

	UKCHIP Standards for Registration			
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UKCHIP Standards for Registration

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These documents will provide additional information.

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Glossary of Terms:

List any new terms created in this document.

Term	Acronym	Definition

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1 Introduction

1.1 Background

1.1.1 Registration with UKCHIP

The UK Council for Health Informatics Professions (UKCHIP) was established in 2002. It operates a registration scheme for health informatics professionals who meet certain standards and agree to work in accordance with its Code of Conduct.

Although registration is currently voluntary it is anticipated that, in the future, the NHS could expect anyone working in Health Informatics to be registered. It is also envisaged that, in due course, certification of Health Informatics professionals will be introduced.

Health Informatics is an atypical profession and it embraces a wide range of specialists who have many different types of skills and competences. To cater for this, UKCHIP currently has three levels of registration as outlined below.

Level 1:	<p>Level 1 registration is intended for those who are either relatively new to the profession, or whose work does not require a particularly high level of Health Informatics knowledge or experience. Eligibility is based on a combination of qualifications (which do not need to be specific to Health Informatics) and experience of working in Health Informatics. There are two main options:</p> <ul style="list-style-type: none"> • one year of Health Informatics experience and a National Qualification at level 3 (A-levels, GNVQ Advanced, ONC, BTEC National etc) or higher; <p>or</p> <ul style="list-style-type: none"> • two years of Health Informatics experience and a National Qualification at level 2 (GCSEs, GNVQ Intermediate, BTEC 1st Diploma etc).
Level 2:	<p>Level 2 registration is intended for those who have begun to develop a career in Health Informatics. Applicants will typically have higher levels of responsibility, qualification and experience than Level 1 registrants. A typical registrant will have 3 years Health Informatics experience, a qualification at NQ level 3 or 4 (e.g. A-levels or 1st degree), and a significant degree of autonomy in their job.</p>
Level 3:	<p>Level 3 registration is intended for those whose careers in Health Informatics have reached a stage where they have the knowledge and experience to provide professional leadership. A typical registrant will have more than 5 years experience in health informatics, a qualification at NQ level 4 or 5 (e.g. 1st degree or higher degree) and operate at a strategic level in their job. This level is intended to be equivalent to chartered status in other professions.</p>

1.1.2 Purpose of Standards

The primary aim of maintaining a register of professionals - in any field - is protection of the public and all registration bodies have to set minimum standards which individuals need to meet in order to be registered.

The purpose of the standards is to ensure that those who are registered are "fit to practice".

1.1.3 Nature of the Standards

The standards are set out as simple statements.

The standards are not quantified and how they are measured is not stated.

The number or quantity of standards is also consistent with comparable documents for other professions once the broad range of specialism in Health Informatics is taken into account.

1.1.4 Derivation of Standards

The requirements were derived by reviewing in some detail a significant number of documents setting out standards in Health Informatics or closely related areas. The most influential (in no particular order) were the following:

- NHS Knowledge and Skills Framework (KSF)¹
- Health Informatics National Occupational Standards (NOS)²
- SFIA (Skills Framework for the Information Age)³.
- Recommendations of the International Medical Informatics Association (IMIA) on Education in Health and Medical Informatics⁴
- Learning outcomes for the Professional Awards in IM&T (Health)
- Learning to Manage Health Information: Health Informatics in the clinical curriculum
- NHS Job Evaluation Handbook⁵
- Selected NHS/Department of Health benchmark statements published by QAA (Quality Assurance Agency for Higher Education)⁶

1.1.5 Constraints

In developing the standards a number of factors concerning the HI profession have had to be taken into account:

- It is relatively new and constantly evolving
- Practitioners have a wide range of backgrounds and have entered the profession in many different ways.
- There is as yet little or no formal career development.
- The proportion of practitioners with an explicit HI qualification is small.
- There are few specialist courses and qualifications for new and aspiring entrants to the profession.
- Unlike many other professions, routes of entry and career pathways are not (yet) well defined.
 - It is unusually diverse both in terms of its specialist areas and the competencies required of practitioners who range from clinical coders and junior ICT staff to

¹ NHS Knowledge and Skills Framework (NHS KSF), Department of Health, October 2004.

