Nutrition Resources in Care Homes (NRICH) Project Review

January 2017- November 2017

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1. Introduction

1.1 Aim
The aim of this document is to review and evaluate the ‘Nutrition Resources in Care Homes’ (NRICH) project which was launched in January 2017. The NRICH project aim is to deliver a bespoke in house training package to care homes to improve the identification and treatment of malnutrition.

1.2 Background
Malnutrition is a major cause and consequence of poor health in older adults. It is associated with a delayed recovery, longer hospital stay and poor clinical outcomes. Three million people are malnourished or at risk of malnutrition in the UK, 1.3 million of these are older adults, costing an estimated £19.6 billion per year in England\(^1\).

Western Sussex Dietitians based at St Richard’s Hospital in Chichester provide a Community dietetic service as part of a service agreement with Sussex Community Foundation Trust. The service provides a domiciliary service for individuals in their own homes and in care homes who are unable to attend an outpatient appointment to see a dietitian. Coastal West Sussex has one of the oldest populations in England, with approximately 266 care homes across the locality\(^2\), approximately half of these homes are covered by the Community Dietitians service; unfortunately at present there is no reciprocal service in the Worthing area.

Since 2015, the Community Dietitians have carried out an annual two month snapshot review of referrals to help understand the nature of referrals received, the subsequent actions taken by the dietitians, and to identify ongoing areas for service development. For the past 3 years, care home residents accounted for 65% of referrals. Anecdotally, the team are aware of variable nutritional screening practice and limited adoption of the ‘Food First’ approach in care homes. The service also received a large proportion of its referrals from a small number of homes despite there being a large number of care homes in the area. These care homes refer multiple residents, but do not follow “Food First” advice or implement the management guidelines as detailed in the Malnutrition Universal Screening Tool, ‘MUST’.

Dietitians frequently observe a lack of consistency in ‘MUST’ screening with minimal specific care planning based on an individual’s dietary requirements.

The NRICH project was developed to address these issues.
1.3 Aims and Objectives

The objectives of the initial phase of the NRICH project were:

- To develop a malnutrition training ‘toolkit’ and nutrition resource pack for care homes.
- To recruit 10 care homes who had patients under the care of the community dietitian.
- To perform a baseline audit of nutrition screening practices, ‘Food First’ implementation, mealtime experience and Oral Nutrition Support (ONS) prescribing in each home.
- To provide bespoke training based on the identified needs of each care home including the implementation of correct ‘MUST’ screening, appropriate care planning and ‘Food first’ approaches e.g. standardised food fortification recipes, snacks and homemade milkshakes.
- To support appropriate prescribing of ONS in care homes in line with the Costal West Sussex Clinical Commissioning Group (CWS CCG) ONS formulary
- To evaluate qualitative and quantitative impact immediately after the intervention, at 6 months and annually.
- To provide a NRICH training award for participating care homes who demonstrate adequate improvement in nutritional practice

2. Method

2.1 Stakeholder Engagement

Key stakeholders were identified as Care Homes, General Practitioners, the Care Quality Commission (CQC) and Healthwatch.

In December 2016 a survey was developed to obtain the views on nutrition training from a small sample of care homes across the area; 12 of the 18 homes approached completed the survey. The key points from the survey were:

- Various types of nutrition training were available to staff (but this was not always compulsory).
- All 12 care homes showed a preference for in-house training for all staff
- 11 of 12 homes felt it would be useful to have a review of nutrition practice before and after training.

The NRICH team also sent a one page press release out to all GP practices and community health teams across the area to advise them of the project. As part of ongoing work with the CWS CCG Medicines Management team, the NRICH project was promoted during presentations to local GPs. The local CWS CCG care home forum was unfortunately put on hold for the majority of 2017 due to restructuring; the NRICH team plan to engage with this forum once reinstated.

The CQC are the regulatory body governing care home standards, the NRICH team felt it would be useful to find out more about how they evaluate nutritional care in care homes.
In February 2017, the NRICH team presented plans for the project to local CQC inspectors. The CQC team responded positively to the project proposal and it was agreed they would be informed when a care home chose to engage with the NRICH project.

The NRICH team also contacted Healthwatch West Sussex, which is an independent organisation within the CQC which uses a community-based approach to identify local health concerns. The Healthwatch Community Involvement Lead was keen to promote the issues raised in wider circles, and also suggested using volunteers to assist with the NRICH work whilst promoting Healthwatch.

