Level 3 Diploma in Health Informatics (7450-03)

September 2013 Version 1.5 (August 2015)

City&
Guilds

Qualification at a glance

Subject area	**Health Informatics**
City & Guilds number	7450
Age group approved	16-18, 19+
Entry requirements	None
Assessment	Portfolio
Fast track	Available
Support materials	Centre handbook
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	City & Guilds number	Accreditation number
Level 3 Diploma in Health Informatics	7450-03	601/0694/3

Version and date	Change detail	Section
1.3 Oct 2013	RPL statement	**Assessment**
1.4 Mar 2014	What opportunities for progression are there? What does the qualification cover?	**Introduction**
1.5 August 2015	Amended level for unit 105	**Units**

Contents

1   Introduction

This document tells you what you need to do to deliver the qualification:

Area	Description
Who is the qualification for?	It is for learners who are on or aspiring to the CF4 Assistant Practitioners level on the Health Informatics Career Framework. It can also assist those looking to progress their career to CF5 Practitioner and have no formal qualification in this area. Typical job roles at CF4/5 would be: - Health Records Library Team Leader/Supervisor - Patient Administration Officer/Team Leader - Medical Records Officer - Clinical Coding Officer/Practitioner - Data Validation/Quality Officer - Statistical Technician - Data Quality Officer - Information Analyst/Data Analyst
What does the qualification cover?	This qualification offers a large degree of flexibility due to the number and variety of optional units available to the learner. A combination of units may be selected to support personal and/or professional development. Below are two examples to demonstrate how units may be combined to enhance existing knowledge and skills in their current role, or support career aspirations. **Example 1: If you work in or plan to work in clinical coding, you may wish to consider undertaking some of the following optional units**: 305 Communicate in a business environment 306 Produce coded clinical data for external audit purposes 307 Prepare, conduct and report results of clinical coding audit 310 Maintaining quality standards in the health sector 311 Principles of managing information and producing documents in a business environment 312 Analyse and present health related data and information 314 Analyse and report data 318 Identify information requirements in a health context 105 IT security for users 221 Principles of working in the public sector 224 Word processing software **Example 2: If you work in or plan to work as an information/data analyst role, you may wish to**

consider undertaking some of the following optional units:

305 Communicate in a business environment

310 Maintaining quality standards in the health sector

311 Principles of managing information and producing documents in a business environment

312 Analyse and present health related data and information

314 Analyse and report data

315 Data management software

316 Service improvement in the health sector

318 Identify information requirements in a health context

320 Manage and evaluate an information system

105 IT security for users

221 Principles of working in the public sector

225 Spreadsheet software

229 Database software

It also allows learners to learn, develop and practise the skills required for employment and/or career progression on the Health Informatics Career Framework. They will gain the knowledge and skills in such areas as;

- Promote good practice in handling information
- Communication skills
- Managing health informatics
- Prepare, conduct and report the results of a clinical coding audit
- Maintaining quality
- Analyse and present data and information
- Contribute to decision making

The qualification also includes a bilingualism unit to meet the needs of statutory requirements in Wales.

Is the qualification part of a framework or initiative?	It serves as the main competency qualification in the Health Informatics Apprenticeship framework.
Who did we develop the qualification with?	The qualification has been designed with professionals from Department of Health Informatics Directorate (DHID), NHS Wales Informatics Services (NWIS) and Agored, based on the National Occupational Standards from Skills for Health.
What opportunities for progression are there?	Whilst some units give a broad understanding and introduction to certain specialist areas they do not negate the need to gain specialist qualifications in those areas, for example clinical coding/audit (Unit 306 and 307). It allows learners to progress into employment or to the following City & Guilds qualifications: • Management Leadership programmes from ILM. • Higher education or further learning • City & Guilds Professional Recognition Awards

Structure

To achieve the **Level 3 Diploma in Health Informatics**, learners must achieve **17** credits from the mandatory units and a minimum of **35** credits from the optional units available. **20** credits must come from optional group A. Learners can take **15** or more credits from optional group B but it is not mandatory.