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4090843

² Available in various formats from www.hinos.org.uk

³ www.sfia.org.uk (requires registration)

⁴ www.imia.org

⁵ NHS Job Evaluation Handbook Second Edition (October 2004), Department of Health.

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4090845

⁶ Available in HTML and PDF from www.qaa.ac.uk/academicinfrastructure/benchmark/health/default.asp

directors of ICT services and those with a clinical background developing safety-critical systems.

- The vast majority of HI professionals with qualifications have not studied health informatics. Furthermore the qualifications of a significant proportion of these are not in subjects related to HI, including medicine or other clinical disciplines, computer science and information management, etc.

1.1.6 Terminology

The abbreviation HI is used throughout this document, as it is in "UKCHIP", to denote Informatics in all Health and Social Care contexts.

Health and social care is dependent on the accuracy and availability, when needed, of appropriate data, information and knowledge. Many systems have been developed to meet the specific needs of health and social care for data, information and knowledge whilst more generic systems may be used for financial applications and office automation for example. In this document *information system* encompasses all these types of system.

1.2 Structure and Scope of the Standards

A distinction has been made between "Generic" and "Specialised" standards.

1.2.1 Generic Standards

Generic standards apply to all individuals registered at Level 1 and all other levels irrespective of their constituency i.e. their area of work, specialisation or expertise.

On their own, some of these standards may seem relatively undemanding but it is the combination of them that is intended to ensure that the hybrid nature of Health Informatics is addressed.

1.2.2 Specialised Standards

Satisfying the generic standards is not sufficient for ensuring "fitness to practice" in a particular constituency.

Individuals registered at Levels 2 and 3 are expected to have met the standards for Level 1 and in addition, any specialised standards relevant to their constituency, their experience or their level of responsibility.

As far as possible, UKCHIP's specialised standards are directly based on standards determined or accepted by other relevant professional or regulatory bodies.

These standards include the currently published Health Informatics National Occupational Standards (HINOS) and, for example, UKCHIP's standards for ICT specialists are based upon standards specified by the British Computer Society (BCS) for professional membership or set in SFIA (Skills Framework for the Information Age). Similarly, for clinical coding, the standards are based on those set for the National Clinical Coding (NCC) qualification.

1.2.3 Knowledge, Skills and Competences

This document sets out requirements for knowledge, skills and competences with respect to the standards. To convey the type of requirement, the following terms are used in the vast majority of cases. Where there is more than one term on a line, the first term is the least demanding so, for example, appreciation is not as onerous as understanding.

Requirement Type	Terms
knowledge	awareness, familiarity, knowledge
	appreciation, understanding (these require comprehension)
skills	ability
competence	competence, proficiency and expertise

Note: this terminology is intended to be consistent with similar publications for other professions. It is not based upon, nor intended to be compared with, the terms used in Bloom's taxonomy⁷.

1.3 Standards Groupings

The standards for registration are separated into the following domains:

Generic Standards, divided into:

- **Generic Professional Standards:** knowledge, skills and competences that all Health Informatics professionals require
- **Generic Informatics Standards:** informatics knowledge, skills and competences that all Health Informatics professionals require

Specialised Standards, divided into:

- **Specialised Professional Standards:** knowledge, skills and competences that may apply to professionals working in particular constituencies in health and social care
- **Specialised Informatics Standards:** Knowledge, skills and competences specific to the Health Informatics constituencies.

1.4 External Frameworks and Standards

Health Informatics is an unusually diverse profession and it is not feasible to identify, or specify, standards for all specialisms within the profession. The table that follows sets out the relevant qualifications that apply to some of the most common HI constituencies.

Individuals with holding these qualifications may be exempt from some of the competency requirements stated explicitly by UKCHIP.

