



Project Report: Screening & Wellbeing Data Older Peoples Essential Nutrition (OPEN), Eastleigh

Executive Summary

The OPEN project involved monitoring screening (using 'MUST') and care planning for a 12 month period from the beginning of May 2015 until the end of April 2016 in healthcare (GPs, Practice Nurses and community nursing), social care and one local authority care home. Recording forms used and data collection methods differed depending on the team. 48% (n=69) of the staff who were going to be (or who were already) screening using 'MUST' received training before start of the data collection timescale at the beginning of May, with the remaining staff receiving training by November 2015 (with the exception of two GPs who were trained in January 2016). This delay in training, as well as the lack of take up of support from the project team may have affected the screening data collection and skewed results. There were a number of reasons for this, all outside of the project's control, including the number of teams involved, team re-structuring, change in key management staff, staff shortages, and other clinical priorities.

The key results were as follows:

- *Screening by teams* - 375 people were screened (a total of 942 screenings were undertaken), with 142 people being screened more than once. 90% of screenings had a 'MUST' score or enough information for 'MUST' to be calculated by the project team. 94% of people 'at risk' (with a 'MUST' score of 1 or more) had a care plan in place
- *Prevalence* – average prevalence across all teams was 24.5% (18% in community nursing teams, 32% in the care home, 8% in social care and 40% in general practice)
- *People 'at risk' screened more than once* - 46% had no change in their 'MUST' score. Of these, only 7% had experienced significant weight change; 25% had increased their weight but not significantly, suggesting their weight gain is not yet significant enough to result in an improved 'MUST' score
- *Wellbeing assessment data* - A quarter of the people with at least two wellbeing forms had a 'MUST' score of 1 or more at initial screening (forms from 16 older people). These small numbers made it difficult to demonstrate the relationship between improving 'MUST' score and perceived wellbeing

Despite the challenges faced by the project, several 'next steps' have been taken in terms of spreading the good practice wider across the Wessex region as a result of the data obtained from the OPEN project in Eastleigh.



Introduction

The OPEN project aims to reduce the number of older people who are malnourished or at risk of malnutrition and the associated health and social care use, as well as to evaluate an integrated approach to malnutrition risk identification and prevention between a range of sectors. This report is one of a series comprising the full evaluation of the OPEN project in Eastleigh. This report considers the data collection and analysis methods, prevalence of malnutrition risk in Eastleigh and an analysis of the wellbeing assessment forms.

Following project coping and set up, malnutrition awareness training was provided for community health care, social care and voluntary sector workers, some of whom were already screening for malnutrition and collecting data. Training on how to screen using the Malnutrition Universal Screening Tool ('MUST') and use of the local nutritional care pathways was included for health and social care workers, including one local authority care home. After training, follow up was provided in a variety of formats (e.g. attendance at team meetings and shadowing opportunities) to support them in effectively implementing malnutrition screening and care planning. During this time, screening data using 'MUST' and wellbeing assessment forms was collected by the OPEN Eastleigh team, in order to support the evaluation of the project. The aim was that all older people under the care of each service were screened to identify all people who were malnourished or at risk of becoming malnourished. Data was collected from the beginning of May 2015 to the end of April 2016 (full 12 month period).

The aims of collecting this data were to:

- Identify the prevalence of malnutrition risk in Eastleigh, in particular the number of older people at risk using each of the healthcare and social care services
- Identify which teams were screening, and the extent of which screening was being carried out by each team – this would provide intelligence on where to focus project support
- Provide further information to identify whether the nutritional care pathways were being followed and individualised care plans being implemented
- Provide evidence that by following the nutritional care pathways, an individual's risk of being malnourished could be reduced
- Determine whether improving a person's 'MUST' score improved their perceived wellbeing
- Support the evaluation of the success of the project in terms of obtaining an integrated approach to the screening for and prevention of malnutrition

Methods

Pre-implementation surveys carried out as part of the project set-up revealed that the Community Care Team (CCT) and care home were already carrying out screening using 'MUST' and implementing some form of individualised care planning. The other teams involved in the project (GPs and practice nurses (PNs) from three town centre GP Practices, Older People's Mental Health (OPMH) and Adult Social Services (comprising social workers, occupational therapists and the Community Independence Team) were not formally screening using 'MUST' prior to the commencement of the project.