Unit accreditation number	City & Guilds unit number	Unit title	Credit value	Unit Level
Mandatory				
A/505/0981	Unit 302	Managing health informatics in healthcare settings	3	3
J/601/7640	Unit 219	Principles of Managing Information and Producing Documents	3	2
L/502/3381	Unit 301	Communication skills for working in the health sector	3	3
K/602/2684	Unit 304	Identify information requirements in a health context	4	3
F/601/2467	Unit 220	Manage own performance in a business environment	2	2
J/601/9470	Unit 303	Promote good practice in handling information in health and social care settings	2	3
Optional A				
K/601/2527	Unit 305	Communicate in a business environment	3	3
A/602/2690	Unit 306	Produce coded clinical data for external audit purposes	5	3
J/602/2692	Unit 307	Prepare, conduct and report the results of a clinical coding audit	5	3

T/500/7210	Unit 308	Quality Management of ICT Products and Services	12	3
K/504/9423	Unit 309	Understanding Bilingualism in Work	2	3
F/502/3412	Unit 310	Maintaining quality standards in the health sector	2	3
M/601/7647	Unit 311	Principles of Managing Information and Producing Documents in a Business Environment	4	3
T/602/2686	Unit 312	Analyse and present health related data and information	4	3
Y/601/2524	Unit 313	Contribute to decision-making in a business environment	3	3
Y/601/2538	Unit 314	Analyse and report data	6	3
A/502/4560	Unit 315	Data management software	4	3
J/502/3413	Unit 316	Service improvement in the health sector	3	3
F/601/2551	Unit 317	Deliver, monitor and evaluate customer service to external customers	3	3
K/602/2684	Unit 318	Identify information requirements in a health context	4	3
J/600/9750	Unit 319	Plan and manage a project	8	4
A/601/2564	Unit 320	Manage and evaluate an information system	6	4

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M/602/4520	Unit 321	Deliver training through demonstration and instruction	3	3
Optional B				
R/502/4256	Unit 105	IT security for users	1	1
K/602/1535	Unit 221	Principles of Working in the Public Sector	5	2
R/502/4399	Unit 209	Specialist software	3	2
F/502/4379	Unit 222	Using collaborative technologies	4	2
M/502/4619	Unit 223	Project Management Software	4	2
R/502/4628	Unit 224	Word processing software	4	2
F/502/4625	Unit 225	Spreadsheet software	4	2
A/601/3181	Unit 226	Creating an object oriented computer program	7	2
L/601/3167	Unit 227	Creating a procedural computer program	7	2
T/601/3177	Unit 228	Creating an event driven computer program	7	2
M/502/4555	Unit 229	Database software	4	2

2 Centre requirements

Approval

If your Centre is approved to offer the following qualifications:

- Level 2 Award/Certificate/Diploma for IT Users ITQ (QCF) (7574)
- Level 3 Award/Certificate/Diploma for IT Users ITQ (QCF) (7574)
- Level 2 Award/Certificate/Diploma in Business and Administration (4448)
- Level 3 Award/Certificate/Diploma in Business and Administration (4448)

you can apply for the new Level 3 Diploma in Health Informatics (7450-03) approval using the **fast track approval form**, available from the City & Guilds website.

Centres should use the fast track form if:
- there have been no changes to the way the qualifications are delivered, and
- they meet all of the approval criteria in the fast track form guidance notes.

Fast track approval is available for 12 months from the launch of the qualification. After 12 months, the Centre will have to go through the standard Qualification Approval Process. The centre is responsible for checking that fast track approval is still current at the time of application.

To offer this qualification, new centres will need to gain both centre and qualification approval. Please refer to the *Centre Manual - Supporting Customer Excellence* for further information.

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

Resource requirements

Physical resources and site agreements

Centres must provide access to sufficient equipment in the centre or workplace to ensure candidates have the opportunity to cover all of the practical activities.

It is acceptable for centres to use specially designated areas within a centre to assess, for example, the installation of network, applications software, operating systems, setting up ICT equipment, etc. especially where the normal learning environment does not allow this to happen The equipment and systems must meet industrial or business standards and be capable of being used under normal working conditions.

Centre staffing

Staff delivering this qualification must be able to demonstrate that they meet the following occupational expertise requirements. They should:

- be occupationally competent or technically knowledgeable in the area] for which they are delivering training and/or have experience of providing training. This knowledge must be to the same level as the training being delivered
- have recent relevant experience in the specific area they will be assessing
- have credible experience of providing training.

Centre staff may undertake more than one role, eg tutor and assessor or internal quality assurer, but cannot internally verify their own assessments.

Assessors and Internal Quality Assurer

Assessor/Internal Quality Assurer TAQA qualifications are valued as qualifications for centre staff, but they are not currently a requirement for the qualification.

Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

Learner entry requirements

City & Guilds does not set entry requirements for this qualification. However, centres must ensure that learners have the potential and opportunity to gain the qualification successfully.

Age restrictions

City & Guilds cannot accept any registrations for learners under 16 as this qualification is not approved for under 16s.

