International Dysphagia Diet Standardisation Initiative (IDDSI) Pilot Implementation

Mid Cheshire Hospitals NHS Trust

Alison Seiler
Siobhan Ludlow
Elizabeth Boaden

Advanced Clinical Specialist Speech & Language Therapists
Why IDDSI?

- Dysphagia affects approximately 8% of the world’s population and up to 65% of stroke patients.
- The modification of diet and fluid consistencies remains a cornerstone of dysphagia management.
- The names and levels of modification vary within and across countries which subsequently increases risks for patient safety.
What is IDDSI?

• New global standardised framework which provides terminology and definitions for texture modified foods and thickened liquids
• Aims to improve the safety and care for individuals with dysphagia of all ages, in all care settings
• Published in November 2015. It consists of a continuum of 8 levels (0-7)
• Colour-coded, image based model using culturally neutral terminology
• Includes descriptors, testing methods and evidence for both drink thickness and food texture levels
RCSLT Stance

Since the publication of the Framework, the RCSLT have done the following:

• Consulted with a small group of SLT experts to explore whether the UK should adopt the IDDSI Framework. The group are satisfied that the Framework has a robust evidence base

• Consulted the wider RCSLT membership. This helped inform the RCSLT’s decision to recommend the adoption of the IDDSI Framework
Pilot Implementation

Setting:
Acute stroke and rehabilitation unit
Leighton Hospital; Mid Cheshire Hospitals Trust

Method:
Pre and post Intervention study (September-October 2016)

Aims:
• To establish if staff are able to assimilate IDDSI terminology in 4 weeks
• Identify barriers and facilitators to a change in terminology from UK to IDDSI descriptors
Methods

1. Consultation
   - 14 doctors (junior-consultant level) & 5 ward managers
   - overview of IDDSI
   - implementation methodology discussed

2. Pre-intervention (15mins)
   - Audit: qualitative and quantitative data
   - Training: 28 staff (nursing, healthcare assistants, therapies)
   - mop up sessions provided for individuals on shifts

3. Intervention (4 weeks)
   - IDDSI UK training triangles laminated above each bed

4. Post-intervention
   - Audit: qualitative and quantitative data
Process

• Leighton Hospital was the first site in Britain to have implemented IDDSI

• IDDSI terminology was used alongside the National Descriptors in order to reduce risk to patients

• Preliminary findings have been presented to the UK Steering Committee for IDDSI and to RCSLT
IDDSI approved triangle generated for use within the pilot implementation study

UK Descriptors mapped onto IDDSI Framework
## Pre Audit Assessment - Questionnaire

<table>
<thead>
<tr>
<th>Question</th>
<th>Y</th>
<th>N</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you know what IDSSI is?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A patient is on a puree diet (texture C). They are given a pot of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ambrosia custard is this appropriate?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A patient is on a soft diet (texture E). They are given a slice of apple</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– is this appropriate?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A patient is on a pre-mashed diet (texture D). They are given an</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>omelette is this appropriate?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many scoops of thickener would you use for syrup thick fluids</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(per 100mls)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many scoops of thickener would you use for custard thick fluids</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(per 100mls)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many scoops of thickener would you use for pudding thick fluids</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(per 100mls)?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Post audit Assessment – Questionnaire

<table>
<thead>
<tr>
<th>Question</th>
<th>Y</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you know what IDSSI is?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A patient is on a puree diet. They are given a pot of ambrosia custard is this appropriate?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A patient is on a soft and bite-sized diet. They are given a slice of apple – is this appropriate?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A patient is on a minced and moist diet. They are given an omelette is this appropriate?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Answer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many scoops of thickener would you use for mildly thick fluids (IDDSI 2) (per 100mls)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many scoops of thickener would you use for moderately thick fluids (IDDSI 3) (per 100mls)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many scoops of thickener would you use for extremely thick fluids (IDDSI 4) (per 100mls)?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Post audit Assessment – Questionnaire**

Do you prefer: (please tick one)

IDDSI terminology e.g. mildly thick, soft and bite sized [ ]

OR

Current descriptors e.g. syrup, texture E [ ]

Can you explain why?