Screening data – data collection methods

Methods used for screening and data collection varied according to team. Table 1 summarises the methods used.

Table 1: Methodology for screening for malnutrition and project data collection

Team	Screening & data collection methods	Input from project Dietitian
GPs PNs	Screening recording form created as part of the project. Monthly emails were sent to the GPs to ask if they had completed any screenings, and to request screening data	Regular emails to remind staff to screen and offer support
CCT & OPMH	Screening recording form created as part of the project. Staff entered screening data & care planning to this form and placed form in a folder for the Dietitian to collect directly from their office in Eastleigh. The form was pseudonymised prior to being collected by the dietitian	Feedback provided to team leads each month by email, e.g. details of inaccurate screenings, quality of the form completion (missing data)
Social care	Screening recording form created (and subsequently amended to simplify) as part of the project. Data from these forms was entered into an Excel spreadsheet by the Team Assistant and then emailed to the Dietitian. Dietitian did not see the original data collection / recording forms	Feedback provided to Team Assistant each month by email, e.g. accuracy of screenings, encouragement
Care home	Screening data was entered onto their existing 'MUST' screening forms. Dietitian visited care home monthly and photocopied these forms (and corresponding nutrition care plans). Upon subsequent visits, data was entered onto the previously photocopied screening forms. Copies of new forms and updated care plans were taken as appropriate	Feedback provided to manager and deputies each month by email, e.g. inaccurate screenings, missing data, common themes

Screening data - entry & analysis methods

From May 2015 to January 2016:

Data from the teams was entered onto an Excel spreadsheet by the project dietitian monthly. This data entry was double checked by the lead OPEN dietitian for quality assurance, new data was analysed monthly and added to the data from previous months. This enabled the project team to provide regular updates on screening figures and progress to all the teams involved in the project, and to produce communications bulletins to teams and associated partners.

From January 2016 to end April 2016:

Data from the teams continued to be entered onto an Excel spreadsheet by the project dietitian monthly. Data was then forwarded to a Senior Research Assistant for the Centre of Implementation Science at the University of Southampton who analysed all new data and added this to data from previous months. These changes occurred to a) reflect staff changes in the OPEN team and b) streamline the process and release some time from the OPEN team's workload.

At the end of the data collection period, the data was analysed by a Research Assistant. Several meetings were held between the Research Assistant, Nutrition in Older People Programme Manager and project dietitian to direct the analysis and ensure the right information was being analysed to provide accurate and meaningful screening data.



Wellbeing data – collection, entry and analysis methods

Wellbeing forms were created and distributed to teams for use in the project. These forms included questions using the EuroQol EQ-5D descriptive system (where the respondent answers questions on health state ticking in the box against the most appropriate statement in each of five dimensions; mobility, self care, usual activities, pain/discomfort, anxiety/depression) and the EQ visual analogue scale¹ (which asks the respondent to mark their perceived overall ‘health score’ on a vertical scale with endpoints labelled as ‘best imaginable health state’ to ‘worst imaginable health state’). The OPEN team requested that only patients with mental capacity complete the form(s), and that staff did not complete the form(s) based on their opinions of the patient. It was intended (and requested of teams) that these forms would be completed by all patients with a ‘MUST’ score of 1 or more at their initial screening, and then every three months thereafter alongside repeated ‘MUST’ scores.

Only the CCT, social care and the care home provided some completed wellbeing forms. The CCT placed completed forms in the same folder as the screening data collection forms, and were collected monthly by the project dietitian. The care home scanned in completed wellbeing forms and sent them to the dietitian by email on an ad hoc basis. Social care emailed the data from wellbeing forms in the form of an Excel spreadsheet. Due to the limited number of forms received, for the last three months of the data collection period, the project dietitian provided the NHS numbers for all the patients (CCT and care home) requiring new or follow-up wellbeing forms to try to improve the number of forms received.

