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*Putting patients at the centre
of good nutritional care*

Malnutrition and Nutritional Care Survey in Adults

UK Malnutrition Awareness Week, October 2022

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On behalf of the Malnutrition Action Group of BAPEN.

MAG

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Key points

The BAPEN malnutrition and nutritional care survey, undertaken in October 2022 in conjunction with the UK Malnutrition Awareness Week, included 1543 adults (52% female; mean age 70 (18-108) years, mean BMI 24.7 (SD 6.4) kg/m^2)) from hospitals and a variety of community settings across the UK.

Patients had a range of primary diagnoses, including neurological diseases (20%), gastrointestinal conditions (16%), frailty (12%), cancer (9%) and a variety of other conditions (respiratory (including COVID-19), falls and fractures, cardiovascular). Around one quarter of patients (24%) were underweight (BMI < 20kg/m^2), 17% were obese (BMI > 30kg/m^2) and 26% had unplanned weight loss.

Overall, 45% of adults were at risk of malnutrition (12% medium and 33% high risk) using the 'Malnutrition Universal Screening Tool' ('MUST'). Malnutrition prevalence was highest in individuals with cancer (62%), gastrointestinal conditions (50%), respiratory conditions (48%), frailty (45%) and neurological diseases (43%). Malnutrition was common in community settings, including in those in their own homes (56% at risk) and in residents in care homes (55% at risk), similar to previous years surveys. In hospitals, 44% of patients were at risk of malnutrition.

Compared to last year (2021), nutritional care plans were in place for a higher proportion of patients overall (62% versus 50% in 2021) and for medium (71 versus 66%) and high risk patients (91% versus 76%) respectively. Enteral tube feeding was recorded in the care plans of 21% of patients and PN use in 8%, an increase from previous years, likely due to the centres participating in the survey. The use of oral nutritional supplements (53%) and food-based interventions (75% had at least one food-based intervention) remained relatively constant as a proportion of those with a care plan in place, but with a drop in the proportion of patients receiving dietetic counselling (from 71% in 2021 to 52% in 2022).

Further analysis of this, and previous years, malnutrition and nutritional care surveys will be undertaken to ascertain the longitudinal changes in the prevalence of malnutrition and the nutritional care undertaken across the UK.

Purpose & Methods

This BAPEN survey aimed to assess the prevalence of malnutrition according to the Malnutrition Universal Screening Tool ('MUST')(1) and the use of nutritional care across any setting in the UK in 2022.

BAPEN has undertaken surveys over many years to assess the extent of malnutrition in different health care settings across the UK (2-6). Similar to previous BAPEN surveys (2019-2021) (2,3,4), this survey of the prevalence of malnutrition and nutritional care, used the BAPEN online portal (https://data.bapen.org.uk/maw/maw-home) to collect data. The designated period of data collection was 1st – 31st October 2022, coinciding with UK Malnutrition Awareness Week 2022. An invitation letter inviting organisations and individuals across health and social care settings to register to participate in the survey was sent out in September 2022 (see Appendix A).

Non identifiable data were entered by health or social care professionals for each individual screened as follows (and see Appendix B for the questions):

Individual Descriptive Data

The following information was collected for each individual:
- Location of residence (Hospital, Community Hospital/Rehabilitation Unit, Own Home, Care Home, Other)
- Length of stay in the location they resided (if applicable)
- Age
- Gender
- Primary diagnosis (choice of 1): Cancer, Cardiovascular (e.g. cardiovascular disease, coronary artery disease), COVID-19, Dermatology, Endocrinology (e.g. diabetes), Falls/Fracture, Frailty, Genito/renal, Gastrointestinal (e.g. Crohn's, colitis), Haematology, Learning Disability, Mental health (e.g. depression, anxiety), Musculoskeletal (e.g. arthritis), Neurological (e.g. stroke, motor neurone disease, dementia, Alzheimer's), Respiratory (e.g. chronic obstructive pulmonary disease, cystic fibrosis), Surgical, No disease or Other (free text)
- Profession of the individual who inputted the data

A paper version was also available for users if needed to capture information to input into the portal (Appendix B)

'MUST'

Data required to complete the Malnutrition Universal Screening Tool ('MUST', see Appendix C) for each individual were entered by the health or social care professional in either metric or imperial units (e.g. weight, height, previous weight or weight lost over 3-6 months). There was a question to confirm if the weight loss was unintentional or not.

Body mass index (BMI) and percentage unintentional weight loss were automatically calculated as were the BMI and weight loss scores (**Steps 1 and 2 of 'MUST'**) in the online portal.

The presence of an acute disease effect (**Step 3 of 'MUST'**; 'if the individual was acutely ill and there has been or is likely to be no nutritional intake for more than 5 days') was answered by health or social care professionals and the relevant score generated.

The overall calculation of the 'MUST' score (0 to 6) and 'MUST' category (low, medium, high) (**Step 4 of 'MUST'**) were automated within the online portal.

The portal could generate for health or social care professionals an email record of each individual 'MUST' screen.

Nutritional care

The survey also asked if there was a malnutrition management plan in place for each individual and if so, the treatment options that were part of the care plan (See Table 1), which could include

- food based interventions and dietary counselling

- oral nutritional supplements (ONS)

- enteral tube feeding (ETF)

- parenteral nutrition (PN)

Table 1: Nutritional care plan treatment options

Food based intervention	Snacks Diet sheet Fortified foods with food ingredients Fortified foods with modular feeds Dietary counselling by dietitian Other (please specify)
Oral nutritional supplements	Ready-made liquid 1.0kcal/ml Ready-made liquid 1.5kcal/ml Ready-made liquid 1.6kcal/ml Ready-made liquid > 2kcal/ml Pre thickened Dessert style Powder Other (please specify)
Enteral Tube feeding	Continuous Bolus Energy density < 1kcal/ml Energy density 1-1.5kcal/ml Energy density 1.6-2kcal/ml Energy density >2kcal/ml Fibre containing High protein Peptide/amino acid Blenderised diet Other (please specify)
Parenteral Nutrition (PN)	Yes No
If yes, is PN managed by a nutrition support team	Yes No
PN Route	Cannula Central Line Peripheral Line Other (please specify)

Results

Individual descriptive data

This survey included 1543 individuals whose anonymised data were entered into the online portal. Most individuals were screened by a Dietitian (88%) or a Nurse (3%).

Location

Three quarters of the individuals in the survey were in hospital (75%). The remaining 25% lived in community settings, including their own home (10%), a community hospital/rehabilitation unit (6%), a care home (6%) or mental health units (MHU) (3%). For those in institutions, there was a wide-ranging length of stay (range from 0-1461 days were reported).

Table 2: Setting of individuals screened and length of stay

Setting	n	%	Length of stay mean (range) days
Hospital	1163	75	27.2 (0-461) ^
Community Hospital / Rehabilitation Unit	94	6	69.5 (4 - 323)
Own Home	152	10	-
Care Home	86	6	401.4 (61-1461)*
Mental Health Unit	45	3	74.7 (3-579)#
Other	3	-	
TOTAL	**1543**	**100**	-

^n=1022; *n=18; #=42

Most individuals screened lived in England (62%; n 960), or Wales 35% (n 535), with a few individuals living in Scotland 3% (n 45) and Northern Ireland 0% (n 3). The counties or regions with the most individuals screened in England were Staffordshire (37%) and West Midlands (23%), in Wales, were Carmarthenshire (28%) and Pembrokeshire (27%) and in Scotland, were Fife (62%) and the Borders (31%). All data in Northern Ireland came from Antrim (see Table 4).

Table 3: Country of individuals screened

Country	Frequency	%
England	960	62
Wales	535	35
Scotland	45	3
Northern Ireland	3	0
Total	**1543**	**100%**

Table 4: County of individuals screened

County	Frequency	%
England		
Bristol	19	2.0
Greater London	1	0.1
Hampshire	25	2.6
Leicestershire	50	5.2
Merseyside	3	0.3
Oxfordshire	100	10.4
Staffordshire	352	36.7
Surrey	118	12.3
West Midlands	219	22.8
Yorkshire	73	7.6
TOTAL (England)	*960*	*100*
Wales		
Cardiff	90	16.8
Carmarthenshire	151	28.2
Ceredigion	70	13.1
Pembrokeshire	146	27.3
Swansea	69	12.9
Vale of Glamorgan	9	1.7
TOTAL (Wales)	*535*	*100*
Scotland		
Borders	14	31.1
Dumfries and Galloway	3	6.7
Fife	28	62.2
TOTAL (Scotland)	*45*	*100*
Northern Ireland		
Antrim	3	100

See Appendix D-F for a summary of data from England; Scotland; Wales and Appendix G-Q for counties with more than 40 individuals in the survey.

Age, gender and primary diagnosis

There was an even split of gender (female 52%; male 48%) and a wide range of ages (mean 70, range 18 – 108 years). Most individuals (68%, n 1052) were aged 65 years and over (20% 65-74 years; 25% 75-84 years; 23% 85 years and over) with one third (32%) aged <65years.

There were many primary diagnostic categories, with the most common ones being neurological conditions (20%), gastrointestinal conditions (16%), frailty (12%) and cancer (9%). COVID-19 as a primary diagnosis accounted for a very small proportion (1%, n 17) of individuals in the survey (Table 5).

Table 5: Primary diagnosis of individuals screened

Primary diagnosis	Frequency	%
Cancer	143	9.3
Cardiovascular (e.g. ischaemia, coronary artery disease)	107	6.9
COVID-19	17	1.1
Dermatological	5	0.3
Endocrinology (e.g. diabetes)	12	0.8
Falls & Fracture	57	3.7
Frailty	191	12.4
Gastrointestinal (includes liver)	253	16.4
Genito/Renal	92	6.0
Mental Health	34	2.2
Learning Disability	31	2.0
Musculoskeletal	96	6.2
Neurological (e.g. stroke, MND, dementia)	309	20.0
Respiratory (e.g. COPD, cystic fibrosis)	92	6.0
Surgical	11	0.7
Other*	55	3.6
No disease	33	2.5
Total	**1543**	**100.0**

'Other' largely comprises of non-specific trauma, sepsis or general medicine

'MUST'

For individuals in the survey who had weight and height data (n 1539), mean weight was 69.0 (SD 20.3) kg, mean height was 1.66 (SD 0.1) m and the mean BMI was 24.7 (SD 6.4) kg/m^2.

Almost one quarter of individuals were underweight (10% BMI 18.5-20kg/m^2 (BMI score 1); 14% BMI < 18.5kg/m^2 (BMI score 2)) but most individuals (76%, n 1128) had a BMI >20kg/m^2 (BMI score 0), including 17% (n 256) who were obese (BMI >30kg/m^2).

Around one quarter (26%) of individuals had unplanned weight loss of 5% or more, with 11% having 5-10% unplanned weight loss (n 172, weight loss score 1) and 15% having >10% weight loss (n 217, weight loss score 2). Most individuals (74%) did not have unplanned weight loss (n 1101, weight loss score 0).

Thirteen per cent of individuals had an acute disease effect score (step 3 of 'MUST') (n 197).

In terms of 'MUST' risk category, 45% were at medium or high risk of malnutrition (n 692; 12% medium (n 179), 33% high risk (n 513)) and 55% (n 847) were at low risk of malnutrition (see Figure 1).