3 Delivering the qualification

Initial assessment and induction

An initial assessment of each learner should be made before the start of their programme to identify:

- if the learner has any specific training needs,
- support and guidance they may need when working towards their qualification.
- any units they have already completed, or credit they have accumulated which is relevant to the qualification.
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the learner fully understands the requirements of the qualification, their responsibilities as a learner, and the responsibilities of the centre. This information can be recorded on a learning contract.

Recommended delivery strategies

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

Centres may design course programmes of study in any way which:

- best meets the needs and capabilities of their candidates
- satisfies the requirements of the qualification.

When designing and delivering the course programme, centres might wish to incorporate other teaching and learning that is not assessed as part of the qualification. This might include the following:

- literacy, language and/or numeracy
- personal learning and thinking skills
- personal and social development
- employment rights and responsibilities

Where applicable, this could involve enabling the candidate to access relevant qualifications covering these skills.

4   Assessment

Summary of assessment methods

Learners will be required to complete a portfolio of evidence for **each** unit, though centres may use an assignment for some units where this would avoid compromising patient confidentiality and conflict with the governance in using data or information in a health environment.

Evidence requirements

The evidence requirements have been specified by CfA, e-skills UK and Skills for Health in their assessment strategy as relevant to the units of the qualification.

Evidence of occupational competence must be generated and collected through performance under workplace conditions. The evidence collected under these conditions must also be as naturally occurring as possible.

The optimum method of collecting evidence of a candidate's competence is by direct observation of naturally occurring activity in the workplace. This observation must be carried out by a qualified assessor.

Simulation is permitted for **some** units within this qualification, where use of sensitive or confidential information would be inappropriate.

Witness testimony can be gathered from a candidate's colleagues, managers, customers, suppliers, etc. They should:

- be specific to the activities or product
- give a brief description of the circumstances of the observation
- give a brief description of the background of the witness and the observed activity
- identify the aspects of the competence demonstrated.

Product evidence must be assessed in order to ensure that:

- the evidence meets the required standard
- the candidate has followed the correct processes to generate the product
- the evidence is authentic.

In regards to the acceptability of knowledge evidence, the optimum method of collecting evidence of a candidate's knowledge is by oral questioning following direct observation in the workplace.

This questioning must be carried out by a qualified assessor.

Recording forms

Candidates and centres may decide to use a paper-based or electronic method of recording evidence.

To support the delivery of vocational qualifications we offer our own e-portfolio, Learning Assistant, an easy-to-use and secure online tool to support and evidence learners' progress towards achieving qualifications.

Further details are available at: **www.cityandguilds.com/eportfolios**.

Recording forms are available on the City & Guilds website.

Centres may devise or customise alternative forms, which must be approved for use by the External Verifier before they are used by candidates and assessors at the centre.

Recognition of Prior Learning

City & Guilds permits the Recognition of Prior learning when a learner is able to provide:

- Certificate of unit credit from another or similar qualification that is the same unit within the relevant City & Guilds qualification
  - automatically from City & Guilds qualifications
  - internally verified and authenticated by the centre for other Awarding organisations – any cross mapping being shown if required
- Evidence that has been internally verified and mapped to the relevant unit(s) within the City & Guilds qualification and externally verified by a City & Guilds Quality Consultant (QC)
- Units achieved via a unit route of a City & Guilds qualification that a learner wishes to have certificate for a full award

Work- based units that are achieved through portfolio of evidence; there is no restriction to the amount of RPL that a learner may use. Certain units may require the use of a City & Guilds assignment or multiple choice test and will need to be achieved using these tests unless agreed with the (QC) and City & Guilds.

5 Units

Structure of units

These units each have the following:
- City & Guilds reference number
- unit accreditation number (UAN)
- title
- level
- credit value
- guided learning hours
- learning outcomes which are comprised of a number of assessment criteria

Unit 105   IT Security for Users

UAN:	R/502/4256
Level:	1
Credit value:	1
GLH:	10

Learning outcome
The learner will:
1.   Be able to use appropriate methods to minimise security risks to IT systems and data
Assessment criteria
The learner can:
1.1   identify security issues that may threaten system performance
1.2   take appropriate security precautions to protect IT systems and data
1.3   identify threats to information security associated with the widespread use of technology
1.4   take appropriate precautions to keep information secure
1.5   follow relevant guidelines and procedures for the secure use of IT
1.6   describe why it is important to backup data securely
1.7   ensure personal data is backed up to appropriate media