⁷ Bloom, B., Englehart, M. Furst, E., Hill, W., & Krathwohl, D. (1956). Taxonomy of educational objectives

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Constituency	Requirements (demonstrably comparable competences are acceptable)
Clinical Coding	NCC (National Clinical Coding) Qualification or ACC (Accredited Clinical Coder) designation
Clinical Informatics	Clinical qualification and experience. Alternatively knowledge, skills and competences – relevant to practising health informatics – which are demonstrably commensurate with those of clinicians.
Health Records	IHRIM (Institute of Health Record and Information Management) Certificate qualification.
	IHRIM (Institute of Health Record and Information Management) Diploma qualification.
IM&T Training	Either of the following: <ul style="list-style-type: none"> • ECDL (European Computer Driving Licence) or similar end-user qualification • IITT (Institute of IT Training) TAP (Trainer Assessment Programme) Certification
	Training/Teaching Qualification such as: <ul style="list-style-type: none"> • Postgraduate Certificate in Education (PGCE) • CIPD (Chartered Institute of Personnel and Development) Certificate in Training Practice • City & Guilds (C&G) 7307
Information and Communication Technologies	Either of the following: <ul style="list-style-type: none"> • MBCS (Member of the British Computer Society) designation • Level 5 of SFIA (Skills Framework for the Information Age) version 3.0
	Either of the following: <ul style="list-style-type: none"> • CITP (Chartered IT Professional) designation • Level 6 of SFIA (Skills Framework for the Information Age) version 3.0 • C.Eng (Information Systems or Information Science)
Information Management	RSS (Royal Statistical Society) Graduate Ordinary Certificate Qualification
	Either of the following: <ul style="list-style-type: none"> • RSS (Royal Statistical Society) Graduate Diploma in Statistics qualification • Graduate Statistician designation
	Chartered Statistician designation
Knowledge Management	Chartered Membership of CILIP (Chartered Institute of Library and Information Professionals)

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Constituency	Requirements (demonstrably comparable competences are acceptable)
	Chartered Membership of CILIP (Chartered Institute of Library and Information Professionals)
Project Management	Prince 2 Practitioner Qualification

2 UKCHIP Standards for Registration

2.1 Standards of Professional Conduct

It is a mandatory requirement for all individuals accepted for registration at all levels by UKCHIP that they shall:

1. Support the objectives and maintain the values of UKCHIP.
2. Respect all individuals and their rights in all professional relationships and interactions.
3. Warn the appropriate persons (employers, clients and colleagues) of any undesirable consequences which it is believed may result from failure to accept professional advice or acting in an un-professional manner (e.g. unethically), or the consequences of any individual overruling or neglecting such advice.
4. Report - to the relevant authority – adverse events where:
 - safety, health, confidentiality or security have, or are believed to have been compromised
 - there has been a failure to meet ethical, legal, code of conduct or other professional requirements
5. Accept personal responsibility for all work undertaken and advice given.
6. Take responsibility for the work done by people they supervise.
7. Be accountable for their individual actions and always act with integrity to satisfy the requirements of relevant ethical obligations, legislation & standards.
8. Work to the principles of equality and diversity, including the need for cultural sensitivity.
9. Work within their limits of competence and refer to others in circumstances where those limits may be exceeded.
10. Maintain fitness to practice through Continuing Professional Development.
11. Support those under their direct supervision or management in respect of their personal and professional development.
12. Promote professionalism in Health Informatics by acting as an advocate for high standards, e.g.:
 - in their own work as an example to others
 - in sharing knowledge and experience with peers
 - by participating in professional activities and organisations

2.2 Generic Professional Standards

2.2.1 Autonomy and Accountability

Identifier	Registration Level	Competency Expectation
GP-1001	1	Ability to work with direct supervision (in accordance with established practices and procedures)
GP-1002	2	Ability to work under broad direction
GP-1003	3	Ability to work autonomously and in a leadership role (i.e. ability to work competently without management by a professional in the same constituency; guidance being provided by peers or externally)

2.2.2 Self Management

Identifier	Registration Level	Competency Expectation
GP-2001	1	Ability to plan and schedule own work with direction from others.
GP-2002	2	Ability to: <ul style="list-style-type: none"> plan, schedule and monitor own work within a limited time horizon; use a systematic, disciplined and analytical approach; use effectively applicable methods, procedures, tools, and standards with only occasional reference to others.
GP-2003	3	Ability to: <ul style="list-style-type: none"> demonstrate strategic and advanced management skills; analyse risks adequately, and plan to achieve targets

