The Value of Nutritional Care in Helping the NHS to Deliver on the NHS Outcomes Framework

An assessment of how delivering high quality nutritional care can enhance the quality of life for people with long-term conditions

October 2013

Table of Contents

Foreword 3

Introduction 5

Background and approach 7

Analysis: How nutritional care can help to deliver on Domain 2 of the NHS Outcomes Framework 9

- Indicator 2.1: Proportion of people feeling supported to manage their condition 9
- Indicator 2.3i: Unplanned hospitalisation for chronic ambulatory care sensitive conditions (adults) 14
- Indicator 2.6.ii: Effectiveness of post-diagnosis care in sustaining independence and improving quality of life 20

Conclusion 23

References 24

Foreword

In a world where there are food and nutrition 'experts', 'researchers', 'gurus' and a myriad of other descriptors, it is increasingly important that we are able to cut through all the food and nutrition 'noise' to understand who the real experts are when it comes to food and nutrition.

The British Dietetic Association (BDA) firmly believes that dietitians are the absolute gold standard when it comes to food and nutrition. Indeed, unlike any other job descriptor, the title 'dietitian' is held so highly that it is protected by law and only appropriately qualified individuals who are registered with the Health and Care Professions Council (HCPC) can, by law, refer to themselves as a dietitian. Dietitians are the only food and nutrition professionals to be statutorily regulated and governed by an ethical code to ensure they always work to the highest standard. They work on a science evidence-base and they do not endorse food and nutrition products or brands. Dietitians work in the NHS, private practice, food industry, education, research, sport, media, public relations, publishing, Non-Government Organisations and Government itself. In short, there are not many areas where dietitians do not make an impact. Their advice influences food and health policy across the spectrum from Governments, local communities and individuals.

As a nation, we are living longer and we are also accessing the NHS for longer. For many, they are also living for longer with long-term conditions. The Government (England) has highlighted a framework which they believe will achieve improved outcomes for patients in the NHS. The BDA, founded in 1936, is *the* professional body for dietitians in the UK and also acts as the profession's trade union. With around 75% of our membership (over 7,000) working in the NHS, with the majority employed in England, it is wholly appropriate that we understand how the dietetic profession fits in and adds real worth and helps the NHS achieve improved outcomes in this new framework, which has to be a positive move for patients.

As Honorary Chairman of the BDA, I very much welcome this document, which was produced in partnership with the British Specialist Nutrition Association (BSNA). In particular, this document primarily focuses on Domain 2 of the framework, ie long-term conditions – the burden of which will only increase in years to come due to an ageing population.

Promoting the role and work of dietitians externally of the BDA as well as helping dietitians themselves understand how their work and-profession adds worth and value to the health of the nation, is key to the work of the BDA. The promotion of this sits at the very heart of our current BDA campaign called 'Trust a Dietitian'.

The Value of Nutritional Care in Helping the NHS to deliver on the NHS Outcomes Framework, is an essential element of the holistic approach being driven by Westminster (for England) and dietitians are essential in achieving better and enhanced patient-centred outcomes. Indeed, as the gold standard of food and nutrition professionals, dietitians are best placed to lead and deliver on this work.

Siân O'Shea
BDA Honorary Chairman

The British Specialist Nutrition Association (BSNA) is delighted to have worked in collaboration with the British Dietetic Association (BDA) to highlight the value of nutritional care and support in the management of long-term conditions. Through greater understanding of patients' nutritional needs and identifying how and where care could be improved, the NHS can better support people with long-term conditions across all healthcare settings.

The NHS is currently moving away from centrally-driven process targets towards measuring patient outcomes through the NHS Outcomes Framework. In this context, this report sets out how dietitians can support the NHS to deliver improved outcomes through high quality nutritional care. It shows that improved nutritional care, with support from a dietitian, can alleviate health problems, improve functional status, and increase quality of life and wellbeing for people living with long-term conditions, in addition to providing cost savings to the NHS. With increasing numbers of people living with one or more long-term conditions, and rising costs of care, it is important that we take action to deliver improved patient outcomes, which will also help to relieve some of the pressures on the NHS and social care organisations.

Both organisations join in making a number of recommendations for action, including: improving the quality and accuracy of data and information collection on hospital admissions related to malnutrition, identifying malnutrition risk earlier, and better supporting patients and carers to ensure all patients receive appropriate access to treatment to improve their health outcomes.

We look forward to working in partnership with the BDA, NHS England, commissioners and providers to ensure that the NHS delivers better experience of care and improved health outcomes for all patients, including those living with long-term conditions.

Roger Clarke
Director General of the BSNA

Introduction

The 2010 White Paper*, Equity and excellence: liberating the NHS*, set out the Government's ambition to achieve improved outcomes in the NHS in England and better respond to patients' needs[1]. Moving away from centrally-driven process targets, the Government's vision was to bring about a paradigm shift, focusing on the outcomes that matter most to patients[2].

As part of this vision, the Government has introduced a national framework of accountability, the NHS Outcomes Framework, empowering the Secretary of State for Health to hold NHS England to account for delivering better health outcomes for people. Through this framework, the NHS will be measured against a set of outcomes and corresponding indicators measuring, for example, whether a patient's treatment was timely, successful and appropriate[3].

The British Dietetic Association (BDA) and the British Specialist Nutrition Association (BSNA) believe that dietitians and the provision of good quality nutritional care can help the NHS to deliver on the NHS Outcomes Framework. There is a particularly strong argument for the role that dietitians can play in helping to deliver on Domain 2 of the NHS Outcomes Framework: *Enhancing the quality of life for people with long-term conditions* as many long-term conditions require dietetic support to ensure optimal nutrition. Specifically, a number of long-term conditions, such as cancer, chronic obstructive pulmonary disease (COPD) or dementia, can have a detrimental impact on patients' nutritional status, which can lead to further health complications[4, 5].

The BDA and the BSNA both agree that it is possible to secure better outcomes for patients by improving their nutritional care, and have therefore collaborated to demonstrate the value of nutritional care in helping the NHS to deliver its commitments through the NHS Outcomes Framework, focusing specifically on those long-term conditions that have a potential to worsen patients' nutritional status.

This report explores how improved nutritional care can enhance the quality of life for people with long-term conditions who are at risk of malnutrition, with specific reference to:

- people feeling supported to manage their condition (indicator 2.1)
- reducing unplanned hospitalisation for chronic ambulatory care sensitive conditions (indicator 2.3i)
- improving the effectiveness of post-diagnosis care in sustaining independence and improving quality of life for people with dementia (indicator 2.6ii)

This report builds on the BDA's 'Trust a Dietitian' campaign which aims to highlight the value of dietitians and their work. Dietitians are the only qualified health professionals that assess, diagnose and treat dietary and nutritional problems at an individual and wider public health level. Uniquely, dietitians use the most up to date public health and scientific research on food, health and disease, which they translate into practical guidance to enable people to make appropriate lifestyle and food choices.

Based on research studies and examples of best practice drawn from across England, the devolved nations, and internationally, this report highlights the economic and clinical benefits of providing good quality nutritional care to people with long-term conditions. It is intended for local commissioners, including clinical commissioning groups (CCGs), healthcare professionals, policymakers and wider stakeholders who have an interest in improving the quality of nutritional care. It also makes a number of practical recommendations for NHS England, commissioners and providers as to how the NHS can prevent health complications, as well as improving the quality of life for those with a long-term condition through nutritional care.

The British Dietetic Association (BDA), established in 1936, is the professional association and trade union for dietitians.