The project dietitian entered the wellbeing data into an Excel spreadsheet, which was then analysed by a Research Assistant. In particular, the data was analysed to determine whether there was any relationship between wellbeing scores and change in ‘MUST’ score.

Results

Numbers screened

942 screenings were carried out across the 12 month period. A total of 375 people were screened (some were screened multiple times by the care home and CCT). Table 2 shows the number of screenings done by each team over the 12 months. Table 3 shows the frequency of screening by quarter; this shows that the number of screenings was fairly consistent for the first three quarters, but started declining in 2016, meaning that the lowest number of screenings was done in the final quarter (February to April 2016).

Table 2: Screening carried out by each community team

Team	No. of screenings	No. people screened at least once	No. people screened multiple times*
CCT and OPMH	396 (42%)	270	74
Care home**	508 (54%)	71	68
Social care	33 (3%)	29	-
GPs / PNs	5 (1%)	5	-
Total	942	375	142

* this ranged from screening twice to maximum of 13 times per person

** care homes are regulated to carry out ‘MUST’ screening on all their residents each month

¹ <http://www.euroqol.org/about-eq-5d/how-to-use-eq-5d.html>



Table 3: Screening numbers by quarter (n=891; 51 people did not have dates entered for their screening)

Quarter	Number of screenings	Percentage of screenings
1 (May – Jul 2015)	243	27%
2 (Aug – Oct 2015)	254	29%
3 (Nov 2015 – Jan 2016)	221	25%
4 (Feb – Apr 2016)	173	19%

90% (n=850) resulted in first valid ‘MUST’ scores (with the remaining 92 having missing scores; the first valid ‘MUST’ score is used and therefore 92 screenings had no valid ‘MUST’ scores at all). Wherever possible, ‘MUST’ scores were calculated (or amended if the staff member had calculated them incorrectly) by the project dietitian using the data provided on the data collection form. Table 4 shows how screenings were done with missing ‘MUST’ scores by each team. NB. This does not include scores which were simply calculated incorrectly by the teams. Despite having no valid ‘MUST’ score, some of these 92 screenings had ‘MUST’ categories recorded, which were used to calculate prevalence of malnutrition risk.

Table 4: Number of missing ‘MUST’ scores (or screenings where ‘MUST’ score was unable to be calculated by the project team from the data available)

Team	No. of screenings	No. of missing ‘MUST’ scores	% of missing ‘MUST’ scores
CCT and OPMH	396	77	19.4%
Care home	508	8	1.6%
Social care	33	6	18.2%
GPs / PNs	5	1	20%
Total	942	92	(average 10%)

Prevalence of malnutrition

Prevalence of malnutrition risk was calculated for all people for their first (or first valid) ‘MUST’ score, and also for all people with multiple screenings (more than one ‘MUST’ screening). Table 5 shows the prevalence of malnutrition risk for people screened by each team. This data represents 80% of the people screened; 20% (n=73) of the people screened did not have any correct ‘MUST’ scores or categories, meaning risk could not be calculated for these people. This reveals that an average of 24.5% of people were ‘at risk’ at first (or first valid) screening, and prevalence varied from 8% for social care to 32% of care home residents. Table 6 shows the prevalence of malnutrition risk for the 142 people screened more than once (between 2 and 13 times). This data represents 89% (n=127) of the people screened; 11% (n=15) of the people screened did not have any correct ‘MUST’ scores or categories, meaning risk could not be calculated for these people. This shows that 27.5% (n=35) of these people were ‘at risk’ of malnutrition at their first (or first valid) screening.