2.2.3 Understanding Safety Implications

Identifier	Registration Level	Competency Expectation
GP-3001	1	That patient safety and the safety of the public underlies all work
GP-3002	2	That working contributions by individuals, their staff and working colleagues can have a significant effect on patient safety and the safety of the public

2.2.4 Communication and Professional Relationships

Identifier	Registration Level	Competency Expectation
GP-4001	1	Ability to communicate appropriately orally, in writing or electronically. This will include: general and technical information, advice, instructions, acquired knowledge and professional judgements. Communication may be direct, indirect (e.g. to patients or the public via web pages) or a mixture.
GP-4002	1	Ability to create and maintain effective and appropriate working relationships with colleagues, clinicians and other staff, clients, suppliers and others.

GP-4003	2	Ability to communicate technical information effectively with non-specialist staff or members of different disciplines.
GP-4004	2	Ability to give presentations using appropriate tools where necessary
GP-4005	2	Understanding of the need to promote HI to other disciplines.
GP-4006	3	Ability to promote HI to other professional groups

2.2.5 Influencing and Negotiation

Identifier	Registration Level	Competency Expectation
GP-5001	2	Ability to influence and negotiate within own area of work or specialization.
GP-5002	3	Ability to influence members of other disciplines.
GP-5003	3	Ability to negotiate with external organizations and, where necessary, on a commercial and formal basis.

2.3 Generic Informatics Standards

2.3.1 Analytical Skills and Problem Solving

Identifier	Registration Level	Competency Expectation
GI-1001	1	Ability to: <ul style="list-style-type: none"> • Analyse and solve problems systematically • Show logical reasoning • Make defensible judgements

2.3.2 ICT Usage

Identifier	Registration Level	Competency Expectation
GI-2001	1	Proficient to a standard equivalent to the seven modules of ECDL

2.3.3 Data Quality

Identifier	Registration Level	Competency Expectation
GI-3001	1	Awareness of <ul style="list-style-type: none"> • The need for, and benefits of, data quality • Methods of ensuring high data quality • Data validation • Audit
GI-3002	2	Understanding of the above

2.3.4 Information Governance and Security

Identifier	Registration Level	Competency Expectation
GI-4001	1	Understanding of the need to maintain confidentiality, integrity and availability of data, information and knowledge
GI-4002	1	Understanding of the need for audit trails
GI-4003	1	Awareness of Information Governance and Security concepts
GI-4004	2	Understanding of the above
GI-4005	1	Understanding of information security fundamentals and ability to use information systems securely
GI-4006	2	Knowledge of appropriate quality assurance and safety processes for use in development, implementation and deployment of information systems

2.3.5 Data, Information and Knowledge

Identifier	Registration Level	Competency Expectation
GI-5001	1	Understanding of the relationships and differences between data, information and knowledge
GI-5002	1	Awareness of the need for data to be collected as part, and for the purposes, of business processes
GI-5003	2	Understanding of the above.

2.3.6 Collection of Data, Information and Knowledge

Identifier	Registration Level	Competency Expectation
GI-6001	1	Ability to search for data, information and knowledge
GI-6002	2	Proficiency in the above
GI-6003	1	Awareness of appropriate tools and techniques for obtaining or gathering data and information
GI-6004	2	Familiarity with the above
GI-6005	3	Proficiency in the above

2.3.7 Validation and Processing of Data, Information and Knowledge

Identifier	Registration Level	Competency Expectation
GI-7001	1	Understanding of the need to monitor and validate the processing of data and information
GI-7002	1	Ability to maintain the integrity of data/information
GI-7003	1	Awareness of validating data and information techniques to ensure fitness for purpose
GI-7004	2	Ability in the above:
GI-7005	3	Proficiency in the above

2.3.8 Appraisal, Analysis and Interpretation of Data, Information and Knowledge

Identifier	Registration Level	Competency Expectation
GI-8001	2	Competence in appraising sources of data, information and knowledge
	3	Proficiency in the above
GI-8002	1	Ability to interpret , evaluate and analyse both data and information
GI-8003	2	Ability to abstract information

Identifier	Registration Level	Competency Expectation
GI-8004	3	Competence in statistics

2.3.9 Presentation and Dissemination of Data, Information and Knowledge

Identifier	Registration Level	Competency Expectation
GI-9001	1	Ability to present the outputs of data and information analysis using suitable methods
GI-9002	2	Competence in presenting data, information and knowledge using a range of methods and styles depending on the needs of the audience and the type of data and information being presented.