Figure 1: Proportion of individuals according to malnutrition risk ('MUST')
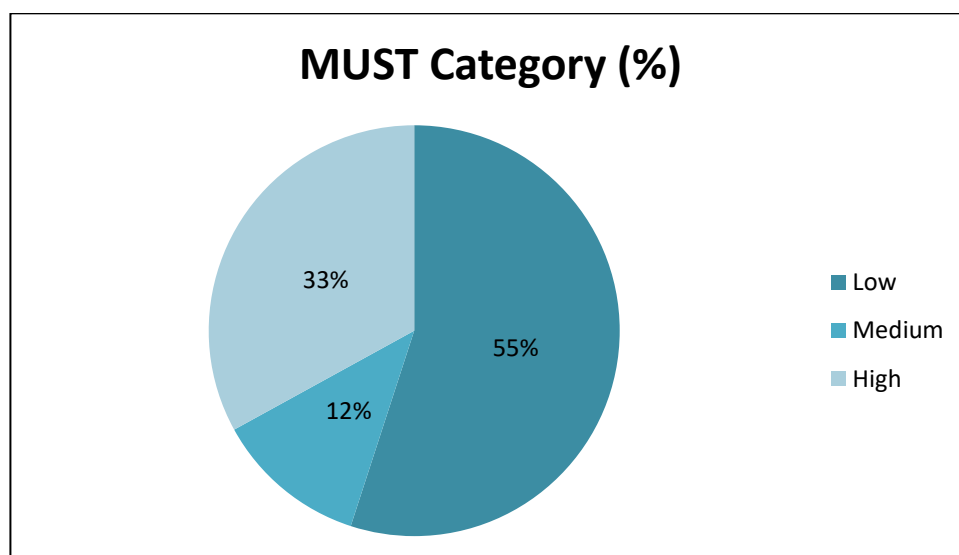

The proportion of patients at risk of malnutrition was similar in those aged 65 years and above (46%; 12% medium, 34% high) compared to those aged under 65 years (43%; 11% medium, 32% high).

'MUST' by Setting

Malnutrition prevalence varied by setting (see Figure 2). Overall, the prevalence of those 'at risk' of malnutrition (medium and high risk with 'MUST') was highest in individual's living in their own homes (56%) or care homes (55%), with almost one third (28%) in community hospital/rehabilitation units at risk. In the MHU's most (62%) individuals were at low risk of malnutrition, though this was a small sample size (n 45). In hospitals, where most of the individuals in the survey were screened (n 1160), 44% were at risk of malnutrition.

Figure 2: Prevalence of malnutrition by setting
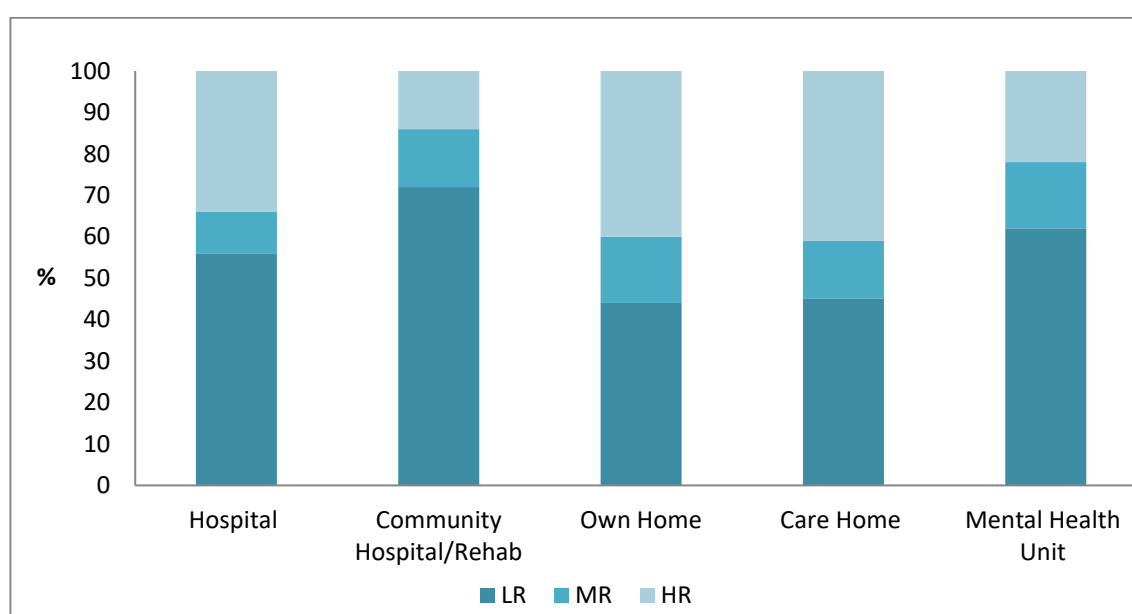
LR=Low Risk, MR = Medium Risk, HR = High Risk

'MUST' by Disease State

Malnutrition prevalence varied across the different diagnostic categories of individuals in the survey (Table 6). The highest prevalence of individuals at risk of malnutrition (medium and high risk with 'MUST') was in those with cancer (62%), gastrointestinal diseases (50%), conditions affecting mental health (50%; note small sample size n 34) respiratory diseases (48%), frailty (45%) and neurological diseases (43%). Apart from individuals with learning disabilities (19%), all diagnostic categories had more than one third of individuals at risk of malnutrition. The proportion of patients at risk of malnutrition with COVID-19 as a primary diagnosis was 41% (n 17).

For some primary diagnostic categories, there were a limited number of patients included within the survey (n<15), so the data on malnutrition prevalence was not shown as it is unlikely to be representative.

**Table 6: Prevalence of malnutrition according to classification of primary diagnosis**

Primary diagnostic category	Low risk (%)	At risk (%) (Medium + High risk)
Cancer (n 143)	38	62
Cardiovascular diseases (n 107)	64	36
COVID-19 (n 17)	59	41
Falls / Fractures (n 57)	63	37
Frailty (n 190)	55	45
Gastrointestinal diseases (n 252)	50	50
Genito/Renal (n 92)	59	41
Learning Disability (n 31)	81	19
Mental Health (n 34)	50	50
Musculoskeletal (n 96)	59	41
Neurological diseases (n 307)	57	43
Other (n 55)	45	55
Respiratory (n 92)	52	48

NOTE: Endocrine, Surgical, Dermatology not shown as n<15.

Nutritional Care Plans - All patients combined

Overall, 62% of patients had a nutritional care plan (n 956) and most patients at medium (71%; 127/179) and high (91%; 466/513) risk of malnutrition had a nutritional care plan in place (Figure 3).

Figure 3: Proportion of patients with a nutritional care plan according to 'MUST' category
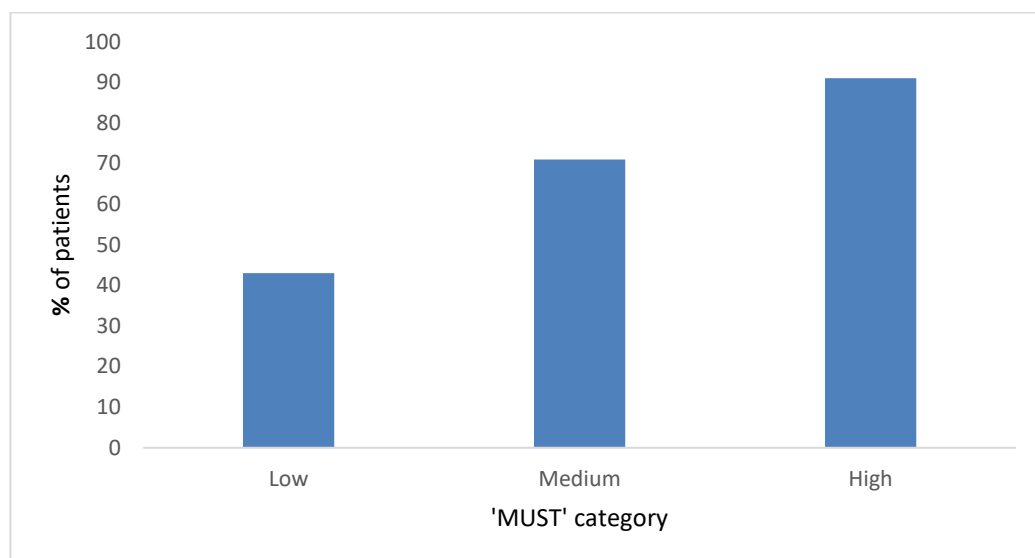
Overall, of those that had a care plan in place (n 956), most (75%; n 717) included food-based interventions (snacks, fortified foods with food ingredients, dietary counselling). Just over half (53%; n 503) had oral nutritional supplements (ONS) (mostly ready-made liquid ONS >2kcal/ml and 1.5kcal/ml) and around 21% (n 196) had enteral tube feeding (predominantly continuous feeding regimens with 1-1.5kcal/ml feeds). Eight percent had parenteral nutrition in their care plan (see Figure 4 for a summary). Of note, individuals could have more than one intervention in their care plans.

Figure 4: Summary of care plans*

Food Based Intervention

75% (n 717) had at least 1 food-based intervention

Top 3

- snacks **(79%)**
- dietary counselling by Dietitian **(52%)**
- foods fortified with ingredients **(38%)**

Oral Nutritional Supplements (ONS)

53% (n 503) had at least 1 ONS

Top 3

- ready-made liquid ONS >2kcal/ml **(49%)**
- ready-made liquid ONS 1.5kcal/ml **(33%)**
- powdered ONS **(9%)**

Enteral Tube Feed

21% (n 196) had at least 1 tube feeding intervention

Top 3

- enteral feed 1-1.5kcal/ml **(60%)**
- continuous feed **(59%)**
- fibre containing enteral feed **(19%)**

Parenteral Nutrition

8% (n 79) received PN

Managed by Nutrition Support Team

- yes (n 74/79) **(94%)**

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* from n 956 individuals recorded as having a nutritional care plan in place. Individuals could receive more than one nutritional intervention in their care plan.

Food Based Interventions

Overall, 75% of those that had a nutritional care plan in place received food-based interventions (n 717). Figure 5 shows that, of those receiving food-based interventions, 79% had snacks and half were seen by a Dietitian (52%). The use of fortified diets (38%) and diet sheets (30%) were also common. 'Other' less commonly listed components of the care plan included texture modified diets and milky drinks/milk shakes.

