About the Health Informatics Career Framework (HICF)

http://www.hicf.org.uk

Background

Health Informatics is about the effective use of data, information, knowledge and technology to support and improve health and health care delivery. There are a variety of staff working to this end, including; knowledge management staff, information management staff, senior managers and directors, ICT staff, health records staff, clinical informatics staff as well as trainers/educators. At present there is no structured career pathway for health informatics as a whole, and for these groups of staff.

As part of wider programme of work for the health informatics community, Informing Healthcare (Wales), working closely with NHS Connecting for Health (England) initiated the development of a career framework for staff in this area. The aim of the career framework is to identify and open up career opportunities in health informatics. It is also designed to help individuals plan their own careers, and organisations to workforce plan in this important area. The approach is consistent with Skills for Health, the Sector Skills Council for the Health Sector, who are developing career frameworks for a variety of staff groups (e.g. Allied Health Professions).

The Structure of the HICF

The Career Framework levels are numbered from CF1 to CF9 and are defined in terms of Initial Entry Level Jobs (at Level CF1) through to Consultant Practitioners (at Level 8) and More Senior Staff (at Level CF9). These levels exist purely as a reference to the Career Framework and do not have a one to one relationship with levels in other frameworks (e.g. Agenda for Change, Qualifications and Credit Framework). Further information on the knowledge and experience at each of these levels (which have been developed by Skills for Health) may be found in Annex One (below). HI staff can progress through the levels of the framework by developing their skills and competences through learning and development.

The Health Informatics staff groups covered by the HICF are as follows:

- Knowledge Management
- Information Management
- HI Senior Managers and Directors
- ICT Staff
- Health Records and Patient Administration
- Clinical Informatics Staff
- HI Educators and Trainers

There are a wide variety of jobs covered by each of these groups and further information may be found in Annex Two (below).

It should be noted that although a diverse range of jobs are included within these overarching headings they will often require competences that are shared across different staff groups. For example; an ICT Trainer may be placed under ‘HI Educators and Trainers’, but will require a number of competences that ICT staff may also have. In this way, although many of the HI jobs identified within the framework are placed within a particular area, they may also have expertise required in other areas. The content of the HICF will help to identify these common and transferable skills with a view to opening up career progression.
The Content of the HICF

The HICF is currently populated with around 100 generic jobs from across the Health Informatics domain. This does not by any means represent all of the jobs carried out in the area, but is an indication of many of them. Each of these are currently described in the form of a specification which covers:

- A description of the roles and responsibilities involved
- An indication of related job titles
- Relevant National Occupational Standards (NOS) and KSF Links
- Relevant qualifications
- Relevant Professional Standards
- The HICF Level

Further information may be found on National Occupational Standards in Annex Three (below).

It should be noted that the generic jobs described in the HICF are not job descriptions in their own right, but can be used by organisations as a template to develop job descriptions. In this way they have the potential to standardise the work carried out by specific groups of staff across Health Informatics, and reduce variation across the sector.
Annex One: The HICF Levels (knowledge, skills and experience)

Level 1 - Initial Entry Level Jobs

Recalls basic general knowledge and uses language, literacy, numeracy and information technology to carry out straightforward tasks AND Shows understanding of a small number of routine work procedures gained through short induction or on the job training.

Level 2 - Support Workers

Uses skills and key competences to carry out tasks where action is governed by rules defining routines and processes and recalls and comprehends basic knowledge of a work area. - The range of knowledge involved is limited to facts and main ideas OR Selects and applies basic methods, tools and strategies AND Recalls and comprehends basic knowledge of a work area. - The range of knowledge involved is limited to facts and main ideas.

Level 3 - Senior Assistants/Technicians

Applies knowledge to a work area that includes processes, techniques, materials, instruments, equipment, terminology and some theoretical ideas AND evaluates different approaches to tasks OR Uses a range of work area-specific skills to carry out tasks and show personal interpretation through selection and adjustment of methods, tools and materials AND evaluates different approaches to tasks.

Level 4 – Assistant Practitioners

Uses a wide range of work area-specific practical and theoretical knowledge AND Evaluates outcomes in terms of planned approach used OR Develops planned approaches to tasks that arise in work or study by applying specialist knowledge and using expert sources of information AND evaluates outcomes in terms of planned approach used.