Unit 209 Specialist software

UAN:	R/502/4399
Level:	2
Credit value:	3
GLH:	20

Learning outcome
The learner will:
1. Be able to input and combine information using specialist applications
Assessment criteria
The learner can:
1.1 input relevant information accurately so that it is ready for processing
1.2 select and use appropriate techniques to link and combine information of different forms or from different sources within the software
1.3 respond appropriately to data entry error messages

Learning outcome
The learner will:
2. Be able to use appropriate structures to organise and retrieve information efficiently
Assessment criteria
The learner can:
2.1 describe what functions to apply to structure and layout information effectively
2.2 select and use appropriate structures and/or layouts to organize information
2.3 apply local and/or legal guidelines and conventions for the storage and use of data where available

Learning outcome
The learner will:
3. Be able to use the functions of the software effectively to process and present information
Assessment criteria
The learner can:
3.1 select and use appropriate tools and techniques to edit, process and format information

3.2	check information meets needs, using IT tools and making corrections as necessary
3.3	select and use appropriate methods to present information

<table>
<tr><td>Unit 219</td><td>Principles of managing information and producing documents</td></tr>
</table>

<table>
<tr><td>UAN:</td><td>J/601/7640</td></tr>
<tr><td>Level:</td><td>2</td></tr>
<tr><td>Credit value:</td><td>3</td></tr>
<tr><td>GLH:</td><td>24</td></tr>
</table>

Learning outcome
The learner will:
1. Understand the purpose of information technology in a business environment
Assessment criteria
The learner can:
1.1 identify different types of information technology that may be used for work tasks
1.2 outline the benefits of using information technology for work tasks

Learning outcome
The learner will:
2. Understand how to manage electronic and paper based information
Assessment criteria
The learner can:
2.1 explain the purpose of agreeing objectives and deadlines for researching information
2.2 identify different ways of researching, organising and reporting Information
2.3 describe procedures to be followed for archiving, retrieving and deleting information, including legal requirements, if required
2.4 explain why confidentiality is critical when managing information

Learning outcome
The learner will:
3. Understand the purpose of producing documents that are fit-for-purpose
Assessment criteria
The learner can:
3.1 identify reasons for producing documents that are fit-for-purpose
3.2 describe different types and styles of documents and when they are used

Learning outcome
The learner will:
4. Know the procedures to be followed when producing documents
Assessment criteria
The learner can:
4.1 identify reasons for agreeing the purpose, content, layout, quality standards and deadlines for the production of documents
4.2 describe ways of checking finished documents for accuracy and correctness, and the purpose of doing so
4.3 explain the purpose of confidentiality and data protection procedures when preparing documents
4.4 compare different types of documents that may be produced from notes and the formats to be followed
4.5 explain the procedures to be followed when preparing text from notes

Unit 220	Manage own performance in a business environment

UAN:	F/601/2467
Level:	2
Credit value:	2
GLH:	9

Learning outcome
The learner will:
1. Understand how to plan work and be accountable to others

Assessment criteria
The learner can:
1.1 outline guidelines, procedures codes of practice relevant to personal work
1.2 explain the purpose of planning work, and being accountable to others for own work
1.3 explain the purpose and benefits of agreeing realistic targets for work
1.4 explain how to agree realistic targets
1.5 describe ways of planning work to meet agreed deadlines
1.6 explain the purpose of keeping other people informed about progress
1.7 explain the purpose and benefits of letting other people know work plans need to be changed
1.8 describe types of problems that may occur during work
1.9 describe ways of seeking assistance with getting help to resolve problems
1.10 explain the purpose and benefits of recognising and learning from mistakes

Learning outcome
The learner will:
2. Understand how to behave in a way that supports effective working

Assessment criteria
The learner can:
2.1 explain the purpose and benefits of agreeing and setting high standards for own work
2.2 describe ways of setting high standards for work
2.3 explain the purpose and benefits of taking on new challenges if they arise
2.4 explain the purpose and benefits of adapting to change
2.5 explain the purpose and benefits of treating others with honesty,

respect and consideration

2.6 explain why own behaviour in the workplace is important

2.7 describe types of behaviour at work that show honesty, respect and consideration and those that do not

Learning outcome
The learner will:
3. Be able to plan and be responsible for own work, supported by others
Assessment criteria
The learner can:
3.1 agree realistic targets and achievable timescales for own work
3.2 plan work tasks to make best use of own time and available resources
3.3 confirm effective working methods with others
3.4 identify and report problems occurring in own work, using the support of other people when necessary
3.5 keep other people informed of progress
3.6 complete work tasks to agreed deadlines or re-negotiate timescales and plans in good time
3.7 take responsibility for own work and accept responsibility for any mistakes made
3.8 follow agreed work guidelines, procedures and, where needed, codes of practice