2.3.10 Monitor, Evaluate and Improve the management of Data, Information and Knowledge

Identifier	Registration Level	Competency Expectation
GI-10001	1	Understand the need for monitoring methods and appropriate management of data, information and knowledge
GI-10002	2	Ability to establish and use monitoring methods and recommend improvements to the management of data, information and knowledge

2.3.11 Develop models for processing new data and information

Identifier	Registration Level	Competency Expectation
GI-11001	2	Ability to develop models for processing new data and information, including data models, database models or mathematical models.
GI-11002	3	Expertise in the above

2.3.12 Information Technology

Identifier	Registration Level	Competency Expectation
GI-12001	1	Awareness of fundamental Information and Communication Technology concepts including system architectures, databases, networks, and the internet.
GI-12002	2	Understanding of fundamental Information and Communication Technology concepts including system architectures, databases, networks, and the internet.

2.3.13 Systems Development & Implementation

Identifier	Registration Level	Competency Expectation
GI-13001	1	Awareness of systems development and implementation lifecycles
GI-13002	2	Understanding of systems development and implementation lifecycles
GI-13003	2	Ability to identify and specify data and information requirements
GI-13004	2	Knowledge/understanding of the non-technical issues associated with the introduction of systems including: <ul style="list-style-type: none"> Stakeholder involvement Management of expectations Process redesign Project and change management Organisational culture implications Implementation/training requirements (including scale, complexity, human and financial resource implications, etc.)
GI-13005	2	Understanding of: <ul style="list-style-type: none"> key factors that affect the success or failure of systems risks to be managed during the development of information systems
GI-13006	3	Understanding of post-implementation needs and resource requirements
GI-13007	2	Appreciation of the need for formally specified and tested continuity, contingency and disaster recovery plans.
GI-13008	3	Ability to evaluate systems, set benchmarks and undertake benefits realisation studies.

2.3.14 Interoperability and Integration

Identifier	Registration Level	Competency Expectation
GI-14001	2	Familiarity with the issues of systems interoperability and integration.

2.3.15 Technical Standards

Identifier	Registration Level	Competency Expectation
GI-15001	2	Familiarity with the purpose and technical concepts of common ICT and data standards
GI-15002	3	Understanding of the purpose and technical concepts of common ICT and data standards

2.3.16 Information Systems Strategy

Identifier	Registration Level	Competency Expectation
GI-16001	1	Awareness of the need for alignment between the business of the organisation and its information systems strategy

Identifier	Registration Level	Competency Expectation
GI-16002	2	Awareness of: <ul style="list-style-type: none"> Information Systems strategy formulation Role and structure of informatics departments Alignment of Information Systems strategy and services with organisational objectives Strategy evaluation
GI-16003	3	Understanding and proficiency in the above

2.3.17 Account/Supplier Management

Identifier	Registration Level	Competency Expectation
GI-17001	3	Competence in dealing with suppliers (if in an end-user situation or organisation) or with clients (if in a supplier situation or organisation)

2.3.18 Benefits Management and Realisation

Identifier	Registration Level	Competency Expectation
GI-18001	2	Awareness of: <ul style="list-style-type: none"> Options Appraisal Business case development Benefits realisation Risk analysis and contingency planning
GI-18002	3	Understanding and proficiency in the above

2.3.19 Document and Records Management

Identifier	Registration Level	Competency Expectation
GI-19001	1	Awareness of the techniques, technologies and media used for document and record management
GI-19002	2	Competence in the application of the techniques, technologies and media used for document and record management

2.4 Specialised Professional Standards

2.4.1 Patients and the Public

Identifier	Registration Level	Competency Expectation
SP-1001	1	Awareness of from the perspective of patients, carers and the public,: <ul style="list-style-type: none"> • standard processes which take place as part of the care process • the needs and expectations of those who receive health and social care services • what patients and carers experience when receiving such services • the need for well being, prevention, self-care and health information
SP-1002	3	From the perspective of patients, carers and the public, familiarity with the points above.