When using IDDSI which TWO of the following did you find most useful: (please tick)

- Descriptor Name e.g. puree [ ]
- Descriptor Number e.g. 4 [ ]
- Descriptor Colour e.g. green [ ]

Do you feel the written/verbal information given was sufficient to allow you to understand / change recommendation descriptions?

Yes [ ]  No [ ]
Post audit Assessment – Matching UK National Descriptors and IDDSI Terminology

<table>
<thead>
<tr>
<th>Transitional Foods</th>
<th>UK National Descriptors</th>
<th>IDDSI Terminology</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORMAL</td>
<td>LIQUIDISED</td>
<td>EXTREMELY THICK</td>
</tr>
<tr>
<td>SOFT (TEX E)</td>
<td>PUREE (TEX C)</td>
<td>MODERATELY THICK</td>
</tr>
<tr>
<td>PRE-MASHED (TEX D)</td>
<td>LIQUIDISED (TEX B)</td>
<td>SLIGHTLY THICK</td>
</tr>
<tr>
<td>PUREE (TEX C)</td>
<td>CUSTARD</td>
<td>MILDLY THICK</td>
</tr>
<tr>
<td>LIQUIDISED (TEX B)</td>
<td>SYRUP</td>
<td>MILDLY THICK</td>
</tr>
<tr>
<td>PUDDING</td>
<td>PUREED</td>
<td>MODERATELY THICK</td>
</tr>
<tr>
<td>REGULAR</td>
<td>SOFT &amp; BITE-SIZED</td>
<td>SLIGHTLY THICK</td>
</tr>
<tr>
<td>THIN</td>
<td>LIQUIDISED</td>
<td>EXTREMELY THICK</td>
</tr>
<tr>
<td>SLIGHTLY THICK</td>
<td>LIQUIDISED</td>
<td>EXTREMELY THICK</td>
</tr>
<tr>
<td>MILDLY THICK</td>
<td>LIQUIDISED</td>
<td>EXTREMELY THICK</td>
</tr>
<tr>
<td>MODERATELY THICK</td>
<td>LIQUIDISED</td>
<td>EXTREMELY THICK</td>
</tr>
<tr>
<td>EXTREMELY THICK</td>
<td>LIQUIDISED</td>
<td>EXTREMELY THICK</td>
</tr>
</tbody>
</table>
Post Audit Assessment – Example of Independent generation of IDDSI descriptors Questions

Please answer the following questions to see how easily you can remember the new IDDSI terminology:

1. What is the IDDSI terminology (name) for SYRUP thick fluids?

IDDSI Number 2 on triangle (Pink)

2. What is the IDDSI terminology (name) for CUSTARD thick fluids?

IDDSI Number 3 on triangle (Yellow)
Results

• Data is reported as a whole staff group, rather than by discipline (e.g. nursing, healthcare, therapies) as there were no significant differences in pre and post audit responses between staffing groups

• **Pre-training awareness** of IDDSI framework:
  3/28 (11%)

• **Post-training awareness** of IDDSI framework:
  25/28 (89%)
Results

• 75% of staff reported the preliminary training on IDDSI to be sufficient

• Staff reported the National Descriptor letter system to be confusing prior to audit. Comments included:

‘Don’t know what all the textures are. The letters are confusing’

‘What’s texture C/D/E mean?’
Identification of food against UK and IDDSI descriptors

Using both National descriptors (pre-audit) and IDDSI descriptors (post audit); staff maintained a similar level of understanding of diet textures and classifications.