Learning outcome
The learner will:
4. Be able to behave in a way that supports effective working
Assessment criteria
The learner can:
4.1 set high standards for own work and show commitment to achieving these standards
4.2 agree to take on new challenge(s) if they arise
4.3 adapt to new ways of working
4.4 treat other people with honesty, respect and consideration
4.5 help and support other people in work tasks

Unit 221   Principles of working in the public sector

UAN:	K/602/1535
Level:	2
Credit value:	5
GLH:	40

Learning outcome
The learner will:
1.   Know the features of the public sector
Assessment criteria
The learner can:
1.1   identify the types of organisations that operate within the public sector
1.2   identify the main differences between types of organisations that operate within the public sector
1.3   describe the aims of a chosen public sector organisation and the wider objectives of the public sector
1.4   identify how local and central government work together to provide public services
1.5   state the major differences between the public, private and not-for profit sectors
1.6   identify the key areas of legislation relating to a chosen public sector organisation

Learning outcome
The learner will:
2.   Understand how the public sector is structured
Assessment criteria
The learner can:
2.1   describe the organisational structure of a chosen public sector organisation
2.2   explain how a chosen public sector organisation fits into the overall public sector

Learning outcome
The learner will:
3. Understand the role of the public sector in providing services and how individual roles contribute to service provision
Assessment criteria
The learner can:
3.1 identify different types of customer for a public sector organisation
3.2 explain why it is important to Understand the needs of a public sector organisation's customers
3.3 describe how public service provision can adapt to changes in customer needs and type
3.4 explain the purpose of ensuring equality and diversity is reflected when providing public services
3.5 explain how individuals contribute to the work of their organisation and the wider public sector

Learning outcome
The learner will:
4. Understand finances in the public sector
Assessment criteria
The learner can:
4.1 identify where money to pay for public services comes from
4.2 identify how a chosen public sector organisation is financed
4.3 explain why it is important not to waste money and resources in the public sector
4.4 explain why prioritisation of public service provision must take place when resources are limited

Learning outcome
The learner will:
5. Understand how public sector organisations work together and with other organisations
Assessment criteria
The learner can:
5.1 explain the benefits of working with other organisations within and outside the public sector
5.2 identify organisations that a public sector organisation works with to provide public services
5.3 explain how a public sector organisation works with other public and non-public sector organisations

Learning outcome
The learner will:
6   Understand how performance is monitored and measured in the public sector and the purpose of doing so
Assessment criteria
The learner can:
6.1   explain why performance is monitored and measured in the public sector
6.2   outline how the performance of a chosen public sector organisation or department can be measured
6.3   explain how individual performance is monitored within a public sector organisation

Unit 222 Using collaborative technologies

UAN:	F/502/4379
Level:	2
Credit value:	4
GLH:	30

Learning outcome
The learner will:
1. Be able to stay safe and secure when working with collaborative technology
Assessment criteria
The learner can:
1.1 take appropriate steps to avoid risks when working with collaborative technology, in line with relevant guidelines
1.2 explain what risks there may be in using collaborative technology and how to keep them to a minimum
1.3 use appropriate methods to promote trust when working collaboratively
1.4 carry out appropriate checks on others online identities and different types of information
1.5 identify and respond to inappropriate content and behaviour

Learning outcome
The learner will:
2. Be able to plan and set up IT tools and devices for collaborative working
Assessment criteria
The learner can:
2.1 describe the purpose for using collaborative technologies
2.2 describe what outcomes are needed from collaborative working and whether or not archiving is required
2.3 describe the roles, IT tools and facilities needed for collaborative tasks and communication media
2.4 describe the features, benefits and limitations of different collaborative technology tools and devices
2.5 describe the compatibility issues in different combinations of collaborative tools and devices
2.6 select an appropriate combination of IT tools and devices to carry out collaborative tasks
2.7 connect and configure the combination of IT tools and devices needed for a collaborative task

Learning outcome
The learner will:
3. Be able to prepare collaborative technologies for use
Assessment criteria
The learner can:
3.1 describe what access rights and issues others may have in using collaborative technologies
3.2 assess what permissions are needed for different users and content
3.3 set up and use access rights to enable others to access information
3.4 set up and use permissions to filter information
3.5 adjust settings so that others can access IT tools and devices for collaborative working
3.6 select and use different elements to control environments for collaborative technologies
3.7 select and join networks and data feeds to manage data to suit collaborative tasks