Figure 5: Food based interventions in nutritional care plans for all patients
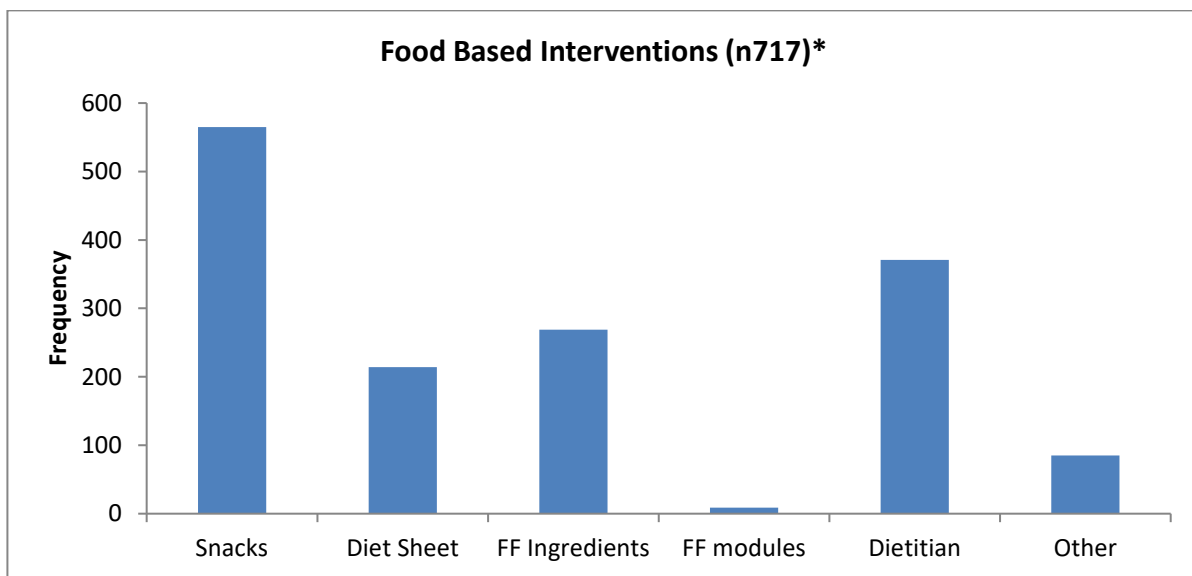
Key: FF = Fortified Food; * patients may have had more than one intervention

Oral nutritional supplements (ONS)

Just over half of the patients that had a nutritional care plan received oral nutritional supplements (n 503, 53%). Of those receiving ONS, ready-made liquid (RML) feeds were most used, with the highest proportion of care plans including >2kcal/ml ONS (49%) and 1.5kcal/ml ONS (33%) (see Figure 6). Other types of ONS included in care plans included powdered (9%), dessert style (8%) and pre-thickened (1%) ONS. 'Other' consisted of a range of ONS including: very high energy supplements ('shot' style), fortified milk drinks, high protein, semi-elemental and low electrolyte ONS.

Figure 6: Oral nutritional supplements in nutritional care plans for all patients
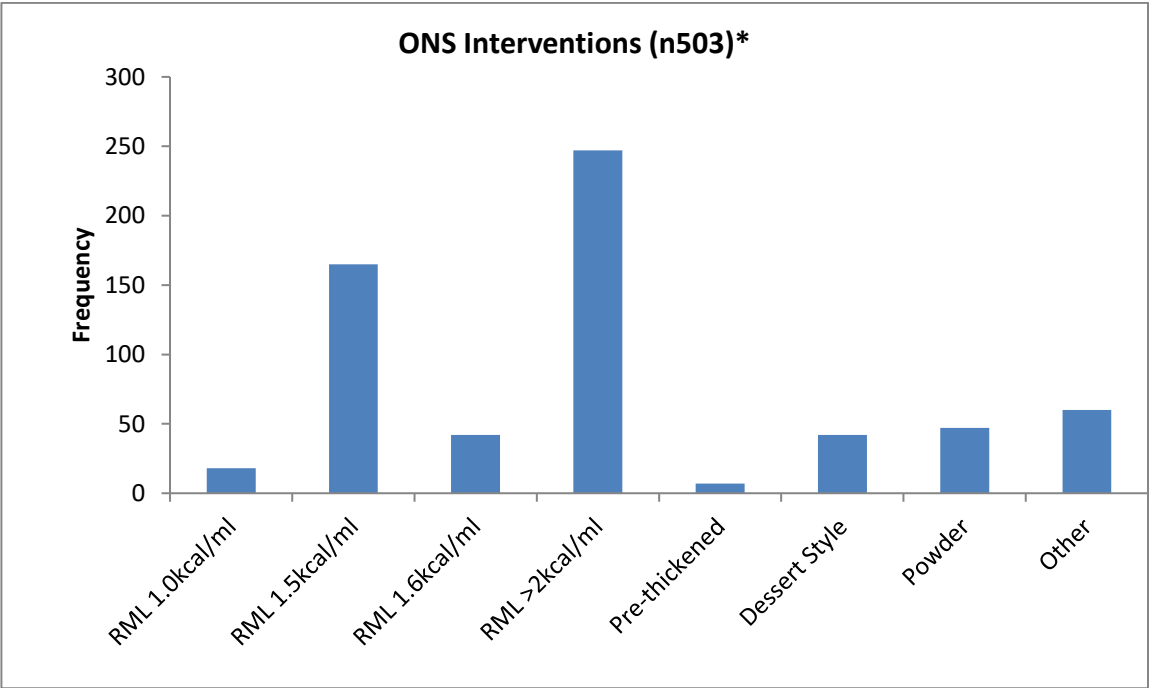
RML = ready-made liquid ONS; * patients may have had more than one intervention

Enteral Tube Feeding and Parenteral Nutrition

Twenty one percent (n 196) of patients who had a nutritional care plan had enteral tube feeding included. Where recorded, continuous feeding regimens were more frequent (59%) than bolus feeding regimens (13%).

Tube feed energy density ranged from <1kcal/ml (5%) to >2kcal/ml (11%) (Figure 7), though by far the most common energy densities used were 1-1.5kcal/ml (60%).

Fibre containing feeds were used in 19% of care plans, high protein feeds and peptide/amino acid-based feeds were each used in 16% of care plans, whilst minimal (< 2%) blenderised diets were recorded.

Figure 7: Enteral tube feeds in nutritional care plans for all patients

Enteral Tube Feed Interventions (n196)*
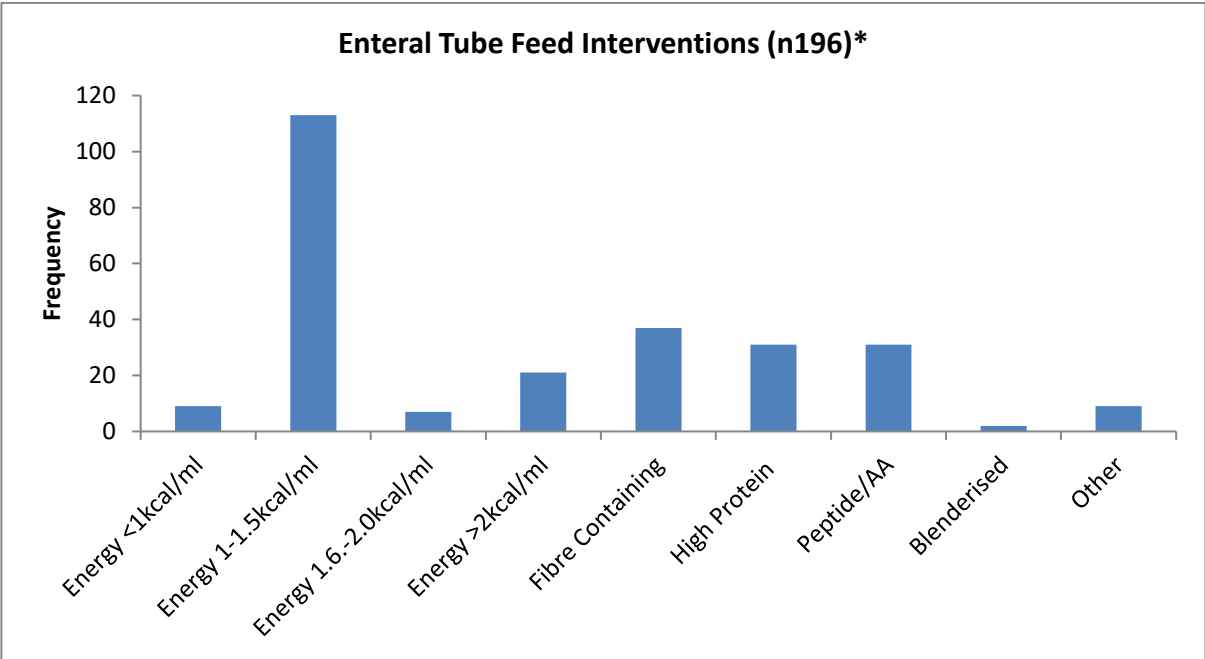
* individuals may have had more than one intervention

Eight percent of nutritional care plans included parenteral nutrition (n 79), mostly fed via the central route (85%; n67/79). Ninety four percent (74/79) of patients on parenteral nutrition were managed by a Nutrition Support Team.

Nutritional Care plans - according to malnutrition risk

For the care plans of those patients at medium (n 127) and high (n 466) malnutrition risk with 'MUST', around three quarters received at least one food-based intervention, 60% received ONS and 22% received enteral tube feeding.

Table 7: Nutritional care according to malnutrition risk

Malnutrition risk	At least one food-based intervention	Oral nutritional supplements	Enteral tube feeding
Medium (M)	81%	55%	13%
High (H)	75%	62%	24%
At risk (M+H) (n 593)	76%	60%	22%

Results expressed as a percent of all medium and /or high-risk patients with a care plan in place. Patients could have more than one intervention in their care plan. Of the 78 patients recorded receiving PN, 35 were high risk, 6 medium risk, 37 low risk.

Food Based Interventions in those at risk of malnutrition

The majority of individuals at risk of malnutrition received at least one food-based intervention and the proportion was similar for both medium and high-risk patients (see Table 7).

The food-based interventions most used were:
- snacks (81%)
- dietetic counselling (56%)
- fortified diet using food ingredients (38%)
- diet sheets (31%)

Note: more than one option could be given to patients.

Less commonly used were modular feeds to fortify the diet, a texture modified diet and nourishing / milky drinks.

There were also 263 individuals at low risk of malnutrition receiving a food-based intervention.

Oral nutritional supplements in those at risk of malnutrition

Over half of all medium and high-risk individuals (n 355) were recorded as receiving ONS (55% of medium risk, 62% of high risk). The most used ONS were:
- >2kcal/ml ready-made liquids (51%)
- 1.5kcal/ml ready-made liquids (31%)
- powders to be reconstituted (12%)
- dessert-style (8%)
- 1.6kcal/ml ready-made liquids (7%)
- pre-thickened (2%)

Note: more than one option could be given to patients.

'Other' ONS (14%) were most often 'shot style' or a specialised ONS (e.g. low-electrolyte, high protein, peptide based)

There were 148 individuals in the survey at low risk of malnutrition receiving ONS.

Enteral tube feeding and parenteral nutrition in those at risk of malnutrition

Overall just under one quarter of patients at risk of malnutrition were recorded as receiving enteral tube feeding (n 129), with 13% of medium risk patients and 24% of high risk patients tube fed. Some patients receiving tube feeding (n 67) were at low risk of malnutrition.

Where recorded, most patients at risk of malnutrition were fed using a continuous feeding regimen (61%, n 79), with very few being bolus fed (7%, n 19).

A range of tube feeds were being used in those at risk of malnutrition, with the most common being 'standard' tube feeds of differing energy density (ranging from 1kcal/ml through to >2kcal/ml; the most common (57%) being 1-1.5kcal/ml). Approximately one quarter of patients used a fibre containing feed (24%) and one fifth used either a peptide / amino-acid based feed (19%) or a high protein feed (15%). There was limited use of blenderised tube feeds (<2%).

