**End of Project Report**

*NHS pilot in England with ASSIST using on-line tools provided by InfoBasis Ltd to assess 300 - 500 users in Health Informatics Services in NHS Organisations against SFIA and NHS KSF skills frameworks.*

1.0 **Introduction**

National Occupational Standards are described in the Department for Education and Skills latest Skills White paper – “Getting on in Business, getting on at work”, and apply to all sectors. National Occupational Standards describe the activities that take place in a sector broken down into units. Units for all sectors are managed by Skills Sector Councils (SSC). The SSC for Health is called Skills for Health.

The responsibility for development, review and maintenance of Health Informatics National Occupational Standards (HI NOS) is held on behalf of the UK by the Information Centre for Health and Social Care. A quality assurance group review the products and outputs, and a Health Informatics Professional Development Board advises on deployment and implementation of HINOS across the four UK home countries.

1.1 **The standards**

There are 127 units in the Health Informatics National Occupational Standards (NOS) which describes the activities performed by a function, and the knowledge, skill and competence by which this activity should be measured. These are often described as the basis of being fit to practice health informatics and presented as a suite of NOS or a competence framework. The units are grouped for ease of reference. Groupings include:

- Processing data and information
- Procurement
- Managing projects
- Managing quality
- Managing risk
- Information and Knowledge
- Software development
- Defining Information, Communication & technology requirements
- Providing technical guidance
- Maintaining the security of ICT systems
- Learning and development
- Clinical informatics

The Health Informatics National Occupational Standards can be found on the Information Centre websites at: [http://www.ic.nhs.uk/informatics](http://www.ic.nhs.uk/informatics) and [www.hinos.org.uk](http://www.hinos.org.uk) and at the Skills for Health website [www.skillsforhealth.org.uk](http://www.skillsforhealth.org.uk)

National Occupational Standards are for all UK countries - England, Wales, Northern Ireland and Scotland. All standards need to be kept current and relevant so they describe how the workforce needs to perform to remain ‘fit for purpose’. They are relevant to staff working in these areas:

- Health Records
- Information Management
2.0 Pilot Objectives

A joint pilot between ASSIST, InfoBasis Ltd and the Information Centre used InfoBasis Ltd tools to assess up to 500 users in NHS Organisations in England, against the SFIA (Skills Framework for the Information Age) and NHS KSF frameworks. The Information Centre funded this pilot and it completed in the NHS financial year 2006/7.

The focus of the pilot is on the ICT group of staff within Health Informatics (HI) Services. Other job roles will not be excluded from this pilot, as this will enable whole teams to actively participate and the volunteer organisations to gain from their participation. The objectives are as follows:

1. To validate an update of Health Informatics National Occupational Standards (HI NOS) for
   • ICT roles and
   • senior staff in health informatics.

2. To test the validity of SFIA in supporting the development of NHS KSF Outlines for ICT roles identifying specifically:
   • areas of good fit
   • areas of poor fit
   • ambiguities/inconsistencies.

3. To test the applicability of the InfoBasis Ltd tool when used by NHS organisations to develop staff according to the skills requirement:
   • areas of good fit
   • areas of poor fit
   • ambiguities/inconsistencies.

Objective 1 will also be informed by recently updated Management (National Occupational) Standards. Skills Sector Councils have already confirmed the new standards are applicable for use across all the sectors.

2.1 The deliverables were agreed as:

  Interim report 20th June 2006 and final draft report 14th Dec 2006, with final approved report prepared for submission to Skills for Health.
• Report for publication in newsletters/web and other journal/publications for use by all partner organisations

The project was managed using PRINCE2 methodology, and responsibilities assigned between the partners:

• Overall Project Manager Information Centre - pam.hughes@ic.nhs.uk

Pam Hughes 2 15th Dec 06
pam.hughes@ic.nhs.uk

Version: Final 1.0
2.2 Approach & Timetable

10 pilot sites from across England were recruited with individuals and organisations expressing an interest. 8 pilot sites attended the training from Infobasis which was delivered in 3 sessions at three locations w/c 5th June 2006. Next steps were to recruit the end users from within the pilot sites. A project review meeting took place 6th July 2006 which tracked progress against plan, and ensured all pilot sites had all the resource, knowledge and facilities they needed to collect data from users over the summer. A further project review took place 7th September 2006 by which time all data collection was expected to be complete.