Table 5: Prevalence of malnutrition risk according to community team (at first valid 'MUST' screening) for the 302 people with valid 'MUST' score and / or category (73 people did not have this valid data)

Team	% of people at 'medium risk' (i.e. 'MUST' = 1)	% of people at 'high risk' (i.e. 'MUST' = 2+)	Total % 'at risk'
CCT & OPMH	7% (n=18)	11% (n=30)	18% (n=48)
Care home	15% (n=11)	17% (n=12)	32% (n=23)
Social care	-	8% (n=2)	8% (n=2)
GPs / PNs	20% (n=1)	20% (n=1)	40% (n=2)
Total	10% (n=30)	14.9% (n=45)	24.5% (n=75)*

* Note that the overall percentage of people 'at risk' is not the average of figures in column 4 because 73 of people did not have any correct 'MUST' scores or categories, meaning risk could not be calculated for these people. This figure was calculated as a percentage of the 302 people with valid 'MUST' scores and/or category

Table 6: Prevalence of malnutrition risk according to community team (at first valid 'MUST' screening) for people screened multiple times (at least twice) for the 127 people with valid 'MUST' score and / or category (15 people did not have this valid data)

Team	% of people at 'medium risk' (i.e. 'MUST' = 1)	% of people at 'high risk' (i.e. 'MUST' = 2+)	Total % 'at risk'
CCT & OPMH	9% (n=7)	9% (n=7)	18% (n=14)
Care home	14% (n=9)	18% (n=12)	32% (n=21)
Total	12% (n=16)	15% (n=19)	27% (n=35)

Weight change for people 'at risk' of malnutrition ('MUST' score of 1+) with at least 2 screenings

16% (n=61) of the people screened had both been screened more than once and had at least one 'MUST' score of 1 or more. These people were all either care home residents or under the care of the CCT (people screened by social care and practice nurses were only screened once or didn't have a 'MUST' score of >0). The results in this section refer to the difference between first and last screening; the first screening being either an initial score >0 or when 'MUST' increased from previously being '0'. The purpose of this was to show what happened to people's risk of malnutrition following 'at risk' identification.

Body Mass Index (BMI) change – 51 people had valid data needed to analyse a change in BMI. The data for the numbers of people (and overall percentages) experiencing a change in their BMI is shown in table 7. This shows that nearly half of the people 'at risk' of malnutrition went on to experience a decrease or further decrease in their BMI over time.

Table 7: Number of people experiencing a change in their BMI between first and last valid screening

Team	Number of people (n=51)		
	Increase	No change	Decrease
CCT & OPMH	7	4	4
Care home	5	10	21
Total	24% (n=12)	27% (n=14)	49% (n=25)



Weight change – 56 people had valid data needed to analyse a change in weight. The data for the numbers of people (and overall percentages) experiencing a change (any change regardless of how small) in their weight is shown in table 8. This shows that over half of the people ‘at risk’ of malnutrition went on to experience a decrease or further decrease in their weight over time.

Table 8: Number of people experiencing a change in weight between first and last valid screening

Team	Number of people (n=56)		
	Increase	No change	Decrease
CCT & OPMH	4	11	5
Care home	10		26
Total	25% (n=14)	20% (n=11)	55% (n=31)

Significant weight change – 56 people had valid data needed to analyse a significant change in weight; >5% weight loss or increase. The data for the numbers of people (and overall percentages) experiencing a significant weight change is shown in table 9.

Table 9: Number of people experiencing a significant weight change between first and last valid screening

Team	Number of people (n=56)		
	Significant increase	Significant decrease	No significant change
CCT & OPMH	2	3	15
Care home	2	16	18
Total	7% (n=4)	34% (n=19)	59% (n=33)

‘MUST’ score change – All 61 people had valid data needed to analyse a change in ‘MUST’ score. The data for the numbers of people (and overall percentages) experiencing a change in ‘MUST’ score is shown in table 10.