Of the 79 individuals recorded as receiving PN, 35 were at high risk of malnutrition, 6 at medium risk and 38 were at low risk. All at-risk (medium and high, n 41) patients were managed by a nutrition support team and the majority were centrally fed 34/41 (83%) or fed via a peripheral line 5/41 (12%).

Conclusions

This 4th BAPEN Malnutrition and Nutritional Care survey, undertaken throughout October 2022, suggests a high prevalence of disease-related malnutrition, identified using 'MUST', across care settings in the UK. A significant proportion of individuals (45%) were at risk of malnutrition, as in previous surveys (2021 (39%), 2020 (40%) and 2019 (42%)) (2-4) and remaining higher than much earlier but larger surveys undertaken by BAPEN in the past (5, 6). Whilst around one quarter of patients were underweight (BMI < 20kg/m^2), 17% were obese (BMI > 30kg/m^2) and around one quarter had unplanned weight loss.

Adults of all ages and from a range of settings, were included in the survey, with many different diagnoses. Most adults were residing in either England (62%) or Wales (35%) and as in previous surveys, the majority (75%) of individuals were in hospital, where 44% were at risk of malnutrition. Malnutrition prevalence in the community varied considerably, depending on the setting (lowest prevalence in mental health units, highest prevalence in care homes) although larger sample sizes may be needed to fully ascertain the true picture across settings.

For primary diagnoses, malnutrition prevalence was highest in those with gastrointestinal diseases (50%), respiratory conditions (48%), cancer (62%) and neurological conditions (43%). Around 17% of individuals had a primary diagnosis of COVID-19, and the malnutrition prevalence was also high (41%) and similar to that observed the year before.

In addition to exploring the prevalence of malnutrition, this survey also assessed the use of nutritional care. Compared to last year the presence of nutritional care plans in place overall increased back up to 62% as in 2020 (vs only 50% in 2021) and for both medium risk patients (from 66% to 71%) and high risk patients (from 76% to 91%). The use of enteral tube feeding in those that had a care plan in place remained above 20% (vs. 13% in 2020, 24% in 2021). Due to the centres participating in the survey this year, there was an increase in recorded PN use (8%, n 79). Overall, the use of food based interventions (75% had at least one food-based intervention) and oral nutritional supplements (53%) remained similar to previous years as a proportion of those with a care plan in place (noting that patients may have had more than one intervention). The use of snacks (79%) and fortified foods (38%) remained key parts of food based nutritional care plans but this year, fewer care plans included dietetic counselling (52%) than the previous year (71%). It is unclear if this change is due to differences in dietetic workforce capacity or referral patterns or simply differences in the survey group this year.

Ready-made liquid oral nutritional supplements were also commonly used with a further increase in the use of more energy dense (>2kcal/ml) supplements to 49% this year (vs. 39% in 2020, 45% in 2021 of those receiving an ONS).

As in previous surveys (2-4), individuals at low risk of malnutrition also had nutritional interventions in their care plan, including food-based intervention and all forms of nutritional support. It is likely that these interventions, that included ETF and PN, were to maintain nutritional status in individuals, including preventing any future nutritional decline with disease or treatment. However, insufficient information in the survey means it's not possible to assess the reasons for specific nutritional care plans or to check the clinical appropriateness of different treatments. The survey also did not look at patient outcomes in relation to malnutrition or the different nutritional support interventions. However, a large evidence base, together with national and international guidelines clearly highlight the negative and costly impact of untreated disease related malnutrition and the clinical and economic value of identifying and treating malnutrition appropriately (7-13).

It was encouraging to have participation from all four nations in the UK in the 2022 survey and we hope greater participation will continue in future to make sure the data becomes more representative by country, setting and diagnostic group. Furthermore, as in previous surveys, individuals' data were submitted by dietitians and dietetic assistants, which may mean that the individuals included in this survey were more likely to be malnourished and receiving nutritional care. A wider contribution from other health and social care professionals in these surveys in the future would be welcomed.

From these surveys we hope to continue to build a national picture of the prevalence of malnutrition and use of nutritional care in different settings, patient groups and in different regions/nations of the UK. We hope that this data helps assess locally and nationally changes over time, highlight potential areas for improvement, and where guidance, education and training, or policy change is required. The data will also help decision makers to focus on where resources are most needed to support those with malnutrition in need of the right nutritional care. A full publication of the past four years of surveys will follow.

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Acknowledgements

Potential conflicts of interest

Appendices

APPENDIX A
Invitation letter to participate in a National Survey of Malnutrition and Nutritional Care

September 2022

Dear Sir/Madam,

Re: Invitation to participate in a national survey of malnutrition and nutritional care during UK Malnutrition Awareness Week (October 2022)

Please join BAPEN in undertaking the next survey of malnutrition and nutritional care during Malnutrition Awareness Week (#UKMAW2022, 10th-16th October 2022).

We are asking individuals working in health and social care to screen for malnutrition using 'MUST' and record any nutritional care a person is given during UK MAW2022.

The survey will be undertaken online through a secure link on the BAPEN website from 1st October for the whole month for individual professionals and organisations to use. You can quickly input the screening results of each person in your care and information on the nutritional care they receive.

There is a simple registration process, so that the system can give you a summary of your own local data. The survey will also help us understand the national picture on malnutrition and nutritional care across the UK in 2022. There will be a small prize for the top screener from England, Scotland, Wales and N Ireland.

Wherever you work, please join us in this national initiative and thank you so much for your support.

Yours faithfully,

Dr Rebecca Stratton, Chair, Malnutrition Action Group (MAG)
Dr Trevor Smith, President, British Association for Parenteral and Enteral Nutrition (BAPEN)

APPENDIX B

Paper form for the National Survey of Malnutrition and Nutritional Care
Please complete each section and transfer to the electronic portal.

Part 1- Background Information

Where does the individual currently reside?

Hospital	
Community Hospital/Rehab Unit	
Own Home	
Care Home	
Mental Health Unit	
Other (Please state)	

Length Of Stay (**days**) (if applicable)	
Age	
Gender	

Disease category of primary diagnosis (choose 1)

Cancer	
Cardiovascular e.g. CVD,CAD	
COVID-19	
Frailty	
Gastrointestinal e.g. Crohns, Colitis (excluding cancer)	
Genito / Renal	
Musculoskeletal e.g. arthritis	
Neurological e.g. stroke, MND	
Respiratory e.g. COPD, CF	
No disease	
Other (please state)	

Part 2 – 'MUST' (all calculations of MUST will be automatic when this data is transferred to the portal)

Current Weight *(metric or imperial)*		
Current Height *(metric or imperial)*		
Has the individual recently lost weight without trying?	Yes	No
If yes to unintentional weight loss: **What was their previous weight or How much weight have they lost** *over the last 3-6 months (metric of imperial)*		
Is the individual acutely ill and has had (or likely to have) no nutritional intake for more than 5 days?	Yes	No

Part 3 – Malnutrition Management Plan

Is there a care plan in place for the management of malnutrition?	Yes No Other – Please state
If Yes: please mark all treatment options that apply	
Food based intervention	Snacks Diet sheet Fortified foods with food ingredients Fortified foods with modular feeds Dietary counselling by dietitian Other (please specify)
Oral nutritional supplements	Ready-made liquid 1.0kcal/ml Ready-made liquid 1.5kcal/ml Ready-made liquid 1.6kcal/ml Ready-made liquid > 2kcal/ml Pre thickened Dessert style Powder Other (please specify)
Enteral Tube feeding	Continuous Bolus Energy density < 1kcal/ml Energy density 1-1.5kcal/ml Energy density 1.6-2kcal/ml Energy density >2kcal/ml Fibre containing High protein Peptide/amino acid Blenderised diet Other (please specify)
Parenteral Nutrition	Yes No
If Yes: **Is PN managed by a nutrition support team**	Yes No
Parenteral Nutrition route	Cannula Central Line Peripheral Line Other (please specify)
Other nutrition support option in care plan	
General comments on screening and management of malnutrition	

'MUST' (see www.bapen.org.uk to download, and for full resources)
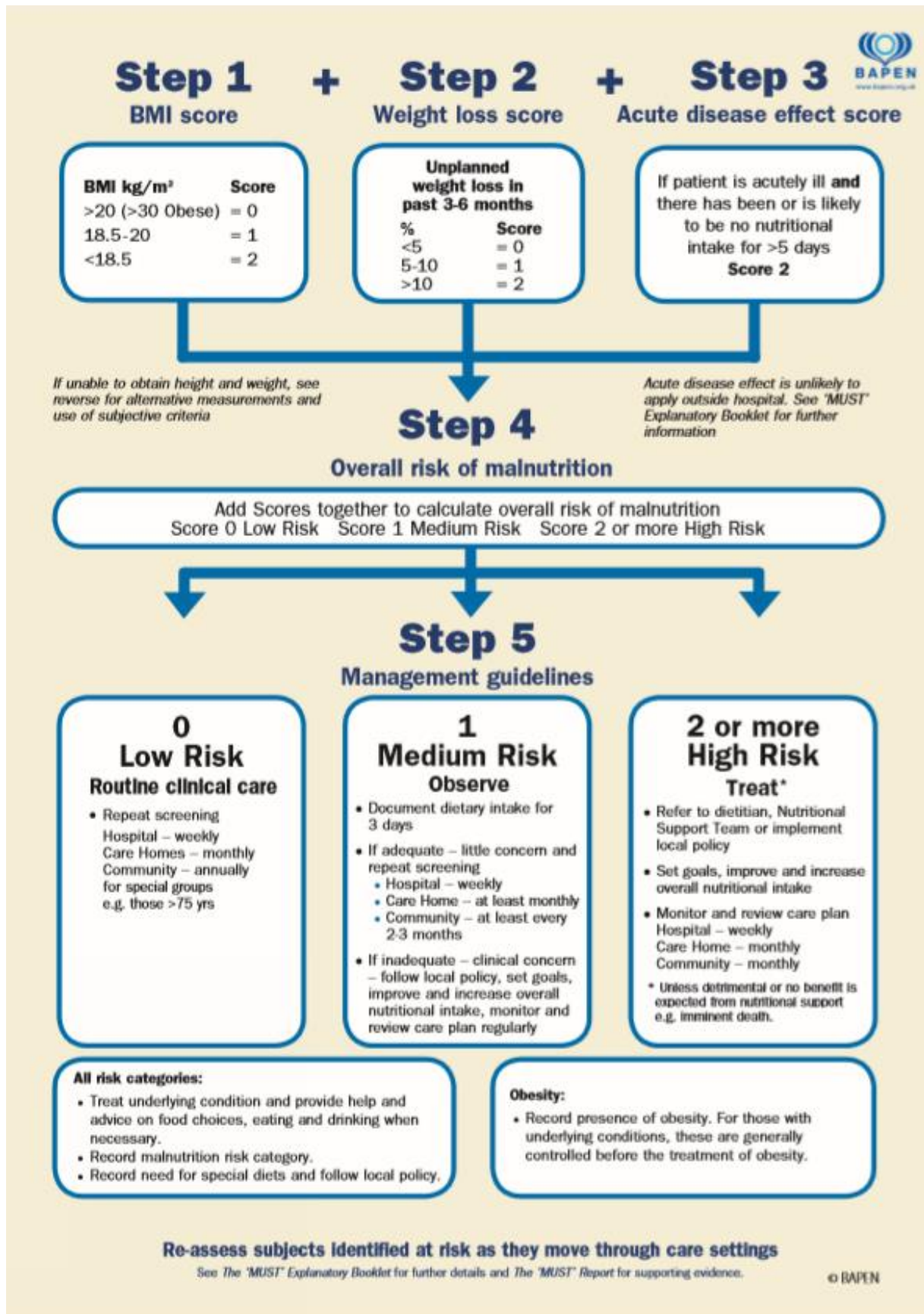
APPENDIX D – England (all data)