Learning outcome
The learner will:
4. Be able to contribute to tasks using collaborative technologies
Assessment criteria
The learner can:
4.1 describe the rules of engagement for using collaborative technologies
4.2 enable others to contribute responsibly to collaborative tasks
4.3 present relevant and valuable information
4.4 moderate the use of collaborative technologies
4.5 archive the outcome of collaborative working
4.6 assess when there is a problem with collaborative technologies and
when to get expert help
4.7 respond to problems with collaborative technologies

Unit 223   Project management software

UAN:	M/502/4619
Level:	2
Credit value:	4
GLH:	30

Learning outcome
The learner will:
1.   Be able to create and define a project
Assessment criteria
The learner can:
1.1   identify the critical information about the project that must be included
1.2   create, store and retrieve project management files effectively in line with local guidelines for storage and use of data where applicable
1.3   define the project file properties and project options

Learning outcome
The learner will:
2.   Be able to enter and edit information about project tasks and resources
Assessment criteria
The learner can:
2.1   identify the critical tasks and milestones to be completed
2.2   enter and edit information about project tasks
2.3   identify any deadlines and constraints which apply to the project
2.4   identify any deadlines and constraints which apply to the project
2.5   create and apply a task calendar for scheduling tasks
2.6   enter and edit information about resources for use in the project
2.7   adjust templates for project information
2.8   set up and edit dependencies between tasks

Learning outcome
The learner will:
3.   Be able to update information about project progress
Assessment criteria
The learner can:
3.1   describe the methods to update and report information about project progress
3.2   use editing and formatting techniques to update project elements
3.3   update task status in line with progress

3.4	update information about resources as required
3.5	compare actual progress with project baseline and reschedule uncompleted tasks
3.6	identify any risks and issues that may have an impact on the project

| **Learning outcome** |
| The learner will: |
| 4. Be able to select and use appropriate tools and techniques to display and report on project status |
| **Assessment criteria** |
| The learner can: |
| 4.1 select and create project reports to meet needs |
| 4.2 use filtering and formatting techniques to display project information to meet needs |
| 4.3 share project information with other applications |

Unit 224   Word processing software

UAN:	R/502/4628
Level:	2
Credit value:	4
GLH:	30

Learning outcome
The learner will:
1. Be able to enter and combine text and other information accurately within word processing documents
Assessment criteria
The learner can:
1.1 identify what types of information are needed in documents
1.2 use appropriate techniques to enter text and other information accurately and efficiently
1.3 select and use appropriate templates for different purposes
1.4 identify when and how to combine and merge information from other software or other documents
1.5 select and use a range of editing tools to amend document content
1.6 combine or merge information within a document from a range of sources
1.7 store and retrieve document and template files effectively, in line with local guidelines and conventions where available

Learning outcome
The learner will:
2. Be able to create and modify layout and structures for word processing documents
Assessment criteria
The learner can:
2.1 identify the document requirements for structure and style
2.2 identify what templates and styles are available and when to use them
2.3 create and modify columns, tables and forms to organise Information
2.4 select and apply styles to text

Learning outcome
The learner will:
3. Be able to use word processing software tools to format and present documents effectively to meet requirements
Assessment criteria
The learner can:
3.1 identify how the document should be formatted to aid meaning
3.2 select and use appropriate techniques to format characters and paragraphs
3.3 select and use appropriate page and section layouts to present and print documents
3.4 describe any quality problems with documents
3.5 check documents meet needs, using IT tools and making corrections as necessary
3.6 respond appropriately to quality problems with documents so that outcomes meet needs

Unit 225   Spreadsheet software

UAN:	F/502/4625
Level:	2
Credit value:	4
GLH:	30

Learning outcome
The learner will:
1. Be able to use a spreadsheet to enter, edit and organise numerical and other data
Assessment criteria
The learner can:
1.1   identify what numerical and other information is needed in the spreadsheet and how it should be structured
1.2   enter and edit numerical and other data accurately
1.3   combine and link data across worksheets
1.4   store and retrieve spreadsheet files effectively, in line with local guidelines and conventions where available

Learning outcome
The learner will:
2. Be able to select and use appropriate formulas and data analysis tools to meet requirements
Assessment criteria
The learner can:
2.1 identify which tools and techniques to use to analyse and manipulate data to meet requirements
2.2 select and use a range of appropriate functions and formulas to meet calculation requirements
2.3 use a range of tools and techniques to analyse and manipulate data to meet requirements

