf
- 5. Holdoway et al. Managing Adult Malnutrition in the Community. 2nd Edition 2017. https://www.malnutritionpathway.co.uk
- 6. Morley JE. Pathophysiology of Anorexia. Clin Geriatric Med. Nov 2002;18 (4):661-73
- 7. Bauer J. et al. Evidence-based recommendations for optimal dietary protein intake in older people: A position paper from the PROT-AGE study group. Journal of the American Medical Directors Association. 2013; 14(8): 542–559
- 8. Stratton RJ. Malnutrition: another health inequality? Proc Nutr Soc 2007; 66 (4): 522-5299.
- 9. Gandy J. Manual of Dietetic Practice. Wiley-Blackwell. 2014.
- 10. National Institute for Health and Care Excellence (NICE). Nutrition support in adults. Quality Standard 24. 2012.
- BDA Food Services Specialist Group. Nutrition Toolkit for Healthcare Catering. June 2016. https://www.bda.uk.com/professional/practice/nutrition_toolkit_for_healthcare_catering Accessed 12/09/19
- 12. Parsons E et al. Oral nutritional supplements in a randomised trial are more effective than dietary advice at improving quality of life in malnourished care home. residents. Clin Nutr. 2017 Feb;36(1):134-142.
- 13. Elia M et al. Cost-effectiveness of oral nutritional supplements in older malnourished care home residents. Clin Nutr. 2018 Apr;37(2):651-658.
- 14. O'Loughlin G and Shanley C. Swallowing problems in the nursing home: a novel training response. Dysphagia. 1998 Summer; 13(3):172-83.
- 15. National Institute for Health and Care Excellence (NICE). Nutrition support in adults: oral nutrition support, enteral tube feeding and parenteral nutrition. Clinical Guideline 32, 2006.
- 16. Care Quality Commission (CQC) Health and Social Care Act 2008 (Regulated Activities) Regulations: Regulation 14.2014.