When considering the overall impact of change in ‘MUST’ score combined with weight change:

- Of the people who had a decrease (improvement) in ‘MUST’ score (n=25), 76% of them (n=19) had valid data to analyse weight change. 42% (n=8) had experienced weight gain and 58% (n=11) had experienced weight loss (this relates to any change in weight; not just significant change)
- Of the people who had an increase (worsening) or no change in ‘MUST’ score (n=36), 89% (n=32) had valid data to analyse weight change. Of these, 19% (n=6) had experienced weight gain

Table 10: Change in ‘MUST’ score for people ‘at risk’ between first and last valid screening

Team	Number of people (n=61)		
	Decrease in ‘MUST’ score (improved)	Increase in ‘MUST’ score (worse)	No change in ‘MUST’ score
CCT & OPMH	12	1	12
Care home	13	7	16
Total	41% (n=25)	13% (n=8)	46% (n=28)



Completion of individualised care plans

94% of people with a 'MUST' score > 0 (i.e. at risk of malnutrition) had some kind of care plan in place. However, how and to what extent the staff in the care home and CCT carrying out the screenings were responding to changes in 'MUST' score was not fully analysed. A brief review of the data suggests that whilst care plans are put in place on initial screening in the majority of people, these were not he changed or updated to reflect changes in 'MUST' in those people where 'MUST' score changed during the course of the data collection period.

Methods for measuring / estimating height, weight and BMI

Weight – of the 375 people screened, 70% (n=262) had valid measurements for weight at initial screening. Table 11 shows the methods for obtaining weight. This data reveals that 62% of all people with 'valid' weight data (screened by all teams) have used recalled or estimated (visually) weight to their 'MUST' score. If care home data is excluded data is excluded, 84% of people had weight data obtained through visual estimation or person recall, with only 16% of these people being weighed using scales.

Table 11: *Methods for obtaining weight at initial screening*

Team	Number of people measured using each method		
	Scales or hoist	Estimated	Person recall
CCT & OPMH	27	16	123
Care home	70	0	0
Social care	1	0	23
GPs / PNs	2	0	0
Average across teams	39% (n=100)	5% (n=16)	35% (n=146)

Height – of the 375 people screened, 59% (n=223) had valid measurements for height at initial screening. The majority of these (69%, n=155) were for people under the care of the CCT. Table 12 shows the methods for obtaining height. This data reveals that 89% of all people with 'valid' height data (screened by all teams) have used recalled or estimated (visually) height to their 'MUST' score.

Table 12: *Methods for obtaining height at initial screening*

Team	Number of people measured using each method					
	Stadiometer	Ulna length	From previous records	Estimated	Person recall	From family member
CCT & OPMH	0	0	1	21	142	0
Care home	10	7	3	0	12	0
Social care	0	0	0	1	23	1
GPs / PNs	2	0	0	0	0	0
Average across teams	5% (n=12)	3% (n=7)	2% (n=4)	10% (n=22)	79% (n=177)	1% (n=1)

BMI – of the 375 people screened, 64% (n=239) had valid measurements for height at initial screening. 71% (n=170) of these BMIs were calculated using the heights and weights obtained by the various methods as shown in tables 11 and 12. The remaining 29% (n=69) were estimated using mid



upper-arm circumference. 68 of these were done by the CCT, with one being done by a Practice nurse.

Results of wellbeing assessment forms

A total of 274 wellbeing forms were completed as part of the project. Of these, 69% (n=188) were completed fully, i.e. without any missing information or data. Forms with missing data have still been included in the data analysis where possible. The majority of forms (60%) were completed in July 2015 and January 2016, which corresponded with the times when the project dietitian actively encouraged the completion of the forms.

Number of wellbeing forms completed by each team / sector

- Of the 942 patients screened for malnutrition as part of the project, 18% of them (n=173) had at least one wellbeing form completed
- Of the 173 people with at least one wellbeing form completed:
 - 22% (n=38) had a 'MUST' score of 1 or more on initial screening
 - 37% (n=64) had at least two wellbeing forms completed, which could be reviewed by changes over time – 25% of these (n=16) were at risk of malnutrition on initial screening, and the remaining 75% (n=48) had an initial 'MUST' score of 0

Table 13 below shows the number of forms completed by each team / sector, corresponding numbers of people, the number of 'at risk' people with completed forms and the number of 'at risk' people with more than one form completed (which can therefore be compared). This shows that whilst the CCT provided the highest number of completed forms, the care home had more 'at risk' people completing forms and more people with one or more completed form.