UK Malnutrition Awareness Week 2022

Date of report:	November 2022
Prepared locality:	England (all sites combined)
Data collected:	October 2022
Number of individuals screened*:	n960

Background Information

Age[1]:	67.5 (18-108) years
Gender:	F n501 (52%)
	M n459 (48%)
Setting:	
-hospital	797 (83%)
-community hospital	1 (-%)
-own home	81 (8%)
-care home	60 (6%)
-mental health unit	19 (2%)
Length of Stay[1]:	22 (0-840) days
Weight[1]:	70.4 (25.1-179.4) kg
BMI[1]:	25.1 (10.4-56.5) kg/m^2

[1] mean (range)

| Primary Diagnosis:	(n960)
-Cancer	99
-Cardiovascular	61
-Covid-19	13
-Falls/Fracture	18
-Frailty	57
-Gastrointestinal	193
-Genito/Renal	68
-Learning Difficulty	29
-Mental Health	28
-Musculoskeletal	76
-Neurological	194
-No Disease	31
-Respiratory	45
-Other	48

Malnutrition Screening ('MUST')Data

'MUST' Criteria	
BMI Score	
>20kg/m^2 (score 0)	754
18.5-20kg/ m^2 (score 1)	88
<18.5kg/ m^2 (score 2)	117
% Weight loss score	
<5% (score 0)	711
5-10% (score 1)	96
>10% (score 2)	138
Acute disease effect score	
No (score 0)	765
Yes (score 2)	140

'MUST' Classification	
Malnutrition Risk	
-Low (total score = 0)	535 (56%)
-Medium (total score =1)	101 (11%)
-High (total score ≥ 2)	323 (34%)

'Low risk' of malnutrition 56% (n535)

'At risk' of malnutrition 44% (n424)

('At risk' is medium and high combined)

Nutritional Care Plan

Care Plan in place?	YES n525 (55%)
	NO n423 (44%)
Of those that had a care plan in place[2]	
-Food Based plan	370
-ONS based plan	315
-Enteral feed / PN	121 / 57

[2]it is possible to have more than 1 type of care plan

'At risk' individuals only (n424)	
Care Plan in place?	YES n361 (85%)
	NO n60 (14%)
Of those that had a care plan in place[2]:	
-Food Based plan	257
-ONS based plan	229
-Enteral feed / PN	91 / 32
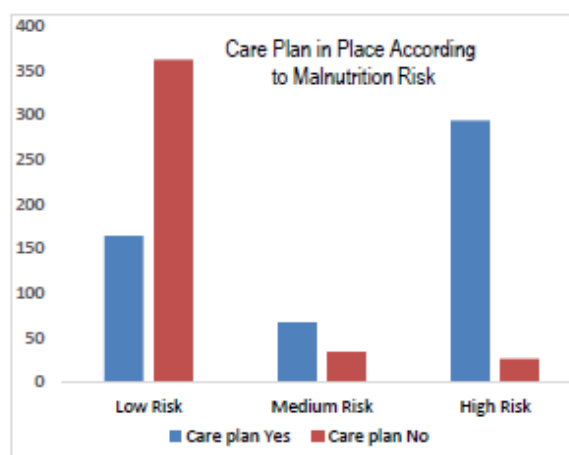
Care Plan in Place According to Malnutrition Risk

APPENDIX E – Scotland (all data)

UK Malnutrition Awareness Week 2022

Date of report:	November 2022
Prepared locality:	Scotland (all sites combined)
Data collected:	October 2022
Number of individuals screened*:	n45

Background Information

Age[1]:	61.7 (22-97) years
Gender:	F n28 (62%)
	M n17 (38%)
Setting:	
-hospital	24 (53%)
-community hospital	-
-own home	20 (45%)
-care home	1 (2%)
Length of Stay[1]:	31 (2-168) days
Weight[1]:	61.4 (36-102) kg
BMI[1]:	22.3 (14.4-38.4) kg/m^2

[1] mean (range)

Primary Diagnosis:	(n45)
-Cancer	6
-Cardiovascular	2
-Covid-19	-
-Frailty	5
-Gastrointestinal	13
-Genito/Renal	1
-Mental Health	2
-Musculoskeletal	1
-Neurological	7
-No Disease	1
-Respiratory	5
-Surgical	2

Malnutrition Screening ('MUST') Data

| 'MUST' Criteria	
BMI Score	
>20kg/m^2 (score 0)	28
18.5-20kg/ m^2 (score 1)	5
<18.5kg/ m^2 (score 2)	12
% Weight loss score	
<5% (score 0)	21
5-10% (score 1)	6
>10% (score 2)	17
Acute disease effect score	
No (score 0)	27
Yes (score 2)	14

'MUST' Classification	
Malnutrition Risk	
-Low (total score = 0)	10 (22%)
-Medium (total score =1)	4 (9%)
-High (total score ≥ 2)	31(69%)

'Low risk' of malnutrition 22% (n10)

'At risk' of malnutrition 78% (n35)

('At risk' is medium and high combined)

Nutritional Care Plan

Care Plan in place?	YES n41 (91%)
	NO n3 (7%)
Of those that had a care plan in place[2]	
-Food Based plan	31
-ONS based plan	22
-Enteral feed / PN	14 / 3

[2] it is possible to have more than 1 type of care plan

'At risk' individuals only (n35)	
Care Plan in place?	YES n33 (94%)
	NO n1 (3%)
Of those that had a care plan in place[2]:	
-Food Based plan	25
-ONS based plan	19
-Enteral feed / PN	9 / 2
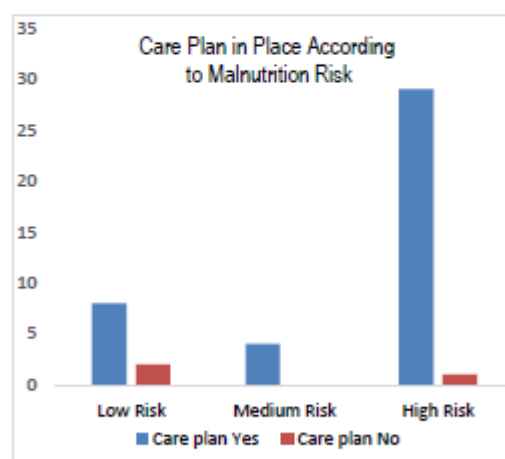
Care Plan in Place According to Malnutrition Risk

APPENDIX F - Wales (all data)

UK Malnutrition Awareness Week 2022

Date of report:	November 2022
Prepared locality:	Wales (all sites)
Data collected:	October 2022
Number of individuals screened*:	n535

Background Information

Age[1]:	75.3 (18-102) years
Gender:	F n270 (50%)
	M n265 (50%)
Setting:	
-hospital	342 (64%)
-community hospital	93 (17%)
-own home	49 (9%)
-care home	25 (5%)
-mental health unit	26 (5%)
Length of Stay[1]:	63 (1-1461) days
Weight[1]:	67 (33.5-169.0) kg
BMI[1]:	24.0 (12.6-55.2) kg/m^2

[1] mean (range)

Primary Diagnosis:	(n535)
-Cancer	38
-Cardiovascular	44
-Covid-19	4
-Falls/Fracture	38
-Frailty	128
-Gastrointestinal	47
-Genito/Renal	23
-Musculoskeletal	19
-Neurological	108
-No Disease	6
-Respiratory	42
-Other	38

Malnutrition Screening ('MUST') Data

'MUST' Criteria	
BMI Score	
>20kg/m^2 (score 0)	344
18.5-20kg/ m^2 (score 1)	54
<18.5kg/ m^2 (score 2)	74
% Weight loss score	
<5% (score 0)	366
5-10% (score 1)	70
>10% (score 2)	62
Acute disease effect score	
No (score 0)	485
Yes (score 2)	43

'MUST' Classification	
Malnutrition Risk	
-Low (total score = 0)	300 (56%)
-Medium (total score =1)	74 (14%)
-High (total score ≥ 2)	158 (30%)

'Low risk' of malnutrition 56% (n300)

'At risk' of malnutrition 44% (n232)

('At risk' is medium and high combined)

Nutritional Care Plan

Care Plan in place?	YES n387 (72%)
	NO n131 (25%)
Of those that had a care plan in place[2]	
-Food Based plan	313
-ONS based plan	164
-Enteral feed / PN	61 / 18

[2] it is possible to have more than 1 type of care plan

'At risk' individuals only (n232)	
Care Plan in place?	YES n198 (85%)
	NO n26 (11%)
Of those that had a care plan in place[2]:	
-Food Based plan	170
-ONS based plan	107
-Enteral feed / PN	29 / 7
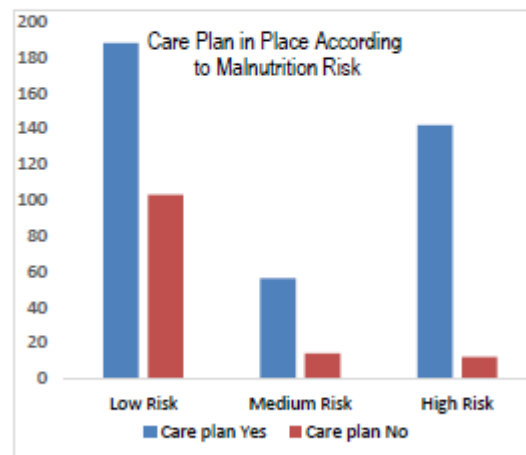
Please consider the sample size in relation to your total population before drawing specific conclusions.
If the sample size is small, it is probable that this data may not be representative of your area.