Its aims are to:

- advance the science and practice of dietetics and associated subjects
- promote training and education in the science and practice of dietetics and associated subjects
- regulate the relations between dietitians and their employer through the BDA Trade Union

The Association aims to inform, protect, represent and support its 7000+ members, who are mostly qualified dietitians, holding a degree or postgraduate diploma recognised for registration by the Health and Care Professions Council.

Dietitians are the only nutrition professionals to be statutorily regulated, and governed by an ethical code, to ensure that they always work to the highest standard. Dietitians work in the NHS, private practice, industry, education, research, sport, media, public relations, publishing, Non-Government Organisations and government. Their advice influences food and health policy across the spectrum from government, local communities and individuals.

For more information about the BDA, please visit: www.bda.uk.com

You can also follow the BDA on Twitter @BrDieteticAssoc

The British Specialist Nutrition Association (BSNA) Ltd is the voice of the specialist nutrition industry in the UK, representing the manufacturers of foods designed to meet the needs of specific groups of people with very particular nutritional requirements.

Specific groups of people that use our specialist products include:

- infants from 0 to 12 months old
- young children under 3 years of age
- patients with clinically diagnosed diseases, disorders or medical conditions
- people with coeliac disease and gluten intolerance
- athletes and people who take part in intense physical activity

These groups of people are typically vulnerable groups whose specialist care requires advice and guidance from healthcare professionals.

The industry produces highly specialised foods that are underpinned by evidence-based scientific research into nutritional needs and requirements of specific groups of people at different life stages. These products are consumed across all healthcare settings – hospitals, clinics, nursing homes and at home to support and improve people's nutritional intake.

The BSNA is recognised by Government, regulators, healthcare professionals and the media as the trade association that speaks on behalf of the specialist nutrition industry in the UK.

For more information on the BSNA, please visit www.bsna.co.uk

You can also follow the BSNA on Twitter @BSNA_UK

Background and approach

The NHS Outcomes Framework 2013/14 sets out the outcomes and corresponding indicators used to hold NHS England (formerly known as the NHS Commissioning Board) to account for improvements in patients' health outcomes. The NHS Outcomes Framework revolves around five domains as follows[6]:

Domain 1	Domain 2	Domain 3	Domain 4	Domain 5
•Preventing people from dying prematurely	•Enhancing the quality of life for people with long-term conditions	•Helping people to recover from episodes of ill health or following injury	•Ensuring that people have a positive experience of care	•Treating and caring for people in a safe environment and protect them from avoidable harm

For each of the five domains there are a series of overall NHS Outcomes Framework indicators. These are further refined for CCGs as CCG Outcomes Indicators 2013/14 to guide their investment and to be used as a tool to drive local improvement. All domains are embryonic in the sense that the indicators are likely to be refined over the next few years, either to provide sufficient detail to separate out the effects of providing improved care on various diseases or to permit comparison between different geographical areas or internationally[7]. For some domains the indicators have yet to be agreed[8].

There is a particularly strong consensus on the role that good nutritional care can play in helping to deliver on Domain 2 of the NHS Outcomes Framework: *Enhancing the quality of life for people with long-term conditions*. For example, the recent National Institute for Health and Care Excellence (NICE) Quality Standard 24: *Nutrition Support in Adults*, has explicitly recognised the contribution of high-quality, cost effective nutritional care in improving the effectiveness, safety and experience of patients with long-term conditions[9].

Alongside this, the Malnutrition Task Force – a coalition of experts across health, social care and local government – has been raising the importance of nutritional care for older people, in particular through the publication of guides and examples of best practice for commissioners and providers in all care settings[10]. A number of organisations, including the BDA, have been involved in, or supported the Task Force, and collaborated to demonstrate the value of nutritional care in improving health outcomes for older people and achieving cost savings in health and social care[11].

This report sets out the evidence base for the impact of good nutritional care on outcomes for people with long-term conditions, and the role of dietetics in helping the NHS to deliver on Domain 2 of the NHS Outcomes Framework. For the purposes of this report, the BDA and BSNA have focused on long-term conditions where there are enhanced nutritional needs. There is, however, evidence to support the role of dietetic/nutritional advice from dietitians in the management of other long-term conditions which are not covered in this briefing.

As part of this project, the BDA and BSNA have undertaken a review of the health economic and clinical literature and gathered case studies to explore the contribution of dietetics to enhancing the quality of life for people with long-term conditions with specific reference to:

- people feeling supported to manage their condition (indicator 2.1)
- reducing unplanned hospitalisation for chronic ambulatory care sensitive conditions (indicator 2.3i)
- improving the effectiveness of post-diagnosis care in sustaining independence and improving quality of life for people with dementia (indicator 2.6ii)

The next three sections analyse evidence on the contribution of nutritional care to the delivery of each of these indicators and makes recommendations for NHS England, commissioners and providers to consider when refining those indicators over the coming months.

Analysis: How nutritional care can help to deliver on Domain 2 of the NHS Outcomes Framework

Disease-related malnutrition can have a variety of consequences, including shorter survival rates, lower functional capacity, longer hospitalisations, increased complication rates and higher drug prescription rates[12], and can therefore have a significant impact on outcomes for people with long-term conditions. This section explores the evidence base for the inclusion of nutritional care as an outcome driver in relation to Domain 2 of the NHS Outcomes Framework.

Indicator 2.1: Proportion of people feeling supported to manage their condition

This indicator aims to ensure that a greater proportion of people aged 18 and over suffering from a long-term condition feel supported in the management of their condition. As set out in the NHS Outcomes Framework technical appendix, this indicator is based on responses to question 32 of the GP patient survey, which reads as follows[13, 14]:

> "In the last six months, have you had enough support from local services or organisations to help you manage your long-term condition(s)? Please think about all services and organisations, not just health services
>
> - Yes, definitely
> - Yes, to some extent
> - No
> - I have not needed such support
> - Don't know/can't say"

The choice of answers attached to the question is rather limited, and although participants are encouraged to think about all services and organisations, it will not differentiate by the type of service people have. In addition, there is no mention of nutrition as an outcome driver for this indicator. Yet there is strong evidence that nutritional care plays an important role in ensuring that people feel adequately supported to manage their long-term condition(s).

Evidence base

Many conditions that are known to be related to malnutrition can affect people's ability to function and live independently, with consequences for their quality of life. Given the rising numbers of people living with chronic, long-term conditions, supporting people to manage their condition effectively is increasingly important.

Evidence for the contribution of nutritional care to quality of life is strongest for older patients, people living with cancer, and those who have experienced a stroke.

Nutritional support and older people

It is recognised that improving nutrition can prevent health problems, help avert impairments in functional status, and increase quality of life and well-being in older adults[15]. The risk of malnutrition increases with age, where it may also be associated with a diagnosis of dementia. Among older patients:

- Malnutrition risk is linked to poorer quality of life in older people on admission to hospital, with functional status and eating-related factors both major influencers on quality of life. A

prospective study of 149 inpatients showed significant associations between quality of life scores and the Mini Nutritional Assessment (MNA-SF). Regression analysis showed that nutritional scores and functional status made independent contributions to quality of life[16]

- Nutritional support has been shown to improve depressive symptoms. In a randomised trial into the effects of oral nutritional supplements (ONS) on hospitalised older patients' depressive symptoms and cognitive function, supplementation led to a statistically significant improvement on depressive symptoms[17]

- A study of 205 older patients showed that multi-component nutritional intervention with malnourished patients for three months after hospital discharge led to significant improvement in functional limitations (eg in relation to mobility), and was cost-neutral[18]

Ensuring that older people have access to high-quality nutrition in the community can lead to health and societal benefits, as the example of the Hertfordshire Community Meals shows below[19].