2.2 Development of the NRICH Project Programme
The programme structure was agreed by the team as:

1. An initial consultation with each care home, including information gathering and signing of an agreement to commit to the NRICH programme.
2. Conduct a pre-training audit of the nutritional practice in the care home.
3. Provide bespoke training based on the results of the pre-training audit.
4. Conduct post-training audit of nutrition practice in the care home.
5. Present the NRICH award to the care home once appropriate improvement in nutrition practice is demonstrated; the award to be valid for 1 year and the CQC informed.
6. Review of nutrition practice after 1 year to re-validate the NRICH award.

2.3 Development of Nutritional Standards and Audit Tools
There are several guidance documents describing nutritional care in care homes. These are often vague in terms of the standards expected. NICE guideline CG32\(^3\) recommends that care homes screen residents for malnutrition risk on admission and upon concerns, but does not advise on which specific tool to use. ‘MUST’ is the nationally validated tool for malnutrition screening, as advised by NICE.

The NRICH team developed five key standards to be evaluated at baseline and post-intervention audit:

1. All residents should be screened accurately using ‘MUST’.
2. An appropriate nutritional care plan should be in place for each resident.
3. Standard menus should be in line with British Dietetic association (BDA) guidance on nutritional adequacy.
4. A standard ‘Food First’ approach (1 pint of fortified milk, 2 nourishing snacks and 3 fortified meals) should be available for those residents at medium or high risk of malnutrition.
5. Oral nutritional supplements should be prescribed appropriately using local CCG formulary guidance.

To evaluate standards 1, 2 and 5, a ‘MUST’ audit tool was developed based on similar ‘MUST’ audit tools used by the dietetic department. A menu audit tool was also created.
to evaluate standards 3 and 4; this tool was largely based on the BDA ‘Digest’ document and a nutrition checklist for care homes developed in Northern Ireland.

Another important aspect of nutrition in care homes that the NRICH team wanted to investigate was the mealtime environment. The team reviewed documents such as assessment forms for NHS Patient Led Assessments of the Care Environment (PLACE) and guidance from the Caroline Walker Trust to develop a mealtime environment observation tool.

To compare pre- and post-training results, objective scoring systems were added to the menu and mealtime observation audit tools.

2.4 Development of Resources and Training Materials
Using the resources developed during the ‘Community Refocus’ project in 2015 the following resources were created to support the NRICH project:

- Forms to support initial administration:
  - Standard introduction letter for care homes
  - Care home information gathering form
  - Care home NRICH Agreement
  - Standard letters to inform local GPs and CQC of care home involvement

- Audit tool proformas
- Excel documents for information collection and data analysis
- NRICH Care Home Malnutrition Resource Pack
- NRICH Care Home Malnutrition training workbook to be used in conjunction with the resource pack and training
- Care Home ‘MUST’ form
- PowerPoint presentations to support the topics covered by the audits listed above, with supporting lesson plans and workbook

2.5 Care Home Recruitment & Training Provision
Care home referrals received by the Community Dietitians were recorded on the information collection spreadsheet from January 2017 onwards. Using this data, the NRICH team approached 10 homes between January and September 2017, with a particular focus on those with a high number of referrals. One home was recruited on the basis of previous dietitian’s experience suggesting input was required. The timing of recruitment was based on the dietitian’s workload and care home availability. The dietitian then organised audit and training dates in conjunction with the care home to suit their staff availability. Care home managers were advised about the training sessions in order to select appropriate staff to attend. Evaluation forms were completed by staff after each session.
3. Results

3.1 Care Home Demographics
As shown in table 1, ten care homes were recruited to take part in the NRICH project. The care homes were a mixed cohort of care types, although predominately nursing care, with a maximum capacity of 497 residents. However, most homes were not at full capacity during this period.