APPENDIX G - Cardiff

UK Malnutrition Awareness Week 2022

Date of report:	November 2022
Prepared locality:	Cardiff
Data collected:	October 2022
Number of individuals screened*:	n90

Background Information

Age[1]:	62.3 (18-94) years
Gender:	F n36 (40%)
	M n54 (60%)
Setting:	
-hospital	74 (82%)
-community hospital	10 (11%)
-own home	6 (7%)
-care home	-
Length of Stay[1]:	62 (1-461) days
Weight[1]:	71.9 (34-152) kg
BMI[1]:	24.8 (13.8-45.9) kg/m^2

[1] mean (range)

Primary Diagnosis:	(n90)
-Cancer	14
-Cardiovascular	7
-Covid-19	-
-Falls/Fracture	3
-Frailty	10
-Gastrointestinal	14
-Genito/Renal	-
-Musculoskeletal	1
-Neurological	32
-No Disease	-
-Respiratory	3
-Other	6

Malnutrition Screening ('MUST') Data

| 'MUST' Criteria	
BMI Score	
>20kg/m^2 (score 0)	70
18.5-20kg/m^2 (score 1)	12
<18.5kg/m^2 (score 2)	8
% Weight loss score	
<5% (score 0)	63
5-10% (score 1)	10
>10% (score 2)	11
Acute disease effect score	
No (score 0)	77
Yes (score 2)	12

'MUST' Classification	
Malnutrition Risk	
-Low (total score = 0)	51 (57%)
-Medium (total score =1)	13 (14%)
-High (total score ≥ 2)	26 (29%)

'Low risk' of malnutrition 57% (n51)

'At risk' of malnutrition 43% (n39)

('At risk' is medium and high combined)

Nutritional Care Plan

Care Plan in place?	YES n89 (99%)
	NO n0 (0%)
Of those that had a care plan in place[2]	
-Food Based plan	32
-ONS based plan	41
-Enteral feed / PN	36 / 15

[2] it is possible to have more than 1 type of care plan

'At risk' individuals only (n39)	
Care Plan in place?	YES n39 (100%)
	NO n0 (0%)
Of those that had a care plan in place[2]:	
-Food Based plan	21
-ONS based plan	24
-Enteral feed / PN	11 / 5
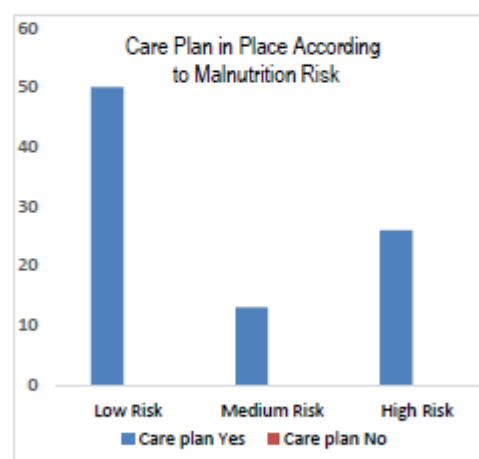
Care Plan in Place According to Malnutrition Risk

Please consider the sample size in relation to your total population before drawing specific conclusions.
If the sample size is small, it is probable that this data may not be representative of your area.

APPENDIX H - Carmarthenshire

UK Malnutrition Awareness Week 2022

Date of report:	November 2022
Prepared locality:	Carmarthenshire
Data collected:	October 2022
Number of individuals screened*:	n151

Background Information

Age[1]:	77.2 (18-99) years
Gender:	F n72 (48%)
	M n79 (52%)
Setting:	
-hospital	93 (62%)
-community hospital	37 (25%)
-own home	9 (6%)
-mental health unit	12 (8%)
Length of Stay[1]:	50 (1-233) days
Weight[1]:	69.8 (35.2-169.0) kg
BMI[1]:	25.0 (14.3-55.2) kg/m^2

[1] *mean (range)*

| Primary Diagnosis:	(n151)
-Cancer	6
-Cardiovascular	11
-Covid-19	1
-Falls/Fracture	5
-Frailty	29
-Gastrointestinal	10
-Genito/Renal	10
-Musculoskeletal	3
-Neurological	49
-No Disease	-
-Respiratory	14
-Other	13

Malnutrition Screening ('MUST') Data

'MUST' Criteria	
BMI Score	
>20kg/m^2 (score 0)	83
18.5-20kg/ m^2 (score 1)	10
<18.5kg/ m^2 (score 2)	16
% Weight loss score	
<5% (score 0)	98
5-10% (score 1)	20
>10% (score 2)	22
Acute disease effect score	
No (score 0)	145
Yes (score 2)	3

'MUST' Classification	
Malnutrition Risk	
-Low (total score = 0)	92 (62%)
-Medium (total score =1)	23 (16%)
-High (total score ≥ 2)	33 (22%)

'Low risk' of malnutrition 62% (n92)

'At risk' of malnutrition 38% (n56)

('At risk' is medium and high combined)

Nutritional Care Plan

Care Plan in place?	YES n102 (68%)
	NO n44 (29%)
Of those that had a care plan in place[2]	
-Food Based plan	97
-ONS based plan	35
-Enteral feed	9

[2] *it is possible to have more than 1 type of care plan*

'At risk' individuals only (n56)	
Care Plan in place?	YES n41 (73%)
	NO n13 (23%)
Of those that had a care plan in place[2]:	
-Food Based plan	39
-ONS based plan	18
-Enteral feed	7
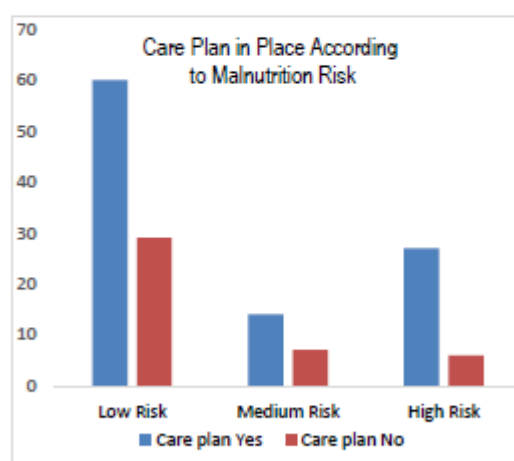
Care Plan in Place According to Malnutrition Risk

APPENDIX I - Ceredigion

UK Malnutrition Awareness Week 2022

Date of report:	November 2022
Prepared locality:	Ceredigion
Data collected:	October 2022
Number of individuals screened*:	n70

Background Information

Age[1]:	80.3 (38-102) years
Gender:	F n37(53%)
	M n33 (47%)
Setting:	
-hospital	54 (77%)
-community hospital	12 (17%)
-own home	4 (6%)
-care home	-
Length of Stay[1]:	30 (1-104) days
Weight[1]:	68.9 (36.5-127) kg
BMI[1]:	24.9 (12.6-47.8) kg/m^2

[1] mean (range)

Primary Diagnosis:	(n70)
-Cancer	4
-Cardiovascular	2
-Covid-19	1
-Falls/Fracture	30
-Frailty	4
-Gastrointestinal	2
-Genito/Renal	7
-Musculoskeletal	2
-Neurological	4
-No Disease	2
-Respiratory	5
-Other	7

Malnutrition Screening ('MUST') Data

| 'MUST' Criteria	
BMI Score	
>20kg/m^2 (score 0)	41
18.5-20kg/ m^2 (score 1)	5
<18.5kg/ m^2 (score 2)	9
% Weight loss score	
<5% (score 0)	54
5-10% (score 1)	8
>10% (score 2)	6
Acute disease effect score	
No (score 0)	62
Yes (score 2)	8

'MUST' Classification	n
Malnutrition Risk	
-Low (total score = 0)	41 (59%)
-Medium (total score =1)	7 (10%)
-High (total score ≥ 2)	22 (31%)

'Low risk' of malnutrition 59% (n41)

'At risk' of malnutrition 41% (n29)

('At risk' is medium and high combined)

Nutritional Care Plan

Care Plan in place?	YES n47 (67%)
	NO n22 (31%)
Of those that had a care plan in place[2]	
-Food Based plan	45
-ONS based plan	16
-Enteral feed / PN	3 / 1

[2] it is possible to have more than 1 type of care plan

'At risk' individuals only (n29)	
Care Plan in place?	YES n24 (83%)
	NO n4 (14%)
Of those that had a care plan in place[2]:	
-Food Based plan	23
-ONS based plan	11
-Enteral feed / PN	1 / 0
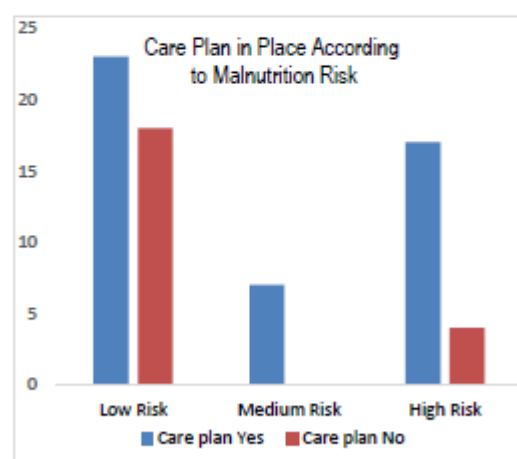
Care Plan in Place According to Malnutrition Risk

Please consider the sample size in relation to your total population before drawing specific conclusions. If the sample size is small, it is probable that this data may not be representative of your area.

APPENDIX J - Leicestershire

UK Malnutrition Awareness Week 2022

Date of report:	November 2022
Prepared locality:	Leicestershire
Data collected:	October 2022
Number of individuals screened*:	n50

Background Information

Age[1]:	58.9 (20-108) years
Gender:	F n26 (52%)
	M n24 (48%)
Setting:	
-hospital	35 (70%)
-community hospital	-
-own home	13 (26%)
-care home	2 (4%)
Length of Stay[1]:	45 (1-365) days
Weight[1]:	69.0 (40.8-110.9) kg
BMI[1]:	24.4 (14.5-41.7) kg/m^2

[1] mean (range)

Primary Diagnosis:	(n50)
-Cancer	14
-Cardiovascular	1
-Covid-19	-
-Falls/Fracture	-
-Frailty	-
-Gastrointestinal	26
-Genito/Renal	1
-Mental Health	1
-Neurological	4
-No Disease	3
-Respiratory	-
-Other	-

Malnutrition Screening ('MUST') Data

| 'MUST' Criteria	
BMI Score	
>20kg/m^2 (score 0)	39
18.5-20kg/ m^2 (score 1)	4
<18.5kg/ m^2 (score 2)	7
% Weight loss score	
<5% (score 0)	36
5-10% (score 1)	3
>10% (score 2)	9
Acute disease effect score	
No (score 0)	35
Yes (score 2)	11

'MUST' Classification	n50
Malnutrition Risk	
-Low (total score = 0)	26 (52%)
-Medium (total score =1)	4 (8%)
-High (total score ≥ 2)	20 (40%)

'Low risk' of malnutrition 52% (n26)

'At risk' of malnutrition 48% (n24)

('At risk' is medium and high combined)

Nutritional Care Plan

Care Plan in place?	YES n41 (82%)
	NO n8 (16%)
Of those that had a care plan in place[2]	
-Food Based plan	15
-ONS based plan	6
-Enteral feed / PN	9 / 28

[2] it is possible to have more than 1 type of care plan

'At risk' individuals only (n24)	
Care Plan in place?	YES n22 (92%)
	NO n2 (8%)
Of those that had a care plan in place[2]:	
-Food Based plan	8
-ONS based plan	2
-Enteral feed / PN	7 / 13
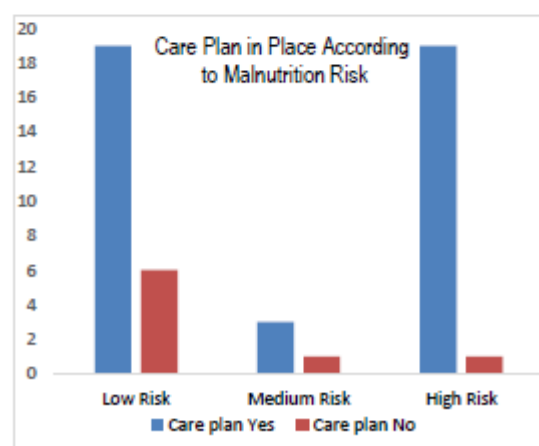
Care Plan in Place According to Malnutrition Risk

*Please consider the sample size in relation to your total population before drawing specific conclusions.
If the sample size is small, it is probable that this data may not be representative of your area.