Case Study A: Hertfordshire Community Meals (HCM)

Hertfordshire Community Meals (HCM) is a not-for-profit social enterprise established in 2007 to provide high quality nutritional meals for older and disabled residents on behalf of Hertfordshire County Council.

Between 1 April 2011 and 31 March 2012, a 'Social Return on Investment' analysis was conducted to assess the social return created for the people who benefited from the meals-on-wheels service and their family/carers.

The analysis showed that the activities of HCM led to a number of positive outcomes for older people including improved health, feeling happier, feeling safer, feeling more secure and benefitting from increased independence. These improved outcomes led to longer-term gains such as staying out of residential care. The older people's family and carers also benefitted with an increased ability to work, more leisure time and improved relationships with their own family and with the person they care for.

In addition, the analysis found that, for every pound invested in HCM, the likely social value created through these outcomes is approximately £5.28 (ranging from £4.42 to £6.10).

Nutritional support and cancer

Weight loss, arising from the disease itself and as a side-effect of treatment, is common in people with cancer[20]. Various nutritional screening and assessment tools have been developed for cancer patients[21]. Up to 85 per cent of cancer patients experience weight loss or malnutrition at some point, but proper nutrition can help them maintain weight, tolerate treatment, maximise outcomes and improve quality of life[22, 23]. Among people living with cancer:

- Assessment of quality of life should be part of the evaluation of any nutritional support in order to optimise its adequacy to patients' needs and expectations. A literature review of nutritional intervention and quality of life in cancer patients supported nutritional care being integrated into oncology pathways, because of its contribution to quality of life[24]

- Medical oncology outpatients are at risk of malnutrition. Nutritional assessment and dietetic involvement are essential to prevent the development of nutrition-related problems during treatment, which can impact on tolerance to chemotherapy and its side-effects[25]

- Patients with gastrointestinal or head and neck malignancies undergoing radiotherapy who received nutritional intervention (intensive counselling plus ONS) versus usual care showed a faster recovery in quality of life and physical function[26]

- In addition to those undergoing treatment, patients living with and beyond cancer can benefit from advice on optimal nutrition and lifestyle changes to support ongoing recovery from surgery and other medical interventions[27]

Nutritional support and stroke

Stroke is the leading cause of dysphagia: difficulty in swallowing. More than 70 per cent of stroke survivors experience dysphagia at some point after a stroke. Identifying swallowing issues early reduces hospital stays, healthcare costs and complications including pneumonia, dehydration and malnutrition[28]. Attention to high quality nutritional care to support people with maintaining their nutrition after a stroke is supported in NICE's clinical guidelines:

- NICE Clinical Guideline 68[29] recommends that all hospital inpatients are screened for malnutrition on admission and weekly thereafter (using an appropriate tool such as the Malnutrition Universal Screening Tool – 'MUST'). The guideline states that healthcare professionals should be aware that dysphagia, poor oral health and reduced ability to self-feed will affect nutrition in people with stroke

- NICE Clinical Guideline 162[30] recommends that appropriately trained and skilled healthcare professionals regularly monitor and reassess people with dysphagia after stroke, and provide nutritional support in line with recommendations in Clinical Guideline 68[31] and Clinical Guideline 32: *Nutrition Support in Adults*[32]

Nutritional support in the community

There is a relative paucity of evidence on the impact of nutritional care and support specifically on the quality of life of people living independently in the community. However there is relevant data showing the impact of ONS:

- A systematic review of patients in the community setting (108 trials, 44 RTs) showed that ONS increased total energy intake across a variety of patient groups, including: people with COPD; older people; patients with cystic fibrosis; patients with HIV; surgical patients; and patients with liver disease[33]

- In studies where older patients were given high-protein ONS, improvements were reported in hand-grip strength, objective measures of physical activity, depressive symptoms and quality of life, compared with controls[34, 35, 36]. In addition, supplementation with ONS for between six and 16 weeks has shown positive effects on functional outcomes, (patients receiving supplements for 6 weeks commenced ONS in hospital and continued after discharge)[37, 38]

High quality nutritional care and dietetic advice can play a significant role in helping people to feel supported in the management of their long-term condition, as demonstrated by the two below case studies gathered by the BDA in its recent toolkit, *Know your Worth - Trust a Dietitian - Making the case for Nutrition and Dietetic Services*[39].

Case study B: Diabetes improved through involvement in an education programme

A six-week education programme in Leeds, run jointly by a Community Diabetes Dietitian and a Diabetes Specialist Nurse, has dramatically improved the life of EC, who has lived with diabetes for almost 20 years.

EC was diagnosed with type 2 diabetes in 1992 and only recently enrolled, via a referral by his doctor, on to the X-PERT Diabetes Programme. X-PERT is a self-management six-week course educating people how to live with their condition on a day-to-day basis.

Having completed the X-PERT Diabetes Programme EC said: *"I can't believe how much my health has improved since beginning the course – it has literally changed my life.*

"I'm thrilled that I've reduced my insulin intake by more than half as it has completely revolutionised my way of living and it's proof that with the right attitude and approach to diabetes anyone can improve their condition, well-being and long-term health."

Case study C: A patient with Irritable Bowel Syndrome (IBS)

Patient X has had IBS since 2008. In recent years, patient X experienced some worrying abdominal pains and consulted their GP to run some blood tests. As the discomfort continued, Patient X went on to see a gastroenterologist at a hospital where they had a virtual colonoscopy as well as a rigid sigmoidoscopy, both of which were negative. Patient X then had a first consultation with a consultant who referred them to see a dietitian. Dietetic support and advice made a real difference in helping this patient to manage their condition.

Talking about their experience with the dietitian, Patient X said: *"I am [now] more conscious of what I eat and drink and when. I found the IBS and diet information sheet very informative and to the point. I am very grateful to the consultant for suggesting I see a dietitian. I am very pleased with the advice I have received. I have not felt the need to use any medication [over the past few months]."*

It is worth noting that PINNT, a support group for people receiving artificial nutrition, has produced helpful guidance for both patients and healthcare professionals to ensure patients feel supported and engaged in the management of their condition through nutritional care[40, 41]. This guidance puts forward a series of questions that dietitians and patients can explore together to encourage the implementation of NICE's Quality Standard 24: *Nutrition Support in Adults*[42, 43].

Recommendations

In light of the above evidence base, we recommend the following:

- When refining the methodology behind indicator 2.1, NHS England should ensure that the GP survey captures aspects of nutrition and/or introduce a measure of adequate nutrition as an

outcome driver. For example, NHS England should consider including the following question as part of the annual survey to measure whether patients' nutritional needs are being met and supported:

  - In the last 6 months, have you had enough support from local health services or organisations to help you to manage your nutritional needs?

- Commissioners and providers should ensure that people with long-term conditions have a clear care plan, kept under regular review, and that nutrition is part of this (especially for people who have a condition associated with increased risk of malnutrition). The GP patient survey currently asks people about whether they have a care plan in place and we would like the survey to also enquire whether the care plan includes information about nutritional care and support

Indicator 2.3i: Unplanned hospitalisation for chronic ambulatory care sensitive conditions (adults)

The desired outcome for this indicator is to reduce serious deterioration in people with ambulatory care sensitive (ACS) conditions. ACS conditions are chronic conditions for which it is possible to prevent acute exacerbations and reduce the need for hospital admission through good quality preventive and primary care[44]. Examples include congestive heart failure, hypertension, asthma, chronic obstructive pulmonary disease (COPD), diabetes and dementia[45]. It has been estimated that ACS conditions currently account for more than one in six emergency hospital admissions in England[46]. These emergency admissions cost the NHS £1.42 billion each year[47].