Level 5 – Practitioners

Uses broad theoretical and practical knowledge that is often specialised within a field and shows awareness of limits to knowledge base AND demonstrates ability to transfer theoretical and practical knowledge in creating solutions to problems OR Uses broad theoretical and practical knowledge that is often specialised within a field and shows awareness of limits to knowledge base AND develops planned and creative responses in researching solutions to well defined concrete and abstract problems.

Level 6 – Senior Practitioners

Uses detailed theoretical and practical knowledge of a work area AND utilises some knowledge that is at the forefront of the work area and will involve a critical understanding of theories and principles AND Devises and sustains arguments to solve problems OR Uses detailed theoretical and practical knowledge of a work area AND demonstrate mastery of methods and tools in a complex and specialised work area and demonstrate innovation in terms of methods used AND devises and sustains arguments to solve problems.
Level 7 – Advanced Practitioners

Utilises highly developed specialised knowledge covering a range of procedures and underpinned by relevant broad based knowledge, experience and competence AND develops new skills in response to emerging knowledge and techniques OR Uses highly specialised theoretical and practical knowledge some of which is at the forefront of knowledge in the work area. This knowledge forms the basis for originality in developing and/or applying ideas AND develops new skills in response to emerging knowledge and techniques OR Demonstrates critical awareness of knowledge issues in the work area and at the interface between different or new work areas, creating a research based diagnosis to problems by integrating knowledge AND Making judgements with incomplete or limited information developing new skills in response to emerging knowledge and techniques.

Level 8 – Consultant Practitioners

Uses highly developed specialised knowledge to critically analyse, evaluate and synthesise new and complex ideas that are at the most advanced frontier of a work area AND extends or redefines existing knowledge and/or professional practice within a work area or at the interface between work areas OR Uses highly developed specialist/specialised knowledge to critically analyse, evaluate and synthesise new and complex ideas that are at the most advanced frontier of a work area AND researches, conceives, designs, implements and adapts projects that lead to new knowledge and new procedural solutions PLUS Applies advanced specialist knowledge across a work area or over more than one work areas acquired over a long period OR in-depth and advanced specialist knowledge, experience and competence.

Level 9 – More Senior Staff

Applies advanced and highly developed theoretical and practical knowledge over a wide range of clinical, scientific, technical and/or management functions OR Is accountable for ensuring all staff within area of responsibility have required skills and knowledge to deliver products of the highest standard and facilitate effective knowledge management to ensure evidence based practice and quality assurance.
Annex Two: HI Staff Groups

Knowledge Management

Knowledge management staff support health professionals and management staff in their education, training and development and professional practice. Access to knowledge may be through books, periodicals and electronic information databases.

Information Management

Staff in this role use statistics and other information in order to plan, monitor and develop the health service. They work in one of the many different fields, including research and data analysis to support public health and health promotion.

HI Senior Managers and Directors

Staff in this area run health informatics services and plan for the future. They can come from any of the specialist HI areas. Their input into the strategic development of health informatics is crucial.

ICT Staff

ICT staff run the internal and external electronic systems. This includes the hardware and software. ICT staff diagnose and fix faults with hardware and software and also support staff to in their use of computers through the help-desk facilities. Roles in this area also help to develop and manage new applications and systems.

Health Records and Patient Administration

These staff collate, store and retrieve records used in diagnosis and treatment, and also provide essential administrative support to services. Accurate, accessible health records are now more vital than ever because many different healthcare professionals can be involved in treating an individual patient.

Clinical Informatics Staff

Clinical informatics staff are usually doctors, nurses or other qualified professionals who have moved into a part-time or full-time role in health informatics. Clinical informatics concerns the capture, communication and use of patient data and clinical knowledge by healthcare professionals. It also includes the development and implementation of electronic tools to support the whole cycle of clinical information.

HI Educators and Trainers

Staff in this area support the effective use of computers through application and systems training. Staff in this area may work in a general training, IT or clinical environment.
Annex Three: National Occupational Standards

National Occupational Standards (NOS) describe good practice in the workplace in terms of what an individual needs to be able to do, as well as what they need to know and understand. National Occupational Standards may be used for competence based approaches to training, development, and assessment. They are developed to be applicable across the four countries, England, Northern Ireland, Scotland, and Wales, and must adhere to criteria laid down by the Accrediting Bodies. For more information on the Health Informatics National Occupational Standards please visit www.skillsforhealth.org.uk or www.hinos.org.uk