Learning outcome
The learner will:
3. Be able to select and use tools and techniques to present and format spreadsheet information
Assessment criteria
The learner can:
3.1   plan how to present and format spreadsheet information effectively to meet needs
3.2   select and use appropriate tools and techniques to format

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	spreadsheet cells, rows, columns and worksheets
3.3	select and format an appropriate chart or graph type to display selected information
3.4	select and use appropriate page layout to present and print spreadsheet information
3.5	check information meets needs, using spreadsheet tools and making corrections as necessary
3.6	describe how to find errors in spreadsheet formulas
3.7	respond appropriately to any problems with spreadsheets

Unit 226   Creating an object oriented computer program

UAN:	A/601/3181
Level:	2
Credit value:	7
GLH:	60

Learning outcome
The learner will:
1.   Be able to implement software using object oriented programming
Assessment criteria
The learner can:
1.1   select, declare and initialise variable and data structure types and sizes to meet given requirements
1.2   define relationships between objects
1.3   implement object behaviours using control structures
1.4   declare file structures
1.5   use standard input/output commands
1.6   use operators and predefined functions
1.7   make effective use of an Integrated Development Environment (IDE)

Learning outcome
The learner will:
2.   Be able to   refine an object oriented program to improve quality
Assessment criteria
The learner can:
2.1   follow an agreed standard for naming, comments and code layout
2.2   implement data validation for inputs
2.3   implement opportunities error handling and reporting
2.4   create on-screen help to assist the users of a computer program

Learning outcome
The learner will:
3.   Be able to test the operation of an object oriented driven program
Assessment criteria
The learner can:
3.1   use of the debugging facilities available in the IDE
3.2   determine expected test results from given test data
3.3   compare actual results against expected results to identify

Unit 227   Creating a procedural computer program

UAN:	L/601/3167
Level:	2
Credit value:	7
GLH:	60

Learning outcome
The learner will:
1.   Be able to implement software using procedural programming
Assessment criteria
The learner can:
1.1   select, declare and initialise variable and data structure types and sizes to meet given requirements
1.2   implement control structures
1.3   declare file structures
1.4   use standard input/output commands
1.5   use operators and predefined functions
1.6   correctly use parameter passing mechanisms

Learning outcome
The learner will:
2.   Be able to refine a procedural programme to improve quality
Assessment criteria
The learner can:
2.1   follow an agreed standard for naming, comments and code layout
2.2   implement data validation for inputs
2.3   implement error handling and reporting
2.4   create documentation to assist the users of a computer programme

Learning outcome
The learner will:
3.   Be able to test the operation of a procedural programme
Assessment criteria
The learner can:
3.1   use available debugging tools
3.2   determine expected test results from given test data
3.3   compare actual test results against expected results to identify

discrepancies

Unit 228　　Creating an event driven computer program

UAN:	T/601/3177
Level:	2
Credit value:	7
GLH:	60

Learning outcome
The learner will:
1.　Be able to implement software using event driven programming
Assessment criteria
The learner can:
1.1　declare and initialise variable and data structure types and sizes to implement given requirements
1.2　assign properties to screen components
1.3　associate events, including parameter passing, to screen components
1.4　implement event handling using control structures
1.5　declare file structures
1.6　use standard input/output commands to implement design requirements
1.7　use of operators and predefined functions
1.8　use an Integrated Development Environment (IDE)

Learning outcome
The learner will:
2.　Be able to refine an event driven program to improve quality
Assessment criteria
The learner can:
2.1　follow an agreed standard for naming, comments and code layout
2.2　implement data validation for inputs
2.3　implement error handling and reporting
2.4　create documentation for the support and maintenance of a computer program

Learning outcome
The learner will:
3.　Be able to test the operation of an event driven program
Assessment criteria
The learner can:
3.1　use the debugging facilities available in the IDE
3.2　determine expected test results from given test data

3.3 compare actual test results against expected results to identify discrepancies

Unit 229   Database software

UAN:	M/502/4555
Level:	2
Credit value:	4
GLH:	30

Learning outcome
The learner will:
1. Be able to create and modify non-relational database tables
Assessment criteria
The learner can:
1.1   identify the components of a database design
1.2   describe the field characteristics for the data required
1.3   create and modify database tables using a range of field types
1.4   describe ways to maintain data integrity
1.5   respond appropriately to problems with database tables
1.6   use database tools and techniques to ensure data integrity is maintained