The data to measure achievement against this indicator will be derived from hospital episode statistics (HES) with general population statistics used as a denominator[48]. In effect, NHS England will be looking at admissions for specific conditions by numbers of people living in the area.

It is acknowledged that there are many health interventions that can mitigate disease progression, especially around lifestyle issues such as tobacco use, alcohol consumption, illicit drug use, obesity and physical activity. However, the critical role of nutritional advice and support in the management of ACS conditions to reduce emergency hospital admissions is often overlooked.

Both cost and health benefits can be realised if patients at risk are identified and treated as soon as they need nutritional support. Such benefits include reductions in GP appointments, admissions and readmissions to hospitals and length of stay for hospitalised patients[49]. They also include the prevention of complications such as secondary chest infections, pressure ulcers and wound abscesses, which have a lasting impact on a person's quality of life[50].

The health and social care costs associated with malnutrition are estimated to amount to at least £13 billion annually, which suggests that significant cost savings could be achieved through the provision of nutritional support to people at risk of being malnourished[51]. This has been recognised by NICE in its guidance on cost savings, which suggests that improving nutritional care for adults at risk of malnutrition in hospitals and care homes is the sixth largest source of NHS savings[52]. Given the significant burden that malnutrition can place on secondary care, it is important for commissioners to consider how it can be better managed in the community.

The recent *Managing Adult Malnutrition in the Community* guidance outlines good clinical practice and sets out clearly how malnutrition can be identified and managed in the community through the provision of high quality food alongside ONS[53]. This guidance was developed by healthcare professionals and is supported by the BDA, the Royal College of Nursing, and the Royal College of GPs among other professional groups[54].

The evidence below explores how improved nutritional care can be deemed as an effective health intervention to mitigate the progression and reduce the number of unplanned hospital admissions for patients with ACS conditions including COPD.

Evidence base

Malnutrition is costly, clinically and financially, if left untreated. However, in patients with – or at risk of – the condition, appropriate nutritional support can prevent complications arising, improve outcomes and be life-saving in some situations[55].

Consistent evidence has shown the benefits of improving nutritional care and hydration on health outcomes and hospital admissions[56]:

- A study of nearly 200 outpatients in Southampton (age 54; 45 per cent female) screened for malnutrition using 'MUST' collected data on healthcare use for the following 6 months. Outpatients at risk of malnutrition experienced significantly more hospital admissions (planned and emergency) and longer length of hospital stay[57]

- A study on the effect of malnutrition on clinical outcomes and healthcare resource use from initial diagnosis by a GP showed that the cost of managing malnourished patients was more than twice as high as that of managing non-malnourished patients. In addition, malnutrition was an independent predictor of mortality[58]

- A systematic review and meta-analysis demonstrated that use of ONS versus routine care can significantly reduce the proportion of patients admitted or readmitted to hospital. In absolute terms 24 per cent (n 95/404) of supplemented patients were admitted or readmitted to hospital, compared with 33 per cent (n 138.414) of the control patients[59]

- A US review of more than 860,000 readmissions showed that ONS use decreases length of stay, episode cost and 30-day readmission risk in the inpatient population[60, 61]

The example below highlights how improved nutrition screening and support in the community can contribute to fewer hospital admissions[62]

Case study D: Improving nutrition screening and support in six care homes in Peterborough

Following the publication of the NICE Clinical Guideline 32: *Nutrition Support in Adults,* the dietetic service in Peterborough set up a pilot study to implement its guidance on oral nutrition support. This pilot study aimed to improve nutrition screening and nutrition support in six care homes, with a longer term aim of improving clinical outcomes and reducing healthcare resource use.

The project committed to:

- Establishing a multi-disciplinary team approach including care home managers, dietetic teams, medicine management and GPs
- Using clinical evidence to back up recommendations
- Using standardised care plans according to malnutrition risk
- Ongoing training to maintain momentum
- Collecting data to demonstrate effectiveness

Further data was collected for three months after implementing screening and care plans linked to nutrition risk. The findings were:

- Significant improvements in documentation of weight, height, proportion of residents screened and appropriate use of care plans
- 31 per cent reduction in hospital admissions (27 per cent reduction in emergency admissions)
- Significant reduction in length of hospital stay (58 per cent) with associated cost savings equating to a mean of £599 per patient over 3 months

Impact on chronic obstructive pulmonary disease (COPD)

The impact of malnutrition has been shown to have a particular impact in the area of COPD. Indeed one survey has suggested that malnutrition could be present in one-fifth of outpatients with COPD[63].

COPD patients are frequently hospitalised with an acute exacerbation of the condition. Deterioration in nutritional status is a likely repercussion of this, and can also contribute to decreased respiratory muscle mass and strength, poor wound healing, and decreased ventilatory response to hypoxia – increasing predisposition to respiratory failure[64].

Providing good nutritional care in the community can prevent deterioration in COPD and therefore result in better patient outcomes and fewer unplanned hospital admissions, as demonstrated by the following studies:

- A 2010 survey of 205 UK outpatients with COPD, screened for malnutrition and followed up for six months, showed that those at risk of malnutrition had almost twice the number of hospital admissions and were three times more likely to die than those not at risk[65]

- A 2011 systematic review and meta-analysis showed that the use of ONS by people with COPD resulted in significant improvements in nutrition intake and body weight, and a tendency for improvements in strength and several functional outcomes[66]

The BDA has recently collected further practical evidence to illustrate how providing dietary advice to people with COPD in the community can help to ensure that their health does not deteriorate. This includes the case study below[67].

Case study E: A patient with COPD regaining strength through dietary advice

A 65-year old female with very severe COPD was referred to a dietitian in 2009 due to reported weight loss over the previous year. Her weight at the point of referral was 41.9 kg and records showed she had lost 10.9% of her weight over the previous three months. The patient was very weak, was wheelchair-bound, and was cared for by her husband as she was not able to do much for herself without getting breathless. She also had a very poor appetite.

Her dietitian advised her to eat little and often, eg three small meals with snacks, including desserts or milky drinks between meals. She was given advice to fortify foods to increase her protein and energy intake. As a result, she was able to maintain her weight.

As she was still underweight, she was provided with further dietary advice to minimise her weight loss during exacerbations of her COPD symptoms. She was advised to consume softer and easier to eat foods such as nutritious drinks using fortified milk. For example, when she was too ill to eat solid food, she consumed over-the-counter and prescribed supplements.

As a result, the patient gradually gained weight and reached her personal goal of 53kg by April 2012. She has now managed to maintain this weight for the past year on a normal diet, and has stopped the supplements and fortification herself. Her appetite has improved and, although she is still using a wheelchair, she is now more able to help her husband at home and go on holiday.