<table>
<thead>
<tr>
<th>March/April 2006</th>
<th>Scoping, planning, agreement, recruit sites</th>
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<tbody>
<tr>
<td>3 May 2006</td>
<td>Project kick off meeting with sites</td>
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<tr>
<td>May 2006</td>
<td>Recruit end users &amp; train site administrators</td>
</tr>
<tr>
<td>Mid - June 2006</td>
<td>End users begin their assessments period 180 days</td>
</tr>
<tr>
<td>Sept 2006</td>
<td>End of data collection period</td>
</tr>
<tr>
<td>Nov 06</td>
<td>Reporting and end of project review</td>
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<tr>
<td>Dec 06</td>
<td>Submit reports to quality assurance and Skills for Health, and software becomes unavailable 31st Dec 06</td>
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<table>
<thead>
<tr>
<th>Site</th>
<th>Initial number of staff in the pilot</th>
<th>Final numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leeds Teaching Hospitals NHS Trust</td>
<td>100</td>
<td>40</td>
</tr>
<tr>
<td>Bradford Health Informatics Service</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>Hull &amp; East Riding HIS</td>
<td>26</td>
<td>29</td>
</tr>
<tr>
<td>Worcestershire Health ICT Services</td>
<td>50</td>
<td>70</td>
</tr>
<tr>
<td>University Hospitals Birmingham NHS Foundation Trust</td>
<td>90</td>
<td>53</td>
</tr>
<tr>
<td>Surrey &amp; Sussex HIS</td>
<td>325</td>
<td>350</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>568</strong></td>
</tr>
</tbody>
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Job roles covered of the Health Informatics family (deficit is as some teams included non HI roles within the pilot i.e. Management Accountant and Head of HR)

| Health Records | 0 |
| Clinical Coders | 0 |
| ICT            | 305 |
| IM             | 17 |
| Senior staff   | 28 |
| Clinical informatics | 7 |
| IT Trainers    | 72 |
|                | 429 |
Those pilots who dropped out:
- University Hospitals Leicester (did not actually begin)
- Doncaster & South Humber Healthcare NHS Trust
- South Staffs HIS
- Lincolnshire NHS Shared Services

3.0 Initial findings (30th September 2006)
Evaluation of the pilot activity was achieved through three reports created by the Project Manager and completed at the agreed project review points (July, September and November) by each pilot lead contact. Exciting interim findings at the 30th September showed
- This tool has enabled some trusts to identify their health informatics capability (previously unknown) with an easy to use product, and many want to continue to use the product beyond the end of the time-limited pilot period
- All but managers and IT Trainers of the health informatics ‘family’ fit the SFIA v3.0
- One pilot site has been able to use the data to inform re-organisation of team/s and/or departments
- This approach has supported the health informatics practitioners at a time when pay modernisation and skills evaluation through the Agenda for Change initiative have impacted their morale through devaluation of the job roles they hold.

This encouraged the pilots and other organisations who had not taken part and several requests were made for access to the product beyond the end of the 180 day trial period.

3.1 Issues & lessons learned
- Some pilots were slower to embrace project requirements and engage users. In many cases this was a problem of a lack of management engagement and a willingness by the lead contacts/admin lead to embrace a pilot that someone else had committed to– it may also be an issue here about national communications from the project manager– why did it work for some and not others? The pilots needs to identify the right people within the organisation to lead and work on the pilot – a combination of those with IT training skills, senior staff with an understanding of how to use the data, and an administrator to support the team
- Once or if, embraced, then local management still found it difficult to enable and support staff to commit the time required for the user assessments
- Earlier indication/clarification of what will happen to the data collected, how the reporting will work and how it could be used– it appeared to some not very intuitive- and if/how there will be access to the system at the end of the pilot period may have been helpful
- Pilots mostly worked separately, but shared good practice through the Project Manager. For those pilots struggling the good practice shared helped only a little
- Linking this pilot and uploading to the pilot system staff KSF outlines which were already written has made the pilot implementation a lot harder
- Including a SFIA Awareness session as a part of the training requirement – delivered by the SFIA Foundation perhaps – would have assisted pilots to get working on the data collection sooner, as some delays are, as
highlighted in the project brief as a risk, are due to unfamiliarity with the skills frameworks not the InfoBasis product
  • Many, but not all, of the pilots would want to retain access to the software, as they could see its potential within the Health Informatics department/teams.