2.4.2 Medicine and Care

Identifier	Registration Level	Competency Expectation
SP-2001	1	Awareness of the concepts of: <ul style="list-style-type: none"> • diagnosis and treatment • care processes • the terminology used in care
SP-2002	3	Familiarity with the above.

2.4.3 Delivery of Care

Identifier	Registration Level	Competency Expectation
SP-3001	1	Awareness of: <ul style="list-style-type: none"> • the different types of health and social care professionals • the roles of health and social care professionals • types of organisation providing health and social care services
SP-3002	3	Familiarity with the above

2.4.4 Improving the Quality and Safety of Care

Identifier	Registration Level	Competency Expectation
SP-4001	2	Awareness of the concepts of: <ul style="list-style-type: none"> • health research, outcomes, evaluation and evidence based practice • clinical governance and audit • risks to patient safety • clinical incidents and negligence • care services in the future
SP-4002	3	Familiarity with the above.

2.4.5 General Management/Leadership

Identifier	Registration Level	Competency Expectation
SP-5001	2	Awareness of management concepts, theories and best practice
SP-5002	3	Knowledge and understanding of leadership concepts, theories and best practice
SP-5003	2	Ability to lead a team of the same discipline as the practitioner
SP-5004	3	Ability to lead a multi-disciplinary team of any size

2.4.6 Strategy, Policy and Planning

Identifier	Registration Level	Competency Expectation
SP-6001	2	Ability to implement policies and articulate changes to working practices or procedures
SP-6002	3	Ability to: <ul style="list-style-type: none"> • formulate policy • develop strategic plans • gain approval for and implement plans, frameworks and policy

2.4.7 Management, Oversight and Funding of Care Services

Identifier	Registration Level	Competency Expectation
SP-7001	1	Awareness of: <ul style="list-style-type: none"> • management and governance in health and social care organisations • organisations associated with health and social care such as government departments, inspection and audit agencies, professional bodies, etc. • health policy and legislation • funding and financing of health and social care • major suppliers to health organisations of pharmaceuticals, medical equipment, consumables, information systems • dissemination of policy, information and knowledge in the health and social care sectors
SP-7002	3	Familiarity with the above.

2.4.8 Quality Management and Service Improvement

Identifier	Registration Level	Competency Expectation
SP-8001	1	Awareness of quality systems and formal quality standards
SP-8002	1	Ability to work to quality standards and procedures
SP-8003	2	Ability to contribute to the development, testing and reviewing of new concepts, models, methods, practices, products, systems and equipment.
SP-8004	3	Ability to develop and maintain a culture that: <ul style="list-style-type: none"> • Encourages suggestions for improvements in quality and working practices • Seeks to improve quality continuously
SP-8005	3	Ability to monitor and report on adherence to local quality standards and procedures
SP-8006	3	Ability to specify and document or evaluate (<i>some will be in delivery not recipient organisations</i>), via an SLA (Service Level Agreement), provision of a service or a service requirement

2.4.9 Programme and Project Management

Identifier	Registration Level	Competency Expectation
SP-9001	1	Ability to work in a project team
SP-9002	2	Knowledge and understanding of programme and project management principles, methods and tools
SP-9003	2	Ability to manage projects including planning, estimating, scheduling, use of software tools, reporting, etc.
SP-9004	3	Proficiency in managing programmes and projects

2.4.10 Risk Management

Identifier	Registration Level	Competency Expectation
SP-10001	1	Understanding that all actions have accompanying degrees of risk
SP-10002	2	Knowledge and understanding of risk management concepts including: <ul style="list-style-type: none"> • Identification, analysis, and assessment of risks • Risk registers • Evaluation and management (e.g. avoidance, mitigation, transfer, etc.)
SP-10003	3	Understanding of business continuity and contingency planning