It is worth highlighting that clinical guidelines for the management of care for people with COPD recommend a focus on nutritional support:

- NICE Clinical Guideline 101 recommends that the body mass index (BMI) should be calculated in patients with COPD, and if the BMI is abnormal (high or low) or changing over time, the patient should be referred for dietetic advice. If the BMI is low, the patient should also be given nutritional supplements to increase their energy intake and be encouraged to take exercise to support the effects of nutritional supplementation on weight gain[68]

- This has been supported by recommendations to nurses that COPD patients should have regular screening to ensure the early identification of nutritional problems and prompt treatment, and referral to a dietitian where necessary[69]

Good practice examples from the devolved nations

Examples of focused efforts to address the quality of nutritional standards can be seen in the development of policy and guidance in both Scotland and Wales. In Wales:

- The Royal College of Nursing, local health boards and the Welsh Assembly Government have been working in partnership to "elevate the provision of food to the same importance as medication"[70]

- A clear direction of travel was set by the Welsh Assembly Government's report *Free to lead, free to care*[71], which contained 35 proposals to improve people's experience of hospital, hospital cleanliness, and hospital food and nutrition. This was followed by the introduction of an All-Wales 'Nutritional Care Pathway' to assess the nutritional needs of patients, as well as supportive audit tools and food and fluid charts in all wards

- The *All Wales Catering and Nutrition Standards for Food and Fluid Provision for Hospital Inpatients*[72], published in 2011, sets out standards to provide for the diverse needs of a hospital population of all ages, both nutritionally at risk and nutritionally well. The standards support the delivery of the All Wales Hospital Nutrition Care pathway protocol and all hospital settings were expected to be fully compliant by April 2013

- A pathway for the management of malnutrition in the community, and a supportive resource pack, was published in 2013[73]. These were developed by a range of health and social care professionals, together with third sector representatives, patients and carers. The pack provides tools and best practice to help improve standards of nutrition for people living in the community

Some of these resources drew on the well developed standards and guidelines developed in Scotland:

- Scotland's Improving Nutritional Care Programme (INCP) was set up in 2007 to support NHS Scotland in meeting the NHS Quality Improvement Scotland (NHS QIS) *Food, fluid and nutritional care in hospitals* standards[74]. Used to assess the performance of Health Boards, the standards included actions around: assessment and screening; planning and delivering food and fluid; communication with patients about eating, drinking and nutrition; and specific training and education requirements for staff

- A number of national overviews of performance were published, as well as a national specification for food in hospitals[75] and supportive guidance for patients on what to expect from

nutritional care in hospital[76]. A 'nutrition champion' role was created, with each Health Board establishing a champion tasked with driving improvements in nutritional care in hospitals[77]. The final report of the INCP, published in 2012, showcased the significant progress made to improve nutritional care in Scotland since its inception[78], and made a series of recommendations to ensure that nutrition "remain(s) a national and local priority for Scotland with national leadership continuing to drive this vital agenda"

- The importance of addressing the needs of people in the community was also recognised, with a 2009 Scottish Government literature review summarising the nutritional needs, barriers around, and possible interventions to, improving the nutrition of older people living in the community[79]. A range of publications and tools have also focused on improving the nutritional care of residents in care homes. *Improving nutrition...improving care*[80], published by Healthcare Improvement Scotland in 2011, brought to life residents' experiences of food and nutrition in care homes. Healthcare Improvement Scotland has published a *Nutrition Care Communication Tool*, to support effective communication of individual needs during the transition between care home and hospital, as well as *Making meals matter*[81] resources to assist in improving meal time processes

- Supporting healthcare professionals' education on nutrition has also been a priority, with NHS Education for Scotland publishing a Core Nutritional Pathway[82], incorporating 'MUST' and an online learning resource to support staff involved in nutritional care in hospitals in optimising their skills[83]

A number of local authorities in England are beginning to address the burden of malnutrition through improved data collection and integrated solutions, as the example of Derbyshire County Council demonstrates below[84].

Case study F: An integrated approach to addressing malnutrition in all settings – Derbyshire County Council

A community-wide Nutrition Steering Group was established with representatives from Derbyshire County Council Adult Care Services, Burton Hospital NHS Foundation Trust, Chesterfield Royal NHS Foundation Trust, Derby Royal Hospital NHS Foundation Trust, Derbyshire Community Health NHS Trust and Derbyshire Healthcare NHS Foundation Trust. The review was initiated after concern was raised about older people being admitted to care homes from both hospitals and the community who were malnourished.

Four key areas were identified as being integral to addressing the issues: communication, screening of older people; training and development; as well as better reporting of data and information that relates to nutrition of older people.

So far, the project has raised awareness with families, carers and staff, and older people now have better information to make informed choices and take back control of their own nutrition. The project has confirmed the prevalence of malnutrition in Derbyshire and they now have a baseline against which the impact of the promotional work can be monitored. Integrated working and engagement has increased since the scrutiny review and there is now agreement in the Health and Wellbeing Board to adopt nutrition of older people as a joint priority for continued multi-agency working.

Recommendations

Given the impact of malnutrition and nutritional support on unplanned hospitalisation for ACS conditions, we recommend the following:

- The Health and Social Care Information Centre (HSCIC) should ensure that it captures improved data on primary and secondary causes of hospital admissions and readmissions in order to quantify the burden of malnutrition. For example, the HES data should routinely include information on patients' nutritional status on admission and when they are discharged, and providers should be using a screening tool, such as 'MUST' to capture that

- Where a patient is found to be malnourished upon admission to hospital, providers should capture data on the setting from which people were admitted in order to identify potential issues in community/residential care. These data should be collected by the HSCIC to ensure resources are targeted appropriately and areas for improvement are identified

- The HSCIC should ensure that it keeps a record of the numbers of people discharged from hospital with a clear care plan incorporating nutritional guidelines – especially for people who have a condition associated with increased risk of malnutrition such as COPD

- NHS England should consider drawing on the resources developed in Scotland and Wales when considering the priority actions to improve nutritional standards of care for England

Indicator 2.6.ii: Effectiveness of post-diagnosis care in sustaining independence and improving quality of life

There is currently no definition for this complementary indicator or for the overarching indicator 2.6 which seeks to improve the quality of life for those with dementia. Therefore this provides an opportunity to make a compelling case about the role that nutrition can have in improving people's quality of life, once they are diagnosed with dementia.

Dementia is one of the most significant challenges affecting health and social care services in England today. The estimated number of people with dementia in the UK currently stands at 800,000 and is expected to double by 2040 in the context of an ageing population[85]. It has also been estimated that the condition costs the UK economy £23 billion every year[86].

Growing awareness about the disease amongst the public, media, politicians, healthcare professionals and commissioners, together with an active patient group community, has placed dementia high on the Government's agenda. This has been reflected in the publication in 2009 of a National Dementia Strategy which set out a vision for transforming dementia services in England with the following three aims:

- Improved awareness
- Earlier diagnosis and intervention
- Higher quality of care[87]

In March 2012, the Prime Minister, David Cameron, also set a challenge to deliver major improvements in dementia care and research by 2015[88]. During his speech to the Dementia 2012 conference, he admitted that "there's no doubt we've got to do better [for people with dementia], right across the board", and also highlighted the importance of "making sure that [people with dementia] have enough to eat and drink"[89].

Over the years, dementia has become a key national priority, and improvements in outcomes for patients with dementia and their carers are key elements of the Department of Health's Mandate to NHS England and the NHS Outcomes Framework[90, 91.]

When it comes to post-diagnosis care, it is important to take account of the two kinds of dementia patients, who can have different care needs:

- Patients who are diagnosed early and whose independence, in particular, will need to be supported
- Patients who are diagnosed and treated at later stages of the disease, whose quality of life can be improved through high quality care provided in residential/nursing care or in their own home

In both cases, we believe that nutritional care and support can play a role, notably because malnutrition can be particularly distressing for people with dementia, and their family and carers.

Indeed, in response to the publication of the National Association of Care Catering (NACC)'s report, *Personalisation, Nutrition and the Role of Community Meals* in October 2010, the Alzheimer's Society stressed the detrimental impact of malnutrition on patients with dementia, and the importance of providing support to patients in the community, highlighting that[92]:

"Malnutrition can have a serious impact on the symptoms of dementia and general well-being, potentially resulting in a person needing avoidable hospital admission or residential care earlier.

"As well as being distressing for the person and their family, malnutrition and poor care create huge and unnecessary costs for already stretched health and social care systems. Supporting people to live well in the community can help relieve this financial burden and hugely improve quality of life. Good nutrition must be at the heart of this care."