Table 13: *Data on numbers of forms collected and number of corresponding people*

Team	No. wellbeing forms	No. people with wellbeing forms	No. people 'at risk' (on initial screening) with forms completed	No. people 'at risk' (on initial screening) with at least 2 forms completed
CCT & OPMH	134	101	17	5
Care home	126	58	19	11
Social care	14	14	2	0

Did wellbeing scores improve for people with at least two wellbeing forms (n=64) regardless of initial 'MUST' score?

Of the 173 people with a form completed, 37% (n=64) had at least two wellbeing forms completed, which could be reviewed by changes over time. Between the first and last wellbeing form, 56% (n=35) improved their wellbeing score, 32% (n=20) had worsened their wellbeing score and 12% (n=8) remained unchanged. Of the same 64 people, 56 of them (87%) had valid first and last 'overall health scores'. Of these, 30% (n=17) improved their overall health score, 27% (n=15) had worsened their overall health score and 43% (n=24) remained unchanged.



Wellbeing and overall health scores were compared with changes in 'MUST' score to see if improving 'MUST' score led to improved wellbeing. Due to the fact that weight needs to increase before you see an increase in 'MUST' score, those people with improved wellbeing scores were also compared to changes in weight. Data for the people who had improved their wellbeing or overall health score is shown in table 14. It is difficult to draw out specific themes for these results due to the small sample numbers involved.

Table 14: Data comparing change in 'MUST' score and weight for the people with improved wellbeing data (between first and last wellbeing form)

	Improved 'MUST'	Worsened 'MUST'	'MUST' unchanged	Invalid (no 'MUST' recorded)	Gained weight	Lost weight	Weight unchanged
Of the n=35 with improved wellbeing	18% (n=6)	11% (n=4)	65% (n=23)	6% (n=2)	45% (n=16)	25% (n=9)	30% (n=10)
Of the n=17 with improved health score	18% (n=3)	18% (n=3)	63% (n=10)	(n=1)	41% (n=7)	25% (n=4)	35% (n=6)

Table 15: Data comparing change in 'MUST' score and weight for the people with worsened wellbeing data (between first and last wellbeing form)

	Improved 'MUST'	Worsened 'MUST'	'MUST' unchanged	Invalid (no 'MUST' recorded)	Gained weight	Lost weight	Weight unchanged
Of the n=20 with worsened wellbeing	0	20% (n=4)	70% (n=14)	10% (n=2)	20% (n=4)	40% (n=8)	40% (n=8)
Of the n=15 with worsened health score	13% (n=2)	20% (n=3)	67% (n=10)	0	13% (n=2)	20% (n=3)	67% (n=10)

Wellbeing form results for people with at least two forms and an initial 'MUST' score of 1+ (n=16)

Of the 16 people at risk of malnutrition on initial screening, 15 had usable data. 19% (n=3) had improved total wellbeing measures (both wellbeing score and overall health score). These people were all care home residents and had initial and final 'MUST' scores of:

1. 'MUST' score decreased from 2 (June 2015) to 1 (February 2016)
2. 'MUST' score decreased from 1 (June 2015) to 0 (April 2016)
3. 'MUST' score decreased from 1 (June 2015) to 0 (April 2016)

The results of all 15 people at risk of malnutrition on initial screening with usable data are shown in table 16. This data (although from a small sample sample) suggests that improved 'MUST' score can lead to improved wellbeing.



Table 16: Data on people with at least two forms and an initial 'MUST' score of 1 or more

	No. of people	No. people with improved wellbeing*	No. people with unchanged wellbeing*	No. people with worsened wellbeing*
Improved 'MUST' score	8	6	1	1
'MUST' score unchanged	5	1	3	1
'MUST' score worsened	2	0	0	2

* relates to any aspect of improvement; either in wellbeing scores and/or overall health scores. However where one of the scores (either wellbeing or overall health scores) had improved and the other worsened, this has been recorded as 'unchanged'.

Investigation of the diagnoses for these 16 individuals revealed that whilst two of them had passed away between completion of their last wellbeing form and the time of data analysis (July 2016), none of them were classed as 'end stage' or 'palliative'. Primary diagnoses varied, and are shown in table 17.