2.4.11 Change Management

Identifier	Registration Level	Competency Expectation
SP-11001	2	Understanding of behaviours that impact implementation of change
SP-11002	2	Awareness of change management principles
SP-11003	2	Awareness of theories and concepts (such as systems thinking and those relating to organisational development and learning) underlying change management
SP-11004	3	Ability to apply appropriate tools and modelling techniques
SP-11005	3	Ability to identify barriers to change and plan for change
SP-11006	3	Ability to analyse current situations/tasks as input to change models
SP-11007	3	Ability to apply the evidence found during implementation of change management
SP-11008	3	Ability to apply systems thinking, systems models and systems methodologies in the analysis of organisations and systems

2.4.12 Personnel Management

Identifier	Registration Level	Competency Expectation
SP-12001	1	Understanding of the need for those under the supervision, direction or management of the practitioner to be developed and to develop themselves
SP-12002	1	Ability to provide advice or demonstrate own role to new or less experienced individuals
SP-12003	2	Ability to act as a mentor
SP-12004	2	Ability to direct or supervise others
SP-12005	2	Ability to manage a team all of whom report directly to the practitioner and who are in the same discipline

Identifier	Registration Level	Competency Expectation
SP-12006	3	Ability to: <ul style="list-style-type: none"> • appraise the work of subordinates • provide subordinates with suitable guidance, encouragement, etc. • advise subordinates on training needs and career development

2.4.13 Finance Management

Identifier	Registration Level	Competency Expectation
SP-13001	3	Familiarity with basic accounting concepts and ability to interpret financial reports
SP-13002	3	Ability to set budgets and manage financial resources for a department or service
SP-13003	2	Ability to contribute effectively to the development of a business case
SP-13004	3	Ability to develop and present a business case

2.5 Specialised Informatics Standards

2.5.1 Protection of Individuals and Organisations

Identifier	Registration Level	Competency Expectation
SI-1001	1	Knowledge and understanding of the requirement for and basic principles of: <ul style="list-style-type: none"> • Maintaining safety of patients and others • Patient Privacy and Consent • Data and Information Confidentiality • Information Security
SI-1002	2	Understanding of the legislation, regulatory guidance and NHS protocols regarding the security and confidentiality of patient identifiable information.

2.5.2 Data, Information and Knowledge in Health and Social Care

Identifier	Registration Level	Competency Expectation
SI-2001	2	Understanding of the relationships and differences between data, information and knowledge in health and social care.
SI-2002	1	Awareness of the need for data to be collected as part, and for the purposes, of clinical and care processes
	2	Understanding of the need for data to be collected and information processed as part, and for the purposes, of clinical and care processes.
SI-2003	1	Understanding of the need to maintain confidentiality, integrity and availability of data, information and knowledge in health and social care
SI-2004	2	Understanding of the need for full appropriate audit trails in health and social care systems.

2.5.3 Information Governance in Health and Social Care

Identifier	Registration Level	Competency Expectation
SI-3001	1	Ability to maintain security of information systems which the practitioner uses or has responsibility for.
SI-3002	1	Familiarity with Information Governance and Security principles and protocols in the context of Health and Social Care
SI-3003	2	Understanding of the conformance legislation, regulatory guidance and NHS protocols regarding the security and confidentiality of patient identifiable information

Identifier	Registration Level	Competency Expectation
SI-3004	2	Understanding of policies and practices in respect of requests from patients (or their representative) and clinicians for access to health records and related information.
SI-3005	2	Understanding of the information governance and local "Caldicott Guardian" arrangements, and the implications for health record keeping.
SI-3006	3	Understanding of the different arrangements and the associated responsibilities of staff for security of all types of information, especially electronically held, and for using such data for "secondary" purposes.
SI-3007	3	Understanding of the purpose, principles and practice of clinical governance in health organisations, how patients can be involved and the implications of the emergence of the expert patient.
SI-3008	3	Understanding of the principles and practice of clinical audit and appreciation of how this contributes to clinical governance.
SI-3009	3	Understanding of the various sources of information needed for effective clinical governance and audit, including access to appropriate evidence-based information.