In fact, dementia patients are particularly at risk of being malnourished. As dementia progresses, patients may experience increasing difficulties around drinking and eating, which may affect the type and amount of food they eat, and result in weight loss and poor health outcomes[93]. It has been estimated that two thirds of people with dementia live in the community and half of this number live alone, while one third live in a care home[94]. It is therefore important that efforts are made to ensure that people who suffer from dementia are provided with nutritional care and support in the community, as well as other care settings.

Dietitians play an essential role in supporting people with dementia in hospitals, within memory services, care homes or the wider community to maintain their nutritional status and independence, as set out below[95].

Dietitians:

- Use their unique professional skills to assess the complex nature of eating and drinking difficulties
- Develop practical strategies to reduce the risk and cost associated with malnutrition and dehydration
- Tailor specific advice centred around the individual needs of the person with dementia
- Understand the complexity and variation of the symptoms of dementia and how this compromises nutritional status and well-being
- Strive to maintain and promote independence and skills at mealtimes; in cooking and food preparation
- Provide education and training for all health and social care professionals
- Educate and advise people with dementia, their carers and families
- Are skilled at supporting people throughout the progression of their dementia from diagnosis to the advanced stages
- Have expert knowledge and communication skills to advise on the most appropriate nutritional intervention and support in palliative and end of life care

In recognition of this role, clinical guidelines have recommended nutritional care and dietary advice for people with dementia. This is further explored in the section below.

Evidence base

A number of clinical guidelines specifically set out the importance of nutritional care and support for people with dementia:

- NICE Clinical Guideline 42 states that health and social care staff should identify the specific needs of people with dementia and their carers, including problems with nutrition, and that care plans should record and address these needs. It further states that people with dementia should

be encouraged to eat and drink by mouth for as long as possible. Specialist assessment and advice concerning swallowing and feeding in dementia should be available. Dietary advice may also be beneficial. Nutritional support, including artificial (tube) feeding, should be considered if dysphagia is thought to be a transient phenomenon[96]

- NICE quality standards support a focus on nutritional care. Statement 6 in Quality Standard 30: *Supporting people to live well with dementia*, states that "People with dementia are enabled, with the involvement of their carers, to access services that help maintain their physical and mental health and wellbeing"[97]. It further references the Social Care Institute for Excellence (SCIE)'s guidance on nutritional care as an underpinning source for this[98]

- NICE Quality Standard 1*: Dementia* also states that[99]:
  - Statement 3: People newly diagnosed with dementia and/or their carers receive written and verbal information about their condition, treatment and the support options in their local area
  - Statement 4: People with dementia have an assessment and an ongoing personalised care plan, agreed across health and social care, that identifies a named care coordinator and addresses their individual needs

- European guidelines around geriatric care (including for older people with dementia) state that nutritional intake is often compromised in geriatric patients, and recommend not waiting for severe undernutrition to take hold but starting enteral treatment early, as soon as nutritional risk is apparent[100]

- Danish guidelines note the positive effect of ONS in patients where there is an intensive nutritional therapy need, including those with dementia[101]

Recommendations

Despite clinical guidelines highlighting the importance of nutritional care for people with dementia, more needs to be done in that area to improve patients' independence and quality of life:

- More research needs to be undertaken to show the impact of nutritional care on enabling independence for people with dementia

- Commissioners and providers should make sure that nutritional assessments are at the core of every care plan implemented for people with dementia under the Quality Standard recommendations

- Commissioners and providers should ensure that carers are provided with clear support and guidance around nutritional needs for people with dementia

- Commissioners and providers should make sure that high quality nutritional support is provided by qualified healthcare professionals for people with dementia in care homes/nursing homes

Conclusion

The BDA and the BSNA believe that providing good quality nutritional care can help the NHS to deliver against the measures set out in the NHS Outcomes Framework. There is a particularly strong consensus – including recognition in the recent NICE Quality Standard 24: *Nutrition Support in Adults*[102] – of the role that good nutritional care can play in helping to deliver on Domain 2 of the NHS Outcomes Framework: *Enhancing the quality of life for people with long-term conditions*.

This report shows that improving nutrition, with support from a dietitian, can help to prevent health problems, improve functional status, and increase quality of life and wellbeing for people living with long-term conditions, in addition to providing cost savings to the NHS.

With rising numbers of people living with one or more long-term condition(s), and escalating costs of care, we must urgently take measures to deliver improved patient outcomes and alleviate pressures on the NHS and social care organisations. Simple steps, like ensuring every person with a long-term condition has a nutritional assessment and a clear care plan that takes account of their nutritional needs and gives them access to support from a dietitian where needed, can make a real difference.

The NHS is yet to fully harness the potential of improving nutritional care. By better understanding people's needs and identifying how and where nutritional care could be improved, the NHS can put in place systems to support people with long-term conditions in their homes, in the community, and in hospital. Given dietitians' unique understanding of people's nutritional needs and the leadership they can provide in this area, it will be important to involve them in the design and commissioning of local health and social care services, working closely with CCGs and local health and wellbeing boards and developing training resources that are specific to local needs.

The BDA and the BSNA look forward to working in partnership with NHS England, commissioners and providers to support the NHS to deliver a better experience of care and improved health outcomes for older people and those living with long-term conditions.

References

[1] Department of Health, *Equity and excellence: Liberating the NHS – White Paper*, July 2010. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213823/dh_117794.pdf

[2] Department of Health, *Equity and excellence: Liberating the NHS – White Paper*, July 2010. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213823/dh_117794.pdf

[3] Department of Health, *NHS Outcomes Framework 2013/14*, November 2012. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213055/121109-NHS-Outcomes-Framework-2013-14.pdf

[4] NICE, *National Clinical Guideline 32: Nutrition support in adults: oral nutrition support, enteral tube feeding and parental nutrition,* February 2006

[5] NICE, *National Clinical Guideline 12: Chronic obstructive pulmonary disease: management of chronic obstructive pulmonary disease in adults in primary and secondary care,* February 2004

[6] Department of Health, *NHS Outcomes Framework 2013/14*, November 2012. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213055/121109-NHS-Outcomes-Framework-2013-14.pdf

[7]Department of Health, *NHS Outcomes Framework 2013/14*, November 2012. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213055/121109-NHS-Outcomes-Framework-2013-14.pdf

[8]Department of Health, *NHS Outcomes Framework 2013/14*, November 2012. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213055/121109-NHS-Outcomes-Framework-2013-14.pdf

[9] NICE, *Quality Standard 24: Nutrition support in adults,* November 2012. Available at http://publications.nice.org.uk/quality-standard-for-nutrition-support-in-adults-qs24

[10] Malnutrition Task Force, 'About the Task Force'. Accessed on 4 October 2013 via: http://www.malnutritiontaskforce.org.uk/about.html

[11] Malnutrition Task Force, 'About the Task Force'. Accessed on 4 October 2013 via: http://www.malnutritiontaskforce.org.uk/about.html

[12] Stratton RJ, Green CJ, Elia M, *Disease related malnutrition: an evidence based approach to treatment*, CABI Publishing, Wallingford, 2003

[13] Department of Health, *NHS Outcomes Framework 2013/14 – Technical Appendix,* November 2012. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213057/121109-Technical-Appendix.pdf

[14] NHS England, *GP Patient Survey*, 2013. Available at http://www.gp-patient.co.uk/

[15] Amarantos E, Martinez A, Dwyer J, 'Nutrition and quality of life in older adults', *Journals of Gerontology*, 2001

[16] Rasheed S, Woods RT, 'An investigation into the association between nutritional status and quality of life in older people admitted to hospital', *Journal of Human Nutrition and Dietetics*, 2013