Table 17: Diagnoses of the 15 people with at least two wellbeing forms and an initial 'MUST' score of 1 or more

Primary diagnosis	No. of people
Dementia	3
Cognitive impairment	2
Parkinsons disease	1
Huntingdon's disease	1
Previous sub-dural haematoma & stroke	1
Chronic renal disease	1
Congestive cardiac failure	1
Type 2 diabetes	1
Leg ulcer	1
Diagnosis not available*	4

* two people had passed away, and two people did not have diagnoses available upon requesting this information from the teams that carried out the screening

Conclusions & Recommendations

Numbers screened

Whilst the screening numbers remaining fairly consistent during 2015 representing good engagement from all teams, screening numbers reduced in 2016, which may be due to other clinical priorities and change in team managements. Numbers of people screened from all teams reduced, but in particular the CCT and social care. The majority of the follow up support carried out was also in mid to late 2015, and after this, despite offering support to all teams, the take-up of support was low. Despite engaging all teams at the project's outset, screening numbers and take of support of support were affected by a number of issues outside the project's control, including: staff shortages, team re-structuring, loss of key managers and other clinical priorities. The lowest screening numbers



came from social care and general practice. Reports from staff within these teams which may explain the results appeared to fall into two key categories; 1) they reportedly do not see many patients that fit in with the project criteria (outside area, under 65, with some practice nurses reporting that the ‘at risk’ patients are usually seen at home rather than coming into the practice) and 2) some staff felt that screening was not part of their role.

As covered in the training evaluation report, 48% (n=69) of the staff who were going to be (or who were already) screening using ‘MUST’ received training before the start of the data collection timescale at the beginning of May 2015, with the remaining staff receiving training by November 2015 (with the exception of two GPs who were trained in January 2016). Despite best efforts from the OPEN team in trying to arrange training dates for all teams and staff as early as possible, it was difficult in practice to arrange dates within the right timeframe due to the number of teams involved, team re-structuring, management change, staff shortages, and other clinical priorities. In fact several of the training dates originally booked for early 2015 were delayed to later in 2015 due to a combination of these issues. This delay in training may have affected the screening data collection (including numbers screened, numbers of correct ‘MUST’ scores obtained, missing data, and care planning), thereby skewing results. Future projects should understand that these issues are outside the project’s control, will inevitably play a part in affecting results.

Prevalence of malnutrition

The prevalence of malnutrition at initial screening appears in line with the figures found in published data for community nursing and the care home. The prevalence found in general practice of 40% is a lot higher than that found in other published data – this is probably due to the very small sample size; only four people were screened in primary care, and through discussion with practice nurses in the West Hampshire region since the end of the project, it became clear that practice nurses tend to only screen people they think ‘look’ malnourished, accounting for the high percentage. The prevalence of malnutrition in people under the care of social services is lower than expected; again this may be due to low sample sizes and a low numbers of people screened. Table 18 shows a comparison of the prevalence levels found in Eastleigh and those found in published data.

Table 18: *Prevalence of malnutrition in Eastleigh compared with national published data*

	Prevalence found in the OPEN Eastleigh project	Prevalence in published data
Community nursing	18%	14% of elderly living at home (Elia & Stratton, 2005)
Social care	8%	28% of hospital admissions (Russell & Elia, 2008; Russell & Elia, 2009)*
Care home	32%	30 – 42% (Russell & Elia, 2008; Russell & Elia, 2009)
General practice	40%	14% of elderly living at home (Elia & Stratton, 2005)

* community nursing and social care have been combined, as people using these services are likely to have multiple co-morbidities and have an increased risk of being admitted to hospital

There may also be some issues with the way that weights and heights were obtained, which could have affected the results obtained. There were a large number of people whose weights and heights were obtained using either a recalled figure or a visual estimation; 89% of heights from all teams were obtained through estimation or person recall, and 84% of weights from teams (excluding the



care home where all residents were weighed using scales) were obtained through estimation or person recall. This was likely because of the difficulty and impracticalities of measuring height and weight in community settings, especially in people's own homes. There is a need to look at simpler ways of screening in the community which do not simply rely on estimations of weight and height which are likely to be inaccurate.