Table 1: Care Home Demographics

<table>
<thead>
<tr>
<th>Care Home initials</th>
<th>Location</th>
<th>Type of Care Home</th>
<th>No. of beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT</td>
<td>Midhurst</td>
<td>Nursing</td>
<td>22</td>
</tr>
<tr>
<td>KL</td>
<td>Chichester</td>
<td>Residential/Nursing</td>
<td>77</td>
</tr>
<tr>
<td>WH</td>
<td>Arundel</td>
<td>Residential/Nursing</td>
<td>76</td>
</tr>
<tr>
<td>HB</td>
<td>Bognor</td>
<td>Nursing</td>
<td>66</td>
</tr>
<tr>
<td>RB</td>
<td>Bognor</td>
<td>Nursing</td>
<td>35</td>
</tr>
<tr>
<td>B</td>
<td>Bognor</td>
<td>Residential/Nursing</td>
<td>40</td>
</tr>
<tr>
<td>DH</td>
<td>Chichester</td>
<td>Nursing</td>
<td>28</td>
</tr>
<tr>
<td>YT</td>
<td>Arundel</td>
<td>Nursing</td>
<td>40</td>
</tr>
<tr>
<td>TH</td>
<td>Bognor</td>
<td>Residential</td>
<td>20</td>
</tr>
<tr>
<td>MH</td>
<td>Chichester</td>
<td>Residential/Nursing</td>
<td>93</td>
</tr>
</tbody>
</table>

3.2 Length of Intervention
The care homes were recruited from January 2017 to September 2017. At time of writing, March 2018, nine homes had completed the review audit process, with one home awaiting review. Figure 1 provides an overview of the process and the average length of time between each stage. The average length of intervention (between end of initial audit and beginning of review audit) was 141 days.

![Figure 1: Average time taken to complete NRICH programme](image)

3.3 NRICH Training
The NRICH training comprised 2 sessions: ‘Malnutrition & ‘MUST’ and ‘Mealtime Experience’. Nine homes received at least one of each session (MH has only received ‘Malnutrition & MUST' training to date). Overall the care homes received an average of seven hours of ‘Malnutrition and ‘MUST’ training and six hours of ‘Mealtime Experience'
training. Tables 2 and 3 provide an overview of the staff demographic and staff numbers attending each type of session at each care home:

Table 2: Attendance at ‘Malnutrition & ‘MUST’ Training sessions

<table>
<thead>
<tr>
<th>Care Home</th>
<th>Catering Team</th>
<th>Care Assistants</th>
<th>Team Lead/Seniors</th>
<th>Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT</td>
<td>5</td>
<td>10</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>HB</td>
<td>30</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>WH</td>
<td>20</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>KL</td>
<td>10</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>RB</td>
<td>15</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>B</td>
<td>10</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>DH</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>5</td>
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<tr>
<td>B</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>YT</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>TH</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>MH</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 3: Attendance at ‘Mealtime Experience’ Training sessions

<table>
<thead>
<tr>
<th>Care Home</th>
<th>Catering Team</th>
<th>Care Assistants</th>
<th>Team Lead/Seniors</th>
<th>Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT</td>
<td>5</td>
<td>10</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>HB</td>
<td>30</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>WH</td>
<td>20</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>KL</td>
<td>10</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>RB</td>
<td>15</td>
<td>5</td>
<td>1</td>
<td>5</td>
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<tr>
<td>B</td>
<td>10</td>
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<td>1</td>
<td>5</td>
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<tr>
<td>DH</td>
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<td>5</td>
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<td>B</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>5</td>
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<tr>
<td>YT</td>
<td>5</td>
<td>5</td>
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<td>5</td>
</tr>
<tr>
<td>TH</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>MH</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Only four homes received training for the catering staff, with this often being a more informal session with one or two members of the catering team.

The evaluation of the sessions showed 100% good or excellent reviews in 3 categories; overall impression of session, overall impression of learning experience and aims/objectives for attendance met.
3.4 Comparison of Initial and Review Audit Results

Table 4 provides an overview of the changes between initial and review audit for each care home. To date, nine homes have received review audits. Three homes (BT, HB and DH) required another ‘MUST’ audit due to lack of significant improvement; the second review audit data for these homes is included in Table 4.