Identification of diet textures using UK National Descriptors (n=74/84)
- Correct identification: 88%
- Incorrect identification: 12%

Identification of diet textures using IDDSI descriptors (n=70/84)
- Correct identification: 83%
- Incorrect identification: 17%
Amount of thickener needed to achieve accurate thickness: UK vs IDDSI

Staff achieved an improved understanding of the amount of thickener required when using the IDDSI descriptors (post audit)

Amount of thickener for UK descriptors (n=65/84 (77%)
- Correct identification: 77%
- Incorrect identification: 23%

Amount of thickener for IDDSI descriptors (n=70/84(83%)
- Correct identification: 83%
- Incorrect identification: 17%

UK Pudding descriptor (n=16/28 (57%) vs IDDSI Extremely thick descriptor (n=22/28 (79%)
IDDSI descriptors: (name, number, colour)

IDDSI recommend using a minimum of 2 descriptors
UK labels matched to IDDSI

89% of staff correctly matched 100% of the National Descriptors to the new IDDSI terminology, demonstrating that they had assimilated knowledge of the new descriptors.

- 89% achieved 100% correct
- 11% achieved 80% correct
- 3/28 (11%) confused 2 labels
When asked to independently name the IDDSI descriptors staff scored higher on average for the fluid terminology than diet:

- Average score (17/28) 60% correct – fluids
- Average score (11/28) 39% correct - diet
- Difficulties most apparent for ‘minced & moist’ and ‘Regular’ diet terminology
- Staff tended to use the term ‘normal’ for regular diet
Number of participants who were able to generate IDDSI terminology when given the UK National Descriptor

- Mildly thick: 18 (64%)
- Moderately thick: 14 (50%)
- Extremely thick: 15 (54%)
- Liquidised: 12 (43%)
- Puree: 8 (29%)
- Minced & moist: 12 (43%)
- Soft & Bitesized: 9 (32%)
- Regular: 19 (68%)

Number of participants
57% of staff preferred the National descriptors
36% of staff preferred IDDSI
## Comments

<table>
<thead>
<tr>
<th>IDDSI: 10/28 (36%)</th>
<th>UK National Descriptors: 16/28 (57%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Obvious by wording as opposed to letter’</td>
<td>‘It’s what I know’</td>
</tr>
<tr>
<td>‘It’s got more information on it’</td>
<td>‘Used to the old way’</td>
</tr>
<tr>
<td>‘More descriptive but I need to learn it’</td>
<td>‘Used to this terminology’</td>
</tr>
<tr>
<td>‘More descriptive’</td>
<td>‘Only because it’s more familiar – the IDDSI description is better’</td>
</tr>
<tr>
<td>‘Easier to understand when you see the triangle’</td>
<td>‘Only because I am used to it, may prefer the new terminology in time’</td>
</tr>
<tr>
<td>‘Easier to relate to’</td>
<td>‘Still use old terminology in conversation’</td>
</tr>
<tr>
<td></td>
<td>‘Faster and worked with before’</td>
</tr>
<tr>
<td></td>
<td>‘Because it gives better description of fluids – mixture of both would be good’</td>
</tr>
</tbody>
</table>
Limitations

• Insufficient length of time for implementation

• UK National descriptors used alongside IDDSI, disincentivise staff to learn the new IDDSI terminology
Reflections of Training

• ‘I think maybe longer to have the different descriptors in place would help for them to be more familiar’

• ‘Keep triangles in use for reference as the hierarchy is useful – fluid wise, IDDSI terminology is easier’

• ‘I don’t remember properly the triangle but as soon as I have a look at it, I do’

• ‘It’s ok as long as you have your sheet’

• ‘Not sure have had enough use of new descriptors to remember’

• ‘Need more training’

• ‘Difficult with bank staff as they don’t understand the new IDDSI recs’
Recommendations

• Provide training on IDDSI

• Increase IDDSI implementation period (RCSLT survey of membership suggest it may take up to 2 years to fully implement the IDDSI framework)

• Use IDDSI triangle as reported to be a useful visual aid

• Consider which descriptor format suits the environment i.e. name, number, colour (IDDSI recommend using a minimum of 2 descriptors)

• Consider removing National descriptors to reduce:
  o staff dependence on ‘familiar’ terminology
  o confusion between fluid consistency stages vs levels

• RCSLT and BDA Statements
References

• Website: http://iddsi.org


• Email: alison.seiler@nhs.net