2.5.4 Primary and Secondary Uses of Data in Health and Social Care

Identifier	Registration Level	Competency Expectation
SI-4001	2	Understanding of the need and uses to which data, information and knowledge are put in the following settings: <ul style="list-style-type: none"> • Provision of care to patients • Public health, epidemiology, etc. • Management and Finance • Business and operational processes • Organisational improvement • External monitoring • Research • Teaching and education
SI-4002	2	Understanding of how routine clinical data can be used to inform health research and policy.
SI-4003	2	Understanding of the benefits and potential risks of aggregating clinical or management data

2.5.5 Information Systems in Health and Social Care

Identifier	Registration Level	Competency Expectation
SI-5001	2	Understanding of systems development and implementation lifecycles for Information Systems in health and social care
SI-5002	2	Ability to identify the needs of clinicians, managers, patients and the public for information systems in health and social care

Identifier	Registration Level	Competency Expectation
SI-5003	2	Ability to develop a specification for information systems to meet the needs of clinicians, patients and the public
SI-5004	3	Ability to facilitate, and clinically validate, the development of communication, information and knowledge systems to meet the needs of an agreed specification
SI-5005	2	Knowledge of appropriate quality assurance and safety processes for use in development, implementation and deployment of information systems
SI-5006	3	Ability to facilitate, and clinically validate, the implementation, evaluation and improvement of communication, information and knowledge systems to meet the needs of clinicians, patients and the public
SI-5007	3	Understanding of post-implementation needs and resource requirements for clinical and other systems. Issues include maintenance/update of data on local systems such as user records, drug dictionaries and coding tables.
SI-5008	2	Understanding, in health and social care context, of key factors that affect the success or failure of systems including clinical involvement and HCI (human computer interface) issues
SI-5009	2	Appreciation of the need for tested continuity, contingency and disaster recovery plans and understanding of the consequences of health and social care systems failing or being unavailable.

2.5.6 Current and Emerging Systems

Identifier	Registration Level	Competency Expectation
SI-6001	1	Familiarity with ICT and applications in own area of work.
SI-6002	2	Knowledge/understanding of data, information, ICT applications and services in health and social care
SI-6003	3	Knowledge/understanding of the following emerging technologies, architectures, systems and applications: <ul style="list-style-type: none"> • Exchange of data and information within and between healthcare organisations • Electronic Records (including EHR, EPR, ESR, PHR) • Telemedicine, Telecare, Telehealth and (electronic) assistive technologies • e-Commerce (for Health) • Decision support, knowledge based, point of care, evidence based systems and others based on artificial intelligence • Web 2.0 technologies for health

2.5.7 Interoperability and Integration

Identifier	Registration Level	Competency Expectation
SI-7001	2	Familiarity with the issues of interoperability and integration of systems and information in the health and social care context.

2.5.8 Technical Standards

Identifier	Registration Level	Competency Expectation
SI-8001	2	Familiarity with the purpose and technical concepts of relevant ICT and data standards in health informatics (e.g. HL7, DICOM, NHS Data Dictionary).
SI-8002	3	Understanding of the above (appropriate to constituencies)

2.5.9 Information Systems Strategy in Health and Social Care

Identifier	Registration Level	Competency Expectation
SI-9001	1	Familiarity with information strategy at the national level.
SI-9002	2	Knowledge/understanding of information strategy at the national level.

2.5.10 Clinical Coding and Terminology

Identifier	Registration Level	Competency Expectation
SI-10001	1	Awareness of: <ul style="list-style-type: none"> The need for, and benefits of, structured coding of data Differences between coding, classification, terming and grouping
SI-10002	2	Understanding of the importance of accurate coding and implications of it not being achieved
SI-10003	2	Understand the basis and applications of different clinical coding systems, classifications and related vocabularies.
SI-10004	2	Awareness of limitations and shortcomings of coding and clinical vocabularies

2.5.11 Health Records

Identifier	Registration Level	Competency Expectation
SI-11001	1	Awareness of need for health records and the health records function
SI-11002	2	Understand the purpose, basic structures, and management of patient health records, including electronic patient records and patient held records.
SI-11003	3	Understanding of: <ul style="list-style-type: none"> Tracking systems for case notes and other types of records and information Archiving policies, media and storage options for case notes and other types of record the requirements for the Retention and destruction of clinical records and information