Table 4: Overview of Initial Audit vs Review Audit Results

<table>
<thead>
<tr>
<th>Initial Audit</th>
<th>KL</th>
<th>BT</th>
<th>WH</th>
<th>HB</th>
<th>RB</th>
<th>B</th>
<th>DH</th>
<th>YT</th>
<th>TH</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of residents audited</td>
<td>70</td>
<td>22</td>
<td>61</td>
<td>43</td>
<td>17</td>
<td>31</td>
<td>26</td>
<td>32</td>
<td>17</td>
</tr>
<tr>
<td>Residents with a 'MUST' form (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>MUST' completion in past month (%)</td>
<td>100</td>
<td>59</td>
<td>97</td>
<td>86</td>
<td>94</td>
<td>52</td>
<td>100</td>
<td>97</td>
<td>0</td>
</tr>
<tr>
<td>MUST' accuracy (%)</td>
<td>89</td>
<td>18</td>
<td>66</td>
<td>69</td>
<td>71</td>
<td>42</td>
<td>46</td>
<td>59</td>
<td>88</td>
</tr>
<tr>
<td>No. of residents on ONS</td>
<td>21</td>
<td>3</td>
<td>9</td>
<td>6</td>
<td>6</td>
<td>10</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Documented action/care plan (%)</td>
<td>92</td>
<td>9</td>
<td>96</td>
<td>95</td>
<td>100</td>
<td>96</td>
<td>96</td>
<td>100</td>
<td>94</td>
</tr>
<tr>
<td>No. of residents currently under Dietitian</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Menu audit score (%)</td>
<td>95</td>
<td>70</td>
<td>97</td>
<td>90</td>
<td>89</td>
<td>89</td>
<td>95</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>Mealtime audit score (%)</td>
<td>70</td>
<td>74</td>
<td>76</td>
<td>57</td>
<td>88</td>
<td>69</td>
<td>67</td>
<td>72</td>
<td>84</td>
</tr>
</tbody>
</table>

| Review Audit | |
|---------------|----|----|----|----|----|---|----|----|----|
| No. of residents audited | 68 | 19 | 61 | 51 | 21 | 28 | 26 | 31 | 17 |
| Residents with a 'MUST' form (%) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| MUST' completion in past month (%) | 95 | 100 | 75 | 100 | 100 | 71 | 100 | 84 | 100 |
| MUST' accuracy (%) | 82 | 74 | 68 | 75 | 95 | 89 | 100 | 87 | 88 |
| Documented action/care plan (%) | 100 | 100 | 78 | 62 | 100 | 71 | 100 | 84 | 100 |
| No. of residents on ONS | 14 | 1 | 8 | 6 | 2 | 1 | 1 | 3 | 2 |
| No. of residents under Dietitian | 5 | 0 | 4 | 3 | 1 | 0 | 4 | 5 | 2 |

Key results:

- 100% of care homes had ‘MUST’ forms in patient files and
- 89% showed improvement in ‘MUST’ accuracy post intervention
- 89% of care homes saw a reduction in the number of residents on ONS
- 67% showed improvement in the documentation of care plans
- 67% of care homes had an improved mealtime audit score

Most care homes saw an improvement in ‘MUST’ completion and accuracy, with some homes showing vast improvement.

The standard of menus was generally high, as can be seen in the initial audit score; therefore menus were not routinely re-audited
All homes saw a reduction or maintained the number of residents on ONS and most had slightly less residents under the active care of the dietitian.

3.5 NRICH Award

The NRICH award was given to care homes that had demonstrated improvement in the areas identified in the initial audit findings.

To date six homes (KL, RB, B, DH, TH, and RB), have been awarded the NRICH award. Three homes (WH, HB, YT) have agreed that they require further support to improve their scores following their review audit.

Going forward, the intention is to re-audit these homes after one year and re-validate their award if standards are maintained or further improved.

4. Discussion

The development and initial phase of the NRICH project has been successful in many ways:

- The NRICH team has developed a wide variety of resources for use in training and to support the NRICH message in the care home setting. These include: NRICH resource books and supporting training workbooks used in sessions with care staff, recipe sheets and standardised training sessions to ensure consistent messages.

  Care homes can access these freely on the Western Sussex Hospitals website. [http://www.westernsussexhospitals.nhs.uk/services/dietitians/](http://www.westernsussexhospitals.nhs.uk/services/dietitians/).

  Feedback from care homes on the resources developed was taken on board and actioned accordingly. For example, the ‘MUST’ screening tool and training presentation were updated following comments from care homes on step 2 of ‘MUST’ and the criteria for ‘weight 3-6months ago’.

- Stakeholder engagement was an important part of the NRICH project development and ongoing stakeholder support will be crucial for the project to be an ongoing success. Building links with the CQC was extremely useful for guiding the development of the project to match the care home registration requirements. Further engagement with care homes through local forums may provide more opportunities to obtain additional ideas and feedback for service development.

- Initial engagement of care homes with the NRICH project was relatively straightforward. Care homes seemed pleased to take part in the programme. They appeared to understand the importance of nutritional care, and welcomed the opportunity for review and training. As demonstrated in section 3.2 the average length of intervention (from end of initial audit to review audit) was approximately 5 months which was longer than initially planned in the NRICH objectives. A number of factors contributed to this such as NRICH staff annual leave, difficulties in
communicating with some homes to arrange training, and several instances of non-attendance at training which required sessions to be re-arranged.