People 'at risk' of malnutrition ('MUST' score of 1+) with at least 2 screenings

Whilst 25% of people (n=14) had increased their weight (as per table 8), only 7% of people had experienced a significant weight change. A significant weight change will often be needed to cause a decrease in 'MUST' score, depending on where BMI sits; this suggests that there will be people who are still gaining weight, but their weight gain is not yet significant enough to result in an improved 'MUST' score. This may be a reason to explain why 46% of people (n=28) had no change in their 'MUST' score.

Wellbeing forms

The project aimed to only collect wellbeing forms for those people 'at risk' of malnutrition (i.e. 'MUST' score of 1 or more) at initial screening, and then every 3 months thereafter. Despite this, 75% of patients with at least two wellbeing forms had a 'MUST' score of 0 at initial screening, making it difficult to demonstrate whether improving 'MUST' score affected perceived wellbeing. With only a small sample number to review (forms from 16 patients; 1.7% of the total patients screened) it is difficult to draw conclusions about the correlation between 'MUST' score and change in perceived wellbeing. Had staff fully realised that only patients 'at risk' should complete these assessment forms, the project may have been more successful in getting more forms completed, reducing the additional workload on staff.

Moving Forward

Despite the challenges faced by the project, there have been many positives to the project in terms of embedding good nutrition practice, and several 'next steps' have been taken in terms of spreading the good practice wider across the Wessex region as a result of the screening data obtained from the OPEN project in Eastleigh.

- The members of the Eastleigh steering group (which was set up and organised by the Wessex AHSN until May 2016) plan to continue meeting as a group, without the direction and leadership of the Wessex AHSN – showing that local team representatives are keen to continue the good work started in Eastleigh and look at how to improve practice even further. The group have already met twice since writing this report
- The care home involved in the project are continuing to use the screening paperwork introduced as part of the OPEN Eastleigh project, as they found this more effective and useful than the paperwork they were using before the project
- Measuring height and weight in the community is impractical and using person recall or visual estimation is often inaccurate. Going forward, the team will look at piloting simpler ways of screening which do not rely on height or weight measurements. In particular, using questions modified from 'MUST' to evaluate whether the older person has unintentionally lost weight and whether the cause may be social or medical along with the PaperWeight Nutrition Armbands – a



single use paper band to easily measure mid upper-arm circumference – with two organisations; Age Concern Hampshire and Dorset Partnership for Older People Programme (POPP). Information from this pilot will also provide input regarding simpler screening methods for use with adult social care teams.

- Due to feedback from several of the practice nurses and GPs involved in the OPEN Eastleigh project who felt they didn't see 'at risk' patients in the practice, a six month pilot is underway where a volunteer (from a voluntary sector organisation) will screen patients over 65 for one morning a week. This will give an idea of the prevalence of malnutrition risk at one large GP practice in Eastleigh, as well as providing data on the effectiveness of using a volunteer instead of healthcare staff in carrying out nutritional screening and provision of basic nutrition advice
- Due to the lack of screening by practice nurses in the OPEN Eastleigh project, three practice nurse forums (spanning the West Hampshire CCG region) were attended where the OPEN team were able to investigate current screening practice amongst practice nurses and identify barriers and potential solutions (through an online survey followed by a presentation and group discussion). The team will then work with West Hampshire CCG to look at ways in which the Wessex AHSN can support them to embed nutritional screening in practice
- It became apparent through the OPEN Eastleigh project that the screening policy in place covering the community nursing teams (CCT and OPMH) was based on hospital inpatient recommendations, rather than being suited to the community setting. The Wessex AHSN team have been working with a Southern Health NHS FT Integrated Service Matron to a) look at how to adapt the policy to make it more suited to the community setting (which is likely to improve screening and individualised care planning further), b) investigate ways to enhance the sharing of nutritional information between the different teams, and c) carry out a research project to look at understanding the barriers and enablers to implementing nutrition interventions in the community

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Version Control

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