3.2 Feedback on the software/product and the frameworks presented within the tool
  • InfoBasis training very good, and good responsive support provided
  • Some functionality is clunky; suggestions for improvement well received
  • Most pilots found the system intuitive, and easy to use, although would have preferred more support and guidance that the pilot supported

3.3 Findings at 30th November 2006
  • Emphasis has been placed on managers using the individual self-assessments to inform personal reviews and KSF outlines.
  • Less use has been made of the reports that show skills gaps across the organisation or within teams.
  • In areas where the skills assessments have been used in personal staff reviews, it has provided a useful starting point in:
    o Discussing and measuring current performance
    o Setting personal objectives and action plans
  • In all areas it has been identified that the KSF alone did not adequately describe the skill set required for ICT job roles. Collating this information provides pilots with evidence of this.
  • In the teams/areas where the pilot project has proved useful, SFIA does enrich and therefore add value to the skill sets for ICT job roles. Collating this information provides pilots with evidence of this.
  • Within areas where SFIA was deemed not applicable, it was felt that the InfoBasis tool would still be useful if a more appropriate framework was loaded alongside KSF. E.g. For training - IITT’s Skills Tracker framework.
  • HR staff recognise that this tool can be better than the KSF for health informatics staff and have suggested the national KSF Group are appraised of the pilot as they believe this is an ideal tool for pre-appraisal planning - for both manager and member of staff.

A further meeting took place with Sussex on 4th December to support access to the reports and conclude useful activity for the pilot before access to the system closes on 31st December. Worcester chose also to attend this meeting.

3.4 Validation of HINOS for ICT staff and senior roles
HINOS have indicative links to the NHS KSF dimensions. A sample of roles across the pilot for senior staff and ICT roles has been accessed to take a look at their SFIA requirements. Using a map of the SFIA to HINOS, and a HINOS to KSF map it was possible to ascertain:
  • There are gaps in the SFIA (across the framework) to NOS mapping (see mapping document), even though the SFIA framework derives from e-skills UK units, and HINOS includes those units
  • Therefore there are potentially missing units from HINOS suite, which may be addressed in the Dec 06 rationalisation project. A senior staff HINOS
review project which ran concurrently to this pilot in 2006, has taken a more detailed look and reports also in December 2006.

- It was not possible to validate the indicative links of HINOS to KSF within the scope of this project.

4.0 Recommendations

- [Resulting from Objective 1] Validate an update of Health Informatics National Occupational Standards (HI NOS)
  
Two HINOS reviews in 2006 have highlighted gaps for senior staff and ICT staff, highlighted most clearly by the SFIA to NOS map, and the result of the senior staff review project. Skills for Health should include an update project in their 2007/8 business planning working cross sector with the other 2 relevant SSCs.

- [Resulting from Objective 2] SFIA is a valid skills framework for health informatics teams
  
The NHS KSF framework is a very generic framework. If personal development reviews for health informatics staff are conducted by using other relevant development tools and the SFIA skills framework specifically, alongside the mandatory NHS KSF then several benefits accrue and these were proven during the pilot. These include gains in more effective staff appraisal and development and enhanced staff motivation and team development. Results from this pilot should be disseminated throughout the health informatics community.

- [Resulting from Objective 3] Continued use of the InfoBasis product
  
The findings of this pilot indicate there is a positive overall ‘fit’ of the product to support the development of health informatics staff. Reporting and guidance for implementation should be improved in any future development.

Any extension of access to the software by the pilots could be negotiated with Infobasis either directly by the pilots as single customers, or by the NHS on a preferential rate. Scope and purpose of any extension should be clear. This could be done collaboratively with the NHS Core Learning Unit who have expressed an interest in a ‘pilot’. InfoBasis are happy to begin these negotiations with a suitably nominated representative from the NHS.

This pilot is obliged to report to the National KSF Group (KSFG) whose opinion was sought prior to the award of contract for this pilot to begin, and whose secretariat have been appraised of progress though 2006. KSFG are seeking recommendations for changes to the KSF and eKSF as a result of the pilot.

5.0 Conclusion and thanks

At a time of re-organisation and deployment of new systems through the National Programme of IT, most pilots have agreed this pilot did not come at a good time, however, there is a further argument that there is never a good time to participate in pilots! The Project Manager recognises and fully appreciates the efforts made by all for the duration of the pilot April to Dec 2006:

- the Lead Contacts and the nominated Admin Contacts from all the pilot sites;
- the role played by ASSIST in supporting the initiation and progression of the pilot, and as a means to publicise and share information on the pilot activity and
• the consistent support of InfoBasis Ltd.

Access to the pilot software will close on 31st December 2006.

6.0 Deliverables

| Report for publication in a newsletters/web and other journal/publications for use by all partner organisations | Paper accepted for HC2007 and will be published on CD conference proceedings but not delivered as a presentation/session |

7.0 Outstanding actions

• Report back to KSFG – main recommendation is that the eKSF tool could usefully include other relevant frameworks such as SFIA, IITT Skills Tracker, and others
• Send approved report to Skills for Health
• Case Study