



A Report from BAPEN  
With the Group on Nutrition in Sheltered Housing (GNASH)

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# Screening for malnutrition in sheltered housing

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on behalf of the Group on Nutrition and  
Sheltered Housing

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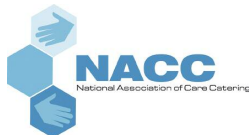
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The members of the Group on Nutrition and Sheltered Housing are:

BAPEN, ERoSH (Essential Role of Sheltered Housing), NACC (National Association of Care Catering), Nutricia (UK) Ltd, Accent Group, Harrogate Neighbours, Richmond Housing Partnership, Westminster Housing & Care. In addition, Home Group and Invicta participated in the project.



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Full details of the Report are available by logging on to [www.bapen.org.uk](http://www.bapen.org.uk)

## Key Points

- Nutritional problems are common among tenants of sheltered housing in England.
- The 'Malnutrition Universal Screening Tool' ('MUST') identified 14% of tenants as 'malnourished' (medium + high risk) and 24% as obese.
- At any one time, malnutrition is estimated to affect as many if not more people in sheltered housing than in hospital.
- Nutritional screening can be used to identify those at risk of malnutrition so that appropriate action can be taken.
- More tenants and scheme managers of sheltered housing preferred to use 'MUST' rather than a questionnaire to detect malnutrition risk.
- There is a need to raise awareness of the problem of malnutrition in sheltered housing and to provide education and training to identify and manage those at risk.

## Executive summary

- 1 The 'Malnutrition Universal Screening Tool' ('MUST') was used to identify malnutrition risk in tenants of sheltered housing in the northern and southern parts of England. The overall age of the 335 tenants studied was  $79.3 \pm 8.6$  (sd) years, with women being significantly older than men ( $80.6 \pm 8.3$  years versus  $76.7 \pm 8.6$  years). Three quarters of the tenants had at least one medical condition.
- 2 Malnutrition' ('MUST' medium + high risk) was found to be present in 14% of the tenants (9% high risk and 5% moderate risk). A body mass index (BMI) of less than  $20 \text{ kg/m}^2$  was present in 62% of those with 'malnutrition' and 9% in the population as a whole. A BMI of over  $\text{kg/m}^2$  was present in 24% of the tenants.
- 3 'Malnutrition' tended to be more common in older tenants, in women who were older than men, and in those who had lived in sheltered housing for longer, but the differences were not significant.
- 4 Attempts to use a questionnaire to predict malnutrition risk and to correlate with 'MUST' met with limited success. The most useful indicators were current appetite, change in appetite, weight loss, and general appearance (assessed by the scheme manager). The last two indicators were more influential in predicting the 'MUST' classification than the first two.
- 5 Use of self-reported height or weight, instead of measurements of weight and height to establish BMI category, misclassified only a small proportion of subjects. With the original 'MUST' as reference (using measured weight and height), the following sensitivities and specificities were established: for self reported height and measured weight, 96% and 96% respectively; for self reported weight and measured height, 93% and 96%; and for self reported height and weight, 95% and 91%. The results were better than those obtained using the questionnaire.
- 6 When scheme managers were asked to indicate their preference for using a questionnaire without measurements of weight and height, or 'MUST' which involved measurements of weight and height, two thirds preferred to use 'MUST'. Most tenants had no preference but amongst those that did, most also preferred 'MUST'. Scheme managers found the application of 'MUST' to all tenants as easy or very easy.
- 7 Nutritional screening is an easy procedure that should be used to identify both malnutrition and obesity in sheltered housing. More objective measurements and criteria, such as those incorporated in 'MUST', are preferable to less reproducible, subjective criteria. Identification of malnutrition or risk of malnutrition needs to be linked to an appropriate action plan. A good practice guide for addressing malnutrition in sheltered housing is now available.

# Background

## Sheltered Housing

The housing of older people is of considerable importance to our society for at least two reasons. First, older people often suffer from physical and mental disabilities that are associated with reduced ability to self-care, and to manage in ordinary housing, especially after their partner/spouse has died. Second, older people represent the fastest growing segment of the population. The 2001 census indicated for the first time that there were more than 1 million people aged over 85 years and the number is set to increase almost four-fold by 2050.

Sheltered housing helps address such problems, by combining self contained facilities with communal facilities, so that tenants can continue to enjoy their independence and participate in communal activities if they wish. Traditional sheltered housing emerged shortly after the Second World War and initially grew slowly, so that by 1960 there were perhaps only about 28,000 people living in such housing (1). More recently sheltered housing has grown faster and it is estimated that there are 0.6 million units (2) (consistent with figures from a recent Department for Communities and Local Government report (3)), housing about 700,000 people, which is more than the number in care homes (~500,000).(4) There are different types of sheltered housing: grouped housing for more active people (category 1); traditional sheltered housing for less active people (category 2, with a warden office, alarm system, laundry and communal facilities); and housing for people with extra needs (also called 'very sheltered housing', or 'extra care' sheltered housing, or category 2.5). The distinction between the categories is not always clear.(5) Sheltered housing, sometimes referred to as retirement housing, is designed to meet the variable needs of tenants,(6) who have their own self-contained flat, bedsit or bungalow, usually in association with communal facilities such as a lounge, laundry, guest flat and garden. Residents may choose to use all, some, or none of these facilities, according to their needs. Meals are not usually provided unless the scheme is 'extra care'. Sheltered housing provides residence that can be regarded as intermediate between that in normal housing and care homes.