The audit review process highlighted that staff turnover is high within care homes and staff frequently left during the intervention time period making it hard to ensure the NRICH message was adopted and maintained by the care home team.

- The NRICH service aimed to deliver a flexible approach for care homes to access training, and thus there were no specific requirements with regard to how many sessions would be run or how many staff were to attend training. On reflection, the NRICH team felt that training wasn’t always delivered to the correct staff within the care home. E.g. ‘MUST’ training was delivered to staff that would not normally carry out ‘MUST’ screening.

Despite care homes being advised that they can contact the Dietitian if they have any questions following training, the service highlighted that queries were often only addressed when the Dietitian returned to conduct a re-audit.

On reflection, the NRICH team felt that a period of ‘facilitation’ after training may be worthwhile to ensure all staff have the opportunity to discuss their queries.

- As highlighted in sections 3.3. and 3.4, a limited number of menus were re-audited and a limited amount of training for catering staff was provided. Menus were often not changed during the intervention period and generally the standard was good. It was therefore felt that this process need not be repeated. Catering staff were often difficult to engage with and they often worked independently limiting their time for training. When speaking with Healthwatch volunteers about the NRICH process, they commented that PLACE inspections around food involve actually tasting the food served to patients, and felt this would be worth considering as part of care home evaluation. This is certainly an area for further development in the future.

- Care homes demonstrated commitment and improvements in at least one aspect of nutritional care following NRICH training. The audit tools used as part of the service were very useful for providing an objective score, and for demonstrating improvements. However the audit tools used for the NRICH service are currently not validated and will need to be updated regularly in line with the most up to date national guidelines For example, Public Health England published a new toolkit for care home catering earlier this year and the BDA have just released their updated ‘Nutrition and Hydration Digest’ document.

- Overall care homes reported they valued the opportunities provided by the NRICH service and the feedback provided on their progress. Those that achieved their NRICH award were very pleased to have done so, and valued the fact that the CQC were also informed.

- To make the intended audit outcomes clearer for care homes in the future, the NRICH team will consider introducing a minimum score for each of the audit areas.
5. Conclusions and Further Actions

The initial phase of the NRICH project has been a successful and there have been a number of positive learning points to take forward for further development.

- The results demonstrate that NRICH is an effective method for improving the management of malnutrition in care homes.

  The aim is for NRICH to be recognised as the gold standard and care homes in Costal West Sussex to have access to NRICH as part of the annual registration processes.

  Support from stakeholders is vital for NRICH to be rolled out across Costal West Sussex along with additional resources for the Dietitians service to implement the programme.

- Community Dietitians will deliver NRICH training in a further 10 homes in 2018 - 2019. Care homes will be identified based on frequency of referrals to the Dietitians and the need identified by the Community Dietitians visiting care homes.

- Reduce the timescales between initial audit and arranging training in care homes to improve efficiency.

- Be more targeted on who attends training sessions following the initial audit e.g. ensure all staff who are involved in completing ‘MUST’ forms attend a specific session as well as the food fortification session. This should directly improve the ‘MUST’ screening accuracy and documentation of care plans based on ‘MUST’ score using the new paperwork. Ultimately preventing the need for additional training following re-audit which has occurred in three of the homes.

- In future there will be more direct engagement with catering teams to ensure that key messages on food fortification are understood and implemented. E.g. fortified milk to be available on drinks trolley for identified residents, suitable snacks/homemade milkshakes are available and standard food fortification recipes to be used in the preparation of meals.

- Review of resources based on feedback from care homes and stakeholders e.g. the importance of oral health for residents.

- Review of the audit tools and creation of minimum scoring to attain NRICH award. To consider and formalise the actions to be taken should a care home not meet the requirements set. To liaise with stakeholders to identify non-compliant or failing NRICH homes.
• Offer training to care agencies who supply bank staff to care homes.

• Establish update courses for new staff in NRICH homes to ensure standards are maintained.

• To address communication issues, identifying an NRICH champion at each care home would be helpful; the hope is that this point of contact will be maintained over the year.

• More qualitative feedback from staff and managers to further assess NRICH impact.

References


2. ‘Supporting Care Homes’ webpage by Coastal West Sussex CCG. Available at https://www.coastalwestsussexccg.nhs.uk/supporting-care-homes


4. The Nutrition and Hydration Digest; Improving outcomes through food and beverage services by The British Dietetic Association, published July 2012