[17] Garibella S, Forster S, 'Effects of dietary supplements on depressive symptoms in older patients: a randomised double-blind placebo-controlled trial', *Clinical Nutrition*, 2007

[18] Neelemaat F, Bosmans JE, Thijs A, Seidell JC, van Bokhorst-de van de Schueren MA, 'Oral nutritional support in malnourished elderly decreases functional limitations with no extra costs', *Clinical Nutrition*, 2012

[19] Malnutrition Task Force, 'Providing Much More than Food', *Preventing Malnutrition in Later Life*. Accessed on 20 September 2013 via: http://www.malnutritiontaskforce.org.uk/downloads/community/Providing_Much_More_than_Food_Hertfordshire.pdf

[20] Huhmann MB, Cunningham RS, 'Importance of nutritional screening in treatment of cancer-related weight loss', *Lancet Oncology*, 2005

[21] Huhmann MB, Cunningham RS, 'Importance of nutritional screening in treatment of cancer-related weight loss', *Lancet Oncology*, 2005

[22] Sauer AC, Coble Voss A, Abbott Nutrition, 'White Paper: Improving Outcomes with Nutrition in Patients with Cancer', *Improving Outcomes with Nutrition in Patients with Cancer*, 2012

[23] Baldwin C, Spiro A, Ahern R, Emery PW, 'Oral Nutritional Interventions in Malnourished Patients with Cancer: A Systemic Review and Meta-Analysis', *Journal of the National Cancer Institute*, 2012

[24] Marin Caroa MM, Lavianob A, Picharda C, 'Nutritional intervention and quality of life in adult oncology patients', *Clinical Nutrition*, 2007

[25] Renshaw GL, Barrett RA, Chowdhury S, 'The incidence of the risk of malnutrition in adult medical oncology outpatients and commonly-associated symptoms', *Journal of Human Nutrition and Dietetics*, 2008
[26] Isenring EA, Bauer JD, Capra S, 'Nutrition support using the American Dietetic Association medical nutrition therapy protocol for radiation oncology patients improves dietary intake compared with standard practice', *Journal of the American Dietetic Association*, 2007
[27] Shaw C (Ed.), *Nutrition and Cancer,* 2010
[28] National Stroke Association, Physical effects: Dysphagia, Accessed 21 August 2013 at: http://www.stroke.org/site/PageServer?pagename=dysphagia
[29] NICE, *National Clinical Guideline 68: Diagnosis and Initial Management of Acute Stroke and Transient Ischaemic Attack (TIA)*, July 2008
[30] NICE, *National Clinical Guideline 162: Stroke rehabilitation Stroke rehabilitation – Long-term rehabilitation after stroke*, June 2013
[31] NICE, *National Clinical Guideline 68: Diagnosis and Initial Management of Acute Stroke and Transient Ischaemic Attack (TIA)*, July 2008
[32] NICE, *National Clinical Guideline 32: Nutrition support in adults: oral nutrition support, enteral tube feeding and parental nutrition,* February 2006
[33] Stratton RJ, Green CJ, Elia M, *Disease related malnutrition: an evidence based approach to treatment*, CABI Publishing, Wallingford, 2003
[34] McMurdo ME, Price RJ, Shields M, Potter J, Stott DJ, 'Should oral nutritional supplementation be given to undernourished older people upon hospital discharge? A controlled trial', *Journal of the American Geriatric Society,* 2009
[35] Gariballa S, Forster S, 'Effects of dietary supplements on depressive symptoms in older patients: a randomised double-blind placebo-controlled trial'*, Clinical Nutrition*, 2007
[36] Gariballa S, Forster S, 'Dietary supplementation and quality of life of older patients: a randomized, double-blind, placebo-controlled trial', *Journal of the American Geriatric Society,* 2007
[37] Gariballa S, Forster S, 'Effects of dietary supplements on depressive symptoms in older patients: a randomised double-blind placebo-controlled trial'*, Clinical Nutrition*, 2007
[38] Gariballa S, Forster S, 'Dietary supplementation and quality of life of older patients: a randomized, double-blind, placebo-controlled trial', *Journal of the American Geriatric Society,* 2007
[39] British Dietetic Association*, Know your Worth - Trust a Dietitian - Making the case for Nutrition and Dietetic Services,* February 2013
[40] PINNT, *Quality Standards for Nutritional Support in Adults: Promises made to your patients*, 2013. Available at : http://pinnt.com/pinnt/media/HANs-Images/QS-for-Nutrition-Support---The-Promises---Healthcare.pdf
[41] PINNT, *Quality Standards for Nutritional Support in Adults: Promises made to you*, 2013. Available at: http://pinnt.com/pinnt/media/HANs-Images/QS-for-Nutrition-Support---Promises---Patient.pdf
[42] PINNT, *Quality Standards for Nutritional Support in Adults: Promises made to your patients*, 2013. Available at : http://pinnt.com/pinnt/media/HANs-Images/QS-for-Nutrition-Support---The-Promises---Healthcare.pdf
[43] PINNT, *Quality Standards for Nutritional Support in Adults: Promises made to you*, 2013. Available at: http://pinnt.com/pinnt/media/HANs-Images/QS-for-Nutrition-Support---Promises---Patient.pdf
[44] The King's Fund, *Transforming our health care system – 4.Managing ambulatory care sensitive conditions*, revised edition, April 2013. Available at: http://www.kingsfund.org.uk/projects/gp-commissioning/ten-priorities-for-commissioners/acs-conditions
[45] Department of Health, *NHS Outcomes Framework 2013/14 – Technical Appendix,* November 2012. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213057/121109-Technical-Appendix.pdf
[46] The King's Fund, *Transforming our health care system – 4.Managing ambulatory care sensitive conditions*, revised edition, April 2013. Available at: http://www.kingsfund.org.uk/projects/gp-commissioning/ten-priorities-for-commissioners/acs-conditions
[47] The King's Fund, *Transforming our health care system – 4.Managing ambulatory care sensitive conditions*, revised edition, April 2013. Available at: http://www.kingsfund.org.uk/projects/gp-commissioning/ten-priorities-for-commissioners/acs-conditions
[48] Department of Health, *NHS Outcomes Framework 2013/14 – Technical Appendix,* November 2012. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213057/121109-Technical-Appendix.pdf