Most schemes have a scheme manager (also called support worker, scheme coordinator, or warden) who may be full or part-time and an emergency alarm service. The scheme manager is required to assess needs and agree a support plan, review it at least annually, and help residents maintain their independence. The scheme manager's job includes coordination and advice on services such as shopping, cleaning, cooking, personal and nursing care. Although they rarely provide such services, they can take on an advocacy and liaison role to help residents access these services.

As suggested above, the needs of sheltered housing residents vary widely: some are extremely fit and independent and may even be working, while others are very frail and have multiple health problems requiring extensive care packages. In some areas of the country, especially cities, sheltered housing is increasingly used to house a proportion of older and vulnerable people with complex or challenging needs, such as those related to mental health, alcohol and drugs. Residents of sheltered housing schemes are typically older than 70 years but their age can range from 50 to over 100 years.

Further information on sheltered housing can be obtained from various organisations shown in Appendix 1.

## Malnutrition in Sheltered Housing

The Department of Health (England) with major stakeholders published a joint action plan *Improving Nutritional Care* in October 2007,(7) which stated that housing providers should:

- Ensure that management and onsite staff undertake training on nutrition to raise awareness of malnutrition and its potential impact on residents
- Explore ways of cascading that information to residents and their carers and families to raise awareness and prevent malnutrition
- Work with multi-disciplinary experts, such as BAPEN, to develop appropriate pathways for referrals for residents who are malnourished or at risk of malnutrition.

The devolved nations have also recognised the need to address the malnutrition in the community, which includes sheltered housing. To do this it is necessary to increase awareness about the detrimental effects of malnutrition, to educate the workforce and the tenants of sheltered housing schemes, and to ensure that various organisations work together to address a common problem.

### Group on Nutrition and Sheltered Housing (GNASH)

The Group on Nutrition and Sheltered Housing (GNASH) was established to address some of these problems. Its members are: BAPEN, Accent Group, City of Westminster Housing and Care, City of Westminster PCT, Essential Role of Sheltered Housing (EROSH); Harrogate Neighbours, National Association of Care Catering (NACC), Nutricia UK, and Richmond Housing Partnership with additional help from Home Group and Invicta for the pilot project.

GNASH aimed to:

- Examine the magnitude of the malnutrition problem in sheltered housing and attitudes of managers and tenants towards nutritional screening
- Develop a Good Practice Guide for addressing malnutrition
- Develop an accompanying education and training course for sheltered housing scheme managers/Wardens/housing related support workers and those working in general needs housing

These aims have been considered simultaneously, but the focus of this report is on the first of them, which was also the main initial reason for the formation of GNASH.

### Nutritional screening and prevalence of malnutrition in sheltered housing

There is surprisingly little information about the prevalence of malnutrition in sheltered housing. In 2003 Stratton, Green and Elia (8) summarised the information obtained from a small number of studies of sheltered housing, all undertaken outside the UK. The prevalence was found to be extremely variable, ranging from 0% to 60%, probably because of the different criteria that were used to identify malnutrition and the different types of sheltered housing or assisted accommodation that were studied. A recent study in Wales (9) reported that the prevalence of malnutrition was 12% using the 'Malnutrition Universal Screening Tool' ('MUST') (4) (10% using dietetic opinion), but it is not clear if this is representative of other parts of the UK, especially England. Without information on the magnitude of the problem it is difficult to plan and allocate appropriate resources to combat the problem.

Although several screening procedures are available to identify malnutrition, 'MUST' has become increasingly used in hospitals, care homes, and in the community, so that it is now the most commonly used tool in the UK. Because it can be used in all these settings, data obtained in one setting can be reliably compared with those obtained in another. The consistency associated with the use of 'MUST' also helps establish continuity of care as people move from one setting to another, for example from hospital to sheltered housing or vice versa. 'MUST' takes into consideration body mass index (BMI) (weight status based on measurement of weight and height) and weight loss in the preceding 3-6 months. In the acute sector 'MUST' also incorporates an acute disease effect resulting in no food intake for more than five days. However, this is unlikely to apply to tenants of sheltered housing because those who are acutely ill and who do not eat at all for this period of time would probably find themselves in hospital. The current project offered the opportunity to examine the practicalities of using 'MUST' in sheltered housing, to examine the possible application of alternative procedures that do not involve measurements of weight and height, and the preference of tenants and scheme managers between 'MUST' and the alternative procedures. The specific aims of the study were to:

- Establish the prevalence of malnutrition amongst tenants in sheltered housing using 'MUST'
- Establish concurrent validity between malnutrition risk obtained by a questionnaire (and between self reported height and/or weight) on the one hand and 'MUST' on the other.
- Examine the preference of scheme managers, who were to undertake nutritional screening, and preference of the tenants, who were to be screened, for 'MUST' which involved measurements of weight and height and the questionnaire, which did not involve such measurements.

A glossary of terms is provided at the back of the report to facilitate understanding by readers with widely different backgrounds.



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