APPENDIX K - Oxfordshire

UK Malnutrition Awareness Week 2022

Date of report:	November 2022
Prepared locality:	Oxfordshire
Data collected:	October 2022
Number of individuals screened*:	n100

Background Information

Age[1]:	60.8 (18-88) years
Gender:	F n41 (41%)
	M n59 (59%)
Setting:	
-hospital	51 (51%)
-community hospital	-
-own home	47 (47%)
-care home	1 (1%)
Length of Stay[1]:	34.9 (1-840) days
Weight[1]:	71.9 (37.4-150.0) kg
BMI[1]:	25.2 (14.6-50.1) kg/m^2

[1] mean (range)

| Primary Diagnosis:	(n100)
-Cancer	31
-Cardiovascular	3
-Covid-19	-
-Endocrinology	7
-Frailty	2
-Gastrointestinal	14
-Genito/Renal	26
-Musculoskeletal	-
-Neurological	3
-No Disease	5
-Respiratory	4
-Other	5

Malnutrition Screening ('MUST') Data

'MUST' Criteria	
BMI Score	
>20kg/m^2 (score 0)	74
18.5-20kg/ m^2 (score 1)	10
<18.5kg/ m^2 (score 2)	16
% Weight loss score	
<5% (score 0)	59
5-10% (score 1)	9
>10% (score 2)	31
Acute disease effect score	
No (score 0)	76
Yes (score 2)	23

'MUST' Classification	
Malnutrition Risk	
-Low (total score = 0)	41 (41%)
-Medium (total score =1)	9 (9%)
-High (total score ≥ 2)	50 (50%)

'Low risk' of malnutrition 41% (n41)

'At risk' of malnutrition 59% (n59)

('At risk' is medium and high combined)

Nutritional Care Plan

Care Plan in place?	YES n70 (70%)
	NO n28 (28%)
Of those that had a care plan in place[2]	
-Food Based plan	46
-ONS based plan	33
-Enteral feed / PN	21 / 9

[2] it is possible to have more than 1 type of care plan

'At risk' individuals only (n59)	
Care Plan in place?	YES n56 (95%)
	NO n1 (2%)
Of those that had a care plan in place[2]:	
-Food Based plan	37
-ONS based plan	26
-Enteral feed / PN	17 / 7
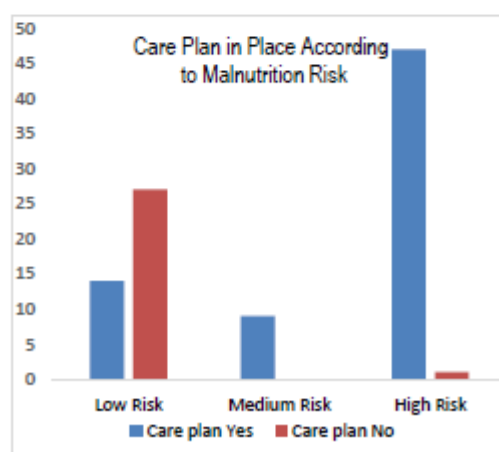
Care Plan in Place According to Malnutrition Risk

*Please consider the sample size in relation to your total population before drawing specific conclusions.
If the sample size is small, it is probable that this data may not be representative of your area.

APPENDIX L - Pembrokeshire

UK Malnutrition Awareness Week 2022

Date of report:	November 2022
Prepared locality:	Pembrokeshire
Data collected:	October 2022
Number of individuals screened*:	n146

Background Information

Age[1]:	81.2 (35-99) years
Gender:	F n79 (54%)
	M n67 (46%)
Setting:	
-hospital	98 (67%)
-community hospital	34 (23%)
-mental health unit	14 (10%)
Length of Stay[1]:	62 (1-316) days
Weight[1]:	66.2 (33.5-145.5) kg
BMI[1]:	24.2 (13.5-47.5) kg/m^2

[1] mean (range)

| Primary Diagnosis:	(n146)
-Cancer	-
-Cardiovascular	21
-Covid-19	2
-Falls/Fracture	-
-Frailty	79
-Gastrointestinal	11
-Genito/Renal	6
-Mental Health	3
-Musculoskeletal	7
-Neurological	3
-Respiratory	7
-Other	7

Malnutrition Screening ('MUST') Data

'MUST' Criteria	
BMI Score	
>20kg/m^2 (score 0)	116
18.5-20kg/m^2 (score 1)	14
<18.5kg/m^2 (score 2)	16
% Weight loss score	
<5% (score 0)	124
5-10% (score 1)	12
>10% (score 2)	10
Acute disease effect score	
No (score 0)	136
Yes (score 2)	9

'MUST' Classification	
Malnutrition Risk	
-Low (total score = 0)	99 (68%)
-Medium (total score =1)	19 (13%)
-High (total score ≥ 2)	28 (19%)

'Low risk' of malnutrition 68% (n99)

'At risk' of malnutrition 32% (n47)

('At risk' is medium and high combined)

Nutritional Care Plan

Care Plan in place?	YES n 76 (52%)
	NO n60 (41%)
Of those that had a care plan in place[2]	
-Food Based plan	71
-ONS based plan	24
-Enteral feed / PN	7 / 10

[2] it is possible to have more than 1 type of care plan

'At risk' individuals only (n47)	
Care Plan in place?	YES n35 (75%)
	NO n7 (15%)
Of those that had a care plan in place[2]:	
-Food Based plan	32
-ONS based plan	15
-Enteral feed	5
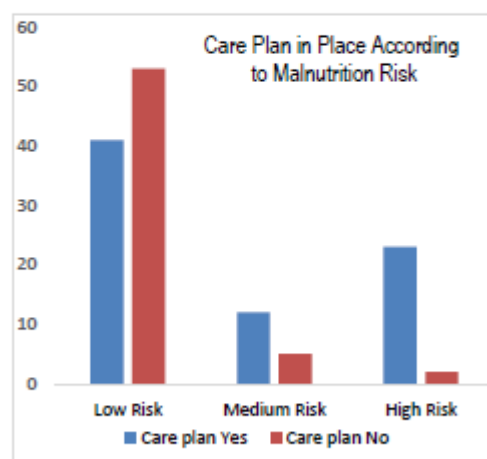
Care Plan in Place According to Malnutrition Risk

Please consider the sample size in relation to your total population before drawing specific conclusions. If the sample size is small, it is probable that this data may not be representative of your area.

APPENDIX M - Staffordshire

UK Malnutrition Awareness Week 2022

Date of report:	November 2022
Prepared locality:	Staffordshire
Data collected:	October 2022
Number of individuals screened*:	n352

Background Information

Age[1]:	74.7 (22-99) years
Gender:	F n185 (53%) M n167 (47%)
Setting: -hospital -community hospital -own home -care home	352 (100%) / / /
Length of Stay[1]:	14.5 (0-123) days
Weight[1]:	69.1 (29.7-141.7) kg
BMI[1]:	24.8 (10.4-43.7) kg/m^2

[1] mean (range)

| Primary Diagnosis:	(n352)
-Cancer	22
-Cardiovascular	46
-Covid-19	12
-Falls/Fracture	14
-Frailty	25
-Gastrointestinal	40
-Genito/Renal	16
-Musculoskeletal	63
-Neurological	66
-No Disease	16
-Respiratory	25
-Other	7

Malnutrition Screening ('MUST') Data

'MUST' Criteria	
BMI Score	
>20kg/m^2 (score 0)	275
18.5-20kg/m^2 (score 1)	34
<18.5kg/m^2 (score 2)	43
% Weight loss score	
<5% (score 0)	279
5-10% (score 1)	30
>10% (score 2)	41
Acute disease effect score	
No (score 0)	308
Yes (score 2)	25

'MUST' Classification	n352
Malnutrition Risk	
-Low (total score = 0)	213 (60%)
-Medium (total score =1)	45 (13%)
-High (total score ≥ 2)	94 (27%)

'Low risk' of malnutrition 60% (n 213)

'At risk' of malnutrition 40% (n 139)

('At risk' is medium and high combined)

Nutritional Care Plan

Care Plan in place?	YES n199 (57%)
	NO n152 (43%)
Of those that had a care plan in place[2]	
-Food Based plan	158
-ONS based plan	140
-Enteral feed	34

[2] it is possible to have more than 1 type of care plan

'At risk' individuals only (n139)	
Care Plan in place?	YES n119 (86%)
	NO n20 (14%)
Of those that had a care plan in place[2]:	
-Food Based plan	89
-ONS based plan	90
-Enteral feed	25
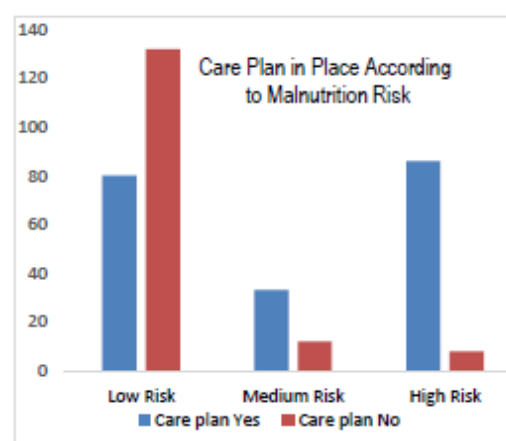
Please consider the sample size in relation to your total population before drawing specific conclusions.
If the sample size is small, it is probable that this data may not be representative of your area.

