Transforming Population Health – Nutrition and Hydration

A community intervention for identifying and addressing malnutrition and dehydration in the 65+ population

The intervention

The purpose of this project is to raise awareness about the risks and signs of malnutrition and dehydration amongst individuals, carers and non-clinically trained practitioners who have routine contact with older people aged 65+. It is a classic population health intervention, in that it is designed to target a specific population cohort, to modify the incidence and mitigate the risks of malnutrition and dehydration, by intervening early and proactively.

The tool upon which the intervention is based is known as the paperweight armband, which has been developed and used over the past 3+ years by partners in Salford. The armband is a non-clinical and non-intrusive tool for identifying and dealing with the signs of malnutrition by measuring the non-dominant upper arm. It is a non-clinical, alternative measurement to BMI. The usual clinical tool is MUST (Malnutrition Universal Screening Tool) which is based on BMI measurement, but MUST does not lend itself to a community wide approach.

Once secured, if the armband slips easily up and down, this is a strong indicator of malnutrition. The practitioner will then be able to open up a conversation about diet, eating habits, help with eating, appetite, unplanned weight loss, and possible food solutions etc and provide / signpost the individual and their carers to advice and guidance on dietary fortification and nutritional self-care, including more routine issues such as shopping or food delivery/ordering. The QR code and website address, which are printed on the armband, link to a range of nutritional support materials on the Salford AGE UK website and allows carers and individuals the opportunity to self-manage for a 12-week period, if they cannot gain weight they need to visit their GP for further support or to be referred to a community dietitian.

The successful delivery of this pilot programme will draw on Salford and partners’ experiences, which is why AGE UK Salford is the delivery partner for this programme. However, it is focussed project management and delivery capacity which will bring this project to successful fruition in the 5 localities, alongside local leadership in the form of a steering group.

Each borough will focus on the following five principles to implement the project:

- Raising awareness across the community;
- Identifying malnutrition and develop standards of nutritional care, including the type and level of information and training needed to achieve this consistently;
- Working together across organisational boundaries;
- Personalised care, support and treatment

Greater Manchester Nutrition and Hydration Project
Additional Information for Applicants
• Monitoring and evaluating the implementation and impact of using the paperweight armband.

Realisation of the potential benefits of using the paperweight armband are ultimately dependent on the systematic and accurate use of the armband as a tool to identify risk of malnutrition, with appropriate advice and support put in place at an individual level to respond to the malnutrition risk it has helped to identify. The robustness of this ‘pathway’ and systematic and consistent application of it will be at the centre of the effectiveness of the pilot programme.

**Current malnutrition prevalence and identification**

Malnutrition amongst the general 65+ population is estimated at around 14% but can rise to as much as 35% prevalence dependent on setting (10-14% of older adults living in sheltered housing, 30% of hospital admissions and 35% in care homes, as estimated by BAPEN/NICE). More than 90% of malnutrition is said to occur amongst people living independently in their own homes and communities which is why a community-level intervention is being recommended, to target the environments where it most commonly occurs. The other main advantage of a community intervention is that it is more likely to pick up and intervene in malnutrition earlier, therefore supporting better health outcomes and quality of life for the individual.

Although there is widespread acknowledgment amongst clinical practitioners about the value of nutritional screening, it routinely goes unrecognised and untreated. There are well-documented barriers to the use of clinical nutritional screening tools such as MUST in routine day to day interactions with older people. The prevailing view seems to be that whilst GPs and nurses are best placed to screen, there are multiple barriers to doing this systematically including time constraints, lack of knowledge, low prioritization of nutrition, forgetting to screen, lack of suitable equipment and training, and this type of screening not being a mandatory requirement (Wessex evaluation of the paperweight armband applied in Hampshire, 2016).

Simple-to-apply methods to identify the risk of malnutrition and dehydration at a community-level can therefore usefully supplement existing clinical screening practices and may be the key to addressing malnutrition risk more systematically and consistently at a population level.

**Overall programme objectives**

The programme objectives, using the paperweight armband and its supporting materials, are to:

• raise awareness of malnutrition amongst older people, their families and carers
• identify malnutrition or the risk of malnutrition by using the paperweight armband
• discuss the support the individual needs to take ‘self-care’ steps to improve nutrition and stimulate weight-gain i.e. fortification of their usual diet, support with shopping etc
• put the plan into place with appropriate support from family carers or care and support providers
• review success of the plan in producing weight gain / after following a 12-week programme of dietary supplementation and consider the need for onward referral to GP
• prompt the development of a local malnutrition pathway across the range of provider settings, which is agreed by local providers and supported by a robust evaluation using local business intelligence data from organisations e.g. sip feed FP10 prescribing data from local CCG’s.
• adopt and use the e-learning package on dysphagia and malnutrition for community staff working with the most vulnerable adults - and ideally wider health care professionals, where this is supported by the locality

• The system benefits of addressing malnutrition and dehydration are usually characterised as a reduction in the need for secondary care, either due to reduced falls or more generally a reduced likelihood of hospitalisation, fewer bed days and fewer outpatient visits, along with quicker convalescence and less need for allied healthcare and social care support, including a fewer number of GP appointments annually. Independent economic analyses from BAPEN estimated the impact of malnutrition on the health and care system to be in the order of £19.6 billion in England in 2011-12.

• Individual benefits are not insignificant, with good nutrition and hydration offering numerous protective benefits (with or without other conditions) which include promoting mobility, steadiness, healing, mental alertness and energy levels, aiding recovery, and indirectly supporting continued independent living. The clinical outcomes for older adults who are well-nourished and adequately hydrated are consistently better.