[49] NICE, *Cost saving guidance – Clinical Guideline 32*, accessed on 19 February 2013, available at http://www.nice.org.uk/usingguidance/benefitsofimplementation/costsavingguidance.jsp
[50] NICE, *Cost saving guidance – Clinical Guideline 32*, accessed on 19 February 2013, available at http://www.nice.org.uk/usingguidance/benefitsofimplementation/costsavingguidance.jsp
[51] Elia M and Russell CA, *Combating Malnutrition: Recommendationsfor Action, Report from the advisory group on malnutrition led by BAPEN*, 2009
[52] NICE, *Cost saving guidance – Quality Standard 24*, accessed on 19 February 2013, available at http://www.nice.org.uk/usingguidance/benefitsofimplementation/costsavingguidance.jsp
[53] *Managing adult malnutrition in the Community – Including a pathway for the appropriate use of oral nutritional supplements (ONS),* produced by a multi-professional consensus panel, May 2012
[54] *Managing adult malnutrition in the Community – Including a pathway for the appropriate use of oral nutritional supplements (ONS),* produced by a multi-professional consensus panel, May 2012
[55] Stratton RJ and Elia M, 'Who benefits from nutritional support: what is the evidence?', *Eur J Gastroenterol Hepatol*, 2007
[56] Stratton RJ, van Binsbergen J, Volkert D, Hebuterne V, Elia M, 'OP038 systematic review and meta analysis of the effects of oral nutrition supplements on hospital admissions', *Clinical Nutrition Supplements*, 2011
[57] Cawood AL, Rust S, Walters E, Stratton RJ, Elia M, 'The impact of malnutrition on healthcare use in hospital outpatients', *Proceedings of the Nutrition Society*, 2010
[58] Guest JF, Panca M, Baeyens JP, de Man F, Ljungqvist O, Pichard C et al, 'Health economic impact of managing patients following a community-based diagnosis in the UK, *Clinical Nutrition*, 2011
[59] Stratton RJ, van Binsbergen J, Volkert D, 'Systematic review and meta-analysis of the effects of oral nutrition supplements on hospital admissions', *Clinical Nutrition*, 2011
[60] Tomas J, Philipson PH, 'Impact of Oral Nutritional Supplementation on Hospital Outcomes', *American Journal of Managed Care*, 2013
[61] Tappenden K, 'The Value of Nutrition Intervention', *Journal of Parenteral and Enteral Nutrition*, 2013
[62] Malnutrition Task Force, 'Smarter Screening and Fewer Hospital Admissions, Improving nutrition screening and support in six care homes in Peterborough', *Preventing Malnutrition in Later Life* . Accessed on 20 September via: http://www.malnutritiontaskforce.org.uk/downloads/care_homes/Smarter_Screening_Fewer_Hospital_Admissions_Peterborough.pdf
[63] Collins PF, Stratton RJ, Kurukulaaratchy R, *Abstract to BAPEN Conference*, 2009
[64] Gupta B, Kant S, Mishra R, Vermaa S, 'Nutritional Status of Chronic Obstructive Pulmonary Disease Patients Admitted in Hospital with Acute Exacerbation', *Journal of Clinical Medicine Research*, 2012
[65] Collins PF, Elia M, Smith TR, Kurukulaaratchy R, Cawood AL, Stratton RJ, 'The impact of malnutrition on hospitalisation and mortality in outpatients with chronic obstructive pulmonary disease', *Proceedings of the Nutrition Society*, 2010
[66] Collins PF, Stratton RJ, Elia M, 'P260 Oral nutritional supplements in chronic obstructive pulmonary disease (COPD): a systemic review and meta-analysis', *Thorax*, 2011
[67] British Dietetic Association, *Case studies on COPD*, October 2013, data on file
[68] NICE, *Clinical Guideline 101: Chronic obstructive pulmonary disease – Management of chronic obstructive pulmonary disease in adults in primary and secondary* care, June 2010
[69] Alison Evans, 'Nutritional screening in patients with COPD', *Nursing Times*, March 2012. Available at: http://www.nursingtimes.net/nutrition-screening-in-patients-with-copd/5042392.article
[70] Welsh Assembly Government, *All Wales Nutrition and Catering Standards for Food and Fluid Provision for Hospital Inpatients*, October 2011
[71] Welsh Assembly Government, *Free to lead, free to care,* 2009
[72] Welsh Assembly Government, *All Wales Nutrition and Catering Standards for Food and Fluid Provision for Hospital Inpatients*, October 2011
[73] Welsh Assembly Government, *Nutrition in Community Settings: a pathway and resource pack,* May 2013
[74] NHS Quality Improvement Scotland, *Food, Fluid and Nutritional Care in Hospitals Standards*, September 2003
[75] Scottish Government, *Food in Hospitals: National Catering and Nutrition Specification for Food and Fluid Provision in Hospitals in Scotland,* 2008
[76] NHS Scotland, *The State Hospital. Quality Improvement Scotland Food, Fluid and Nutrition Standards: a guide for patients,* January 2010

[77] NHS Education for Scotland, *Making a difference: the evolution of the nutrition champion role in NHSScotland*, 2010
[78] Healthcare Improvement Scotland, *Improving nutrition...improving care: final report,* March 2012
[79] Scottish Government, *Older People Living in the Community - Nutritional Needs, Barriers and Interventions: a Literature Review*, December 2009
[80] Healthcare Improvement Scotland, *Improving nutrition...improving care,* 2011
[81] Healthcare Improvement Scotland, *Making meals matter resources pack,* June 2011
[82] NHS Education Scotland, *Core Nutritional Pathway,* 2011
[83] NHS Education Scotland, *Nutritional Care in Hospitals Online Learning Resources,* 2011
[84] Malnutrition Task Force, 'An integrated approach to addressing malnutrition in all settings – Derbyshire County Council', *Preventing Malnutrition in Later Life. Accessed on 20 September via:* http://www.malnutritiontaskforce.org.uk/downloads/integrated_working/Derbyshire_County_Council_Integrated_Approach.pdf
[85]Department of Health, 'Improving care for people with dementia – Policy update', 25 April 2013. Available at https://www.gov.uk/government/policies/improving-care-for-people-with-dementia
[86]Department of Health, 'Improving care for people with dementia – Policy update', 25 April 2013. Available at https://www.gov.uk/government/policies/improving-care-for-people-with-dementia
[87] Department of Health, *Living well with dementia: A national dementia strategy*, February 2009
[88] Cabinet Office, 'Transcript: Prime Minister's speech to the Dementia 2012 conference', 26 March 2012. Available at: https://www.gov.uk/government/speeches/transcript-prime-ministers-speech-to-the-dementia-2012-conference
[89] Cabinet Office, 'Transcript: Prime Minister's speech to the Dementia 2012 conference', 26 March 2012. Available at: https://www.gov.uk/government/speeches/transcript-prime-ministers-speech-to-the-dementia-2012-conference
[90] Department of Health, *The Mandate: a mandate from the government to the NHS Commissioning Board: April 2013 to March 2015*, November 2012. Available at: https://www.gov.uk/government/publications/the-nhs-mandate
[91] Department of Health, *NHS Outcomes Framework 2013/14*, November 2012. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213055/121109-NHS-Outcomes-Framework-2013-14.pdf
[92]Alzheimer's Society, 'Malnutrition can cause people with Alzheimer's disease to deteriorate' – Press release, October 2010. Available at : http://www.alzheimers.org.uk/site/scripts/press_article.php?pressReleaseID=575
[93] Alzheimer's Society, 'Food for thought – Difficulties in eating and driking'. Accessed on 4 October 2013, via: http://www.alzheimers.org.uk/site/scripts/documents_info.php?documentID=1614&pageNumber=2
[94] Alzheimer's Society, 'About dementia – statistics'. Accessed on 4 October 2013, via: http://www.alzheimers.org.uk/statistics
[95] British Dietetic Association, *Dementia Factsheet (final draft)*, October 2013, data on file
[96] NICE, *Clinical guideline 42: Dementia - Supporting people with dementia and their carers in health and social care*, November 2006
[97] NICE, *Quality Standard 30: Quality standard on supporting people with dementia to live well,* April 2013
[98] SCIE, *Guide 15: Eating and nutritional care,* 2013
[99] NICE, *Quality Standard 1: Dementia,* June 2010
[100] Volkert D, Berner YN, Berry E, Cederholm T, Coti BP, Milne A et al, *ESPEN Guidelines on Enteral Nutrition: Geriatrics,* 2006
[101] Danish National Board of Health, *Screening and treatment of patients at nutritional risk. Guidelines for physicians, dietitians, nurses and other HCPs,* 2008
[102] NICE, *Quality Standard 24: Nutrition support in adults,* November 2012. Available at http://publications.nice.org.uk/quality-standard-for-nutrition-support-in-adults-qs24


THE BRITISH DIETETIC ASSOCIATION


Trust a
Dietitian.


British Specialist
Nutrition Association Ltd
bsna