APPENDIX N - Surrey

UK Malnutrition Awareness Week 2022

Date of report:	November 2022
Prepared locality:	Surrey
Data collected:	October 2022
Number of individuals screened*:	n118

Background Information

Age[1]:	70.8 (18-99) years
Gender:	F n63 (53%)
	M n55 (47%)
Setting:	
-hospital	115 (97%)
-community hospital	-
-own home	1 (1%)
-care home	2 (2%)
Length of Stay[1]:	- days
Weight[1]:	69.9 (34.6-179.4) kg
BMI[1]:	24.9 (13.2-50.8) kg/m^2

[1] mean (range)

Primary Diagnosis:	(n118)
-Cancer	3
-Cardiovascular	9
-Covid-19	1
-Falls/Fracture	1
-Frailty	18
-Gastrointestinal	25
-Genito/Renal	11
-Mental Health	6
-Musculoskeletal	11
-Neurological	24
-Respiratory	3
-Other	6

Malnutrition Screening ('MUST') Data

| 'MUST' Criteria	
BMI Score	
>20kg/m^2 (score 0)	94
18.5-20kg/m^2 (score 1)	13
<18.5kg/m^2 (score 2)	11
% Weight loss score	
<5% (score 0)	93
5-10% (score 1)	17
>10% (score 2)	7
Acute disease effect score	
No (score 0)	57
Yes (score 2)	57

'MUST' Classification	
Malnutrition Risk	
-Low (total score = 0)	46 (39%)
-Medium (total score =1)	4 (3%)
-High (total score ≥ 2)	68 (58%)

'Low risk' of malnutrition 39% (n46)

'At risk' of malnutrition 61% (n72)

('At risk' is medium and high combined)

Nutritional Care Plan

Care Plan in place?	YES n36 (31%)
	NO n81 (69%)
Of those that had a care plan in place[2]	
-Food Based plan	64
-ONS based plan	57
-Enteral feed / PN	22 / 7

[2] it is possible to have more than 1 type of care plan

'At risk' individuals only (n72)	
Care Plan in place?	YES n70 (97%)
	NO n2 (3%)
Of those that had a care plan in place[2]:	
-Food Based plan	58
-ONS based plan	53
-Enteral feed / PN	20 / 3
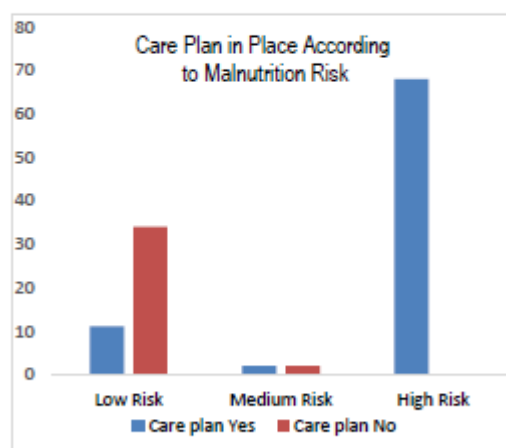
Care Plan in Place According to Malnutrition Risk

Please consider the sample size in relation to your total population before drawing specific conclusions. If the sample size is small, it is probable that this data may not be representative of your area.

APPENDIX O - Swansea

UK Malnutrition Awareness Week 2022

Date of report:	November 2022
Prepared locality:	Swansea
Data collected:	October 2022
Number of individuals screened*:	n69

Background Information

Age[1]:	75.5 (40-92) years
Gender:	F n39 (57%)
	M n30 (43%)
Setting:	
-hospital	18 (26%)
-community hospital	-
-own home	26 (38%)
-care home	25 (36%)
Length of Stay[1]:	206 (2-1461) days
Weight[1]:	56.2 (33.8-120.0) kg
BMI[1]:	20.1 (13.1-27.2) kg/m^2

[1] mean (range)

| **Primary Diagnosis:**	(n69)
-Cancer	14
-Cardiovascular	3
-Covid-19	-
-Falls/Fracture	-
-Frailty	6
-Gastrointestinal	10
-Genito/Renal	-
-Musculoskeletal	6
-Neurological	20
-No Disease	4
-Respiratory	4
-Other	2

Malnutrition Screening ('MUST') Data

'MUST' Criteria	
BMI Score	
>20kg/m^2 (score 0)	27
18.5-20kg/ m^2 (score 1)	13
<18.5kg/ m^2 (score 2)	23
% Weight loss score	
<5% (score 0)	19
5-10% (score 1)	19
>10% (score 2)	13
Acute disease effect score	
No (score 0)	58
Yes (score 2)	10

'MUST' Classification	
Malnutrition Risk	
-Low (total score = 0)	11 (16%)
-Medium (total score =1)	12 (17%)
-High (total score ≥ 2)	46 (67%)

'Low risk' of malnutrition 16% (n11)

'At risk' of malnutrition 84% (n58)

('At risk' is medium and high combined)

Nutritional Care Plan

Care Plan in place?	YES n67 (97%)
	NO n2 (3%)
Of those that had a care plan in place[2]	
-Food Based plan	62
-ONS based plan	46
-Enteral feed / PN	6 / 2

[2] it is possible to have more than 1 type of care plan

'At risk' individuals only (n58)	
Care Plan in place?	YES n56 (97%)
	NO n2 (3%)
Of those that had a care plan in place[2]:	
-Food Based plan	52
-ONS based plan	37
-Enteral feed / PN	5 / 2
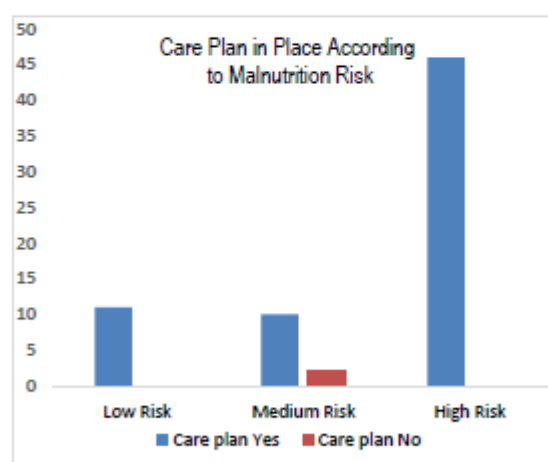
Care Plan in Place According to Malnutrition Risk

Please consider the sample size in relation to your total population before drawing specific conclusions. If the sample size is small, it is probable that this data may not be representative of your area.

APPENDIX P – West Midlands

UK Malnutrition Awareness Week 2022

Date of report:	November 2022
Prepared locality:	West Midlands
Data collected:	October 2022
Number of individuals screened*:	n219

Background Information

Age[1]:	60.7 (18-92) years	**Primary Diagnosis:**	(n219)
Gender:	F n120 (55%)	-Cancer	24
	M n99 (45%)	-Cardiovascular	-
		-Covid-19	-
Setting:		-Falls/Fracture	3
-hospital	219 (100%)	-Frailty	2
-community hospital	/	-Gastrointestinal	86
-own home	/	-Genito/Renal	12
-care home	/	-Mental Health	3
		-Musculoskeletal	2
Length of Stay[1]:	22 (0-304) days	-Neurological	60
Weight[1]:	71.5 (25.1-163.0) kg	-Respiratory	8
BMI[1]:	25.6 (11.2-56.5) kg/m²	-Other	19

[1] mean (range)

Malnutrition Screening ('MUST') Data

'MUST' Criteria			'MUST' Classification	
BMI Score			**Malnutrition Risk**	
>20kg/m² (score 0)	182		-Low (total score = 0)	135 (62%)
18.5-20kg/ m² (score 1)	13		-Medium (total score =1)	20 (9%)
<18.5kg/ m² (score 2)	14		-High (total score ≥ 2)	64 (29%)
% Weight loss score				
<5% (score 0)	158			
5-10% (score 1)	22		**'Low risk' of malnutrition 62% (n135)**	
>10% (score 2)	35			
Acute disease effect score			**'At risk' of malnutrition 38% (n84)**	
No (score 0)	185			
Yes (score 2)	23		('At risk' is medium and high combined)	

Nutritional Care Plan

Care Plan in place?	YES n93 (43%)
	NO n121 (55%)
Of those that had a care plan in place[2]	
-Food Based plan	49
-ONS based plan	55
-Enteral feed / PN	32 / 13

[2]it is possible to have more than 1 type of care plan

'At risk' individuals only (n84)	
Care Plan in place?	YES n59(70%)
	NO n25 (28%)
Of those that had a care plan in place[2]:	
-Food Based plan	33
-ONS based plan	35
-Enteral feed / PN	19 / 9
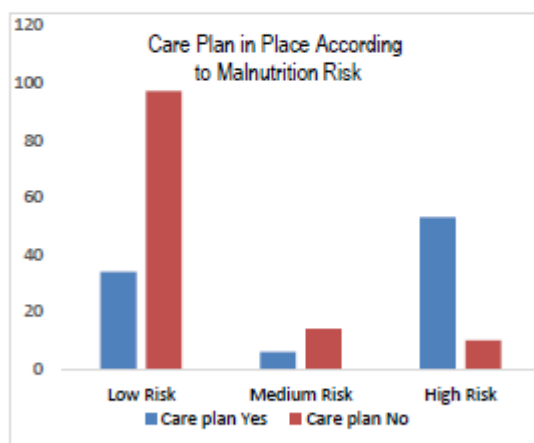
Care Plan in Place According to Malnutrition Risk

*Please consider the sample size in relation to your total population before drawing specific conclusions. If the sample size is small, it is probable that this data may not be representative of your area.

APPENDIX Q - Yorkshire

UK Malnutrition Awareness Week 2022

Date of report:	November 2022
Prepared locality:	Yorkshire
Data collected:	October 2022
Number of individuals screened*:	n73

Background Information

Age[1]:	64.8 (20-98) years
Gender:	F n47 (64%)
	M n26 (36%)
Setting:	
-hospital	-
-community hospital	-
-own home	20 (27%)
-care home	53 (73%)
Length of Stay[1]:	-
Weight[1]:	69.5 (34.0-167.4) kg
BMI[1]:	26.1 (13.3-53.4) kg/m^2

[1] mean (range)

Primary Diagnosis:	(n73)
-Cancer	4
-Cardiovascular	-
-Covid-19	-
-Falls/Fracture	-
-Frailty	5
-Gastrointestinal	2
-Genito/Renal	-
-Learning Disability	29
-Neurological	22
-No Disease	2
-Respiratory	4
-Other	5

Malnutrition Screening ('MUST') Data

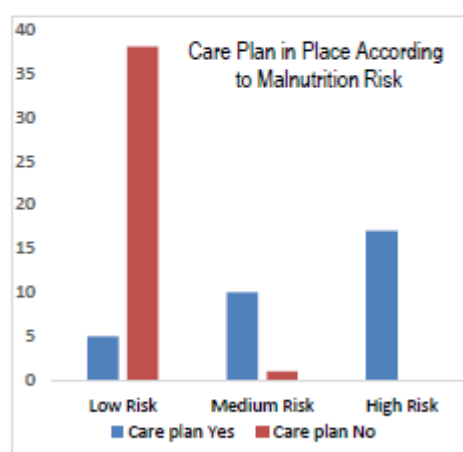| 'MUST' Criteria	
BMI Score	
>20kg/m^2 (score 0)	52
18.5-20kg/ m^2 (score 1)	11
<18.5kg/ m^2 (score 2)	10
% Weight loss score	
<5% (score 0)	55
5-10% (score 1)	5
>10% (score 2)	12
Acute disease effect score	
No (score 0)	70
Yes (score 2)	3

'MUST' Classification	
Malnutrition Risk	
-Low (total score = 0)	45 (62%)
-Medium (total score =1)	11 (15%)
-High (total score ≥ 2)	17 (23%)

'Low risk' of malnutrition 62% (n45)

'At risk' of malnutrition 38% (n28)

('At risk' is medium and high combined)

Nutritional Care Plan

Care Plan in place?	YES n32 (44%)
	NO n39 (53%)
Of those that had a care plan in place[2]	
-Food Based plan	29
-ONS based plan	18
-Enteral feed	3

[2] it is possible to have more than 1 type of care plan

'At risk' individuals only (n28)	
Care Plan in place?	YES n27 (96%)
	NO n1 (4%)
Of those that had a care plan in place[2]:	
-Food Based plan	24
-ONS based plan	18
-Enteral feed	3

Care Plan in Place According to Malnutrition Risk

*Please consider the sample size in relation to your total population before drawing specific conclusions.
If the sample size is small, it is probable that this data may not be representative of your area.