Learning outcome
The learner will:
2. Be able to enter, edit and organise structured information in a database
Assessment criteria
The learner can:
2.1   create forms to enter, edit and organise data in a database
2.2   select and use appropriate tools and techniques to format data entry forms
2.3   check data entry meets needs, using IT tools and making corrections as necessary
2.4   respond appropriately to data entry errors

Learning outcome
The learner will:
3. Be able to use database software tools to run queries and produce reports
Assessment criteria
The learner can:
3.1   create and run database queries using multiple criteria to display or amend selected data
3.2   plan and produce database reports from a single table non-

relational database

3.3 select and use appropriate tools and techniques to format database

reports

3.4 check reports meet needs, using IT tools and making corrections as

necessary

Unit 301   Communication skills for working in the health sector

UAN:	L/502/3381
Level:	3
Credit value:	3
GLH:	17

Learning outcome
The learner will:
1. Understand how to communicate effectively in different situations
Assessment criteria
The learner can:
1.1 explain the factors to consider when communicating
1.2 explain the importance of using forms of communication that are appropriate to the situation
1.3 outline the skills needed for effective communication in different situations
1.4 explain how to communicate according to policies, procedures and legislation

Learning outcome
The learner will:
2. Understand how to manage barriers to effective communication
Assessment criteria
The learner can:
2.1 describe barriers to effective communication
2.2 evaluate strategies to overcome barriers to effective communication

Learning outcome
The learner will:
3. Know how to maintain accurate and complete records
Assessment criteria
The learner can:
3.1 describe the requirements of relevant legislation, policies and procedures in relation to record keeping
3.2 describe how to maintain accurate and complete records
3.3 describe why it is important to follow relevant legislation, policies and procedures when communicating and sharing information

Learning outcome
The learner will:
4.   Understand how to develop own communication skills
Assessment criteria
The learner can:
4.1   explain how effective communication can present a positive image   of self, organisation or service
4.2   assess strategies to improve effectiveness of own communication

Unit 302   Managing health informatics in healthcare settings

UAN:	A/505/0981
Level:	3
Credit value:	3
GLH:	20

Learning outcome
The learner will:
1. Know how to comply with policies and procedures for information and data
Assessment criteria
The learner can:
1.1 identify current legislation for handling information in a health and social care setting
1.2 identify the types of information and data collected by an organisation
1.3 describe the procedures for managing personal data requests
1.4 describe an organisation's information governance policies and procedures

Learning outcome
The learner will:
2. Understand how to take due care in the collection, storage and use of information and data
Assessment criteria
The learner can:
2.1 explain how information and data flow within and between organisations
2.2 describe the risk assessment when collecting, storing and using information and data
2.3 describe own responsibility for collecting, storing and using information and data
2.4 explain why confidentiality is important

Learning outcome
The learner will:
3. Understand quality improvement in information and data
Assessment criteria
The learner can:

3.1	explain own responsibilities for maintaining quality improvement in
	informatics
3.2	explain how to escalate an identified quality improvement

Learning outcome
The learner will:
4. Be able to use information and data
Assessment criteria
The learner can:
4.1 manage requests for information and data, working within current local and national guidelines
4.2 advise others about information and data usage
4.3 validate information and data used by self and others
4.4 evaluate the impact of inaccurate, incomplete or unavailable information and data on
• the organisation
• partner organisations
• individuals

Learning outcome
The learner will:
5. Be able to reflect on personal practice in informatics
Assessment criteria
The learner can:
5.1 evaluate personal practice in managing information and data

Unit 303   Promote good practice in handling information in health and social care settings

UAN:	J/601/9470
Level:	3
Credit value:	2
GLH:	16

Learning outcome
The learner will:
1.   Understand requirements for handling information in health and social care settings
Assessment criteria
The learner can:
1.1   identify legislation and codes of practice that relate to handling information in health and social care
1.2   summarise the main points of legal requirements and codes of practice for handling information in health and social care

Learning outcome
The learner will:
2.   Be able to implement good practice in handling information
Assessment criteria
The learner can:
2.1   describe features of manual and electronic information storage systems that help ensure security
2.2   demonstrate practices that ensure security when storing and accessing information
2.3   demonstrate practices that ensure security when storing and accessing information

Learning outcome
The learner will:
3.   Be able to support others to handle information
Assessment criteria
The learner can:
3.1   support others to Understand the need for secure handling of information
3.2   support others to Understand and contribute to records

Unit 304 Identify information requirements in a health context

UAN:	K/602/2684
Level:	3
Credit value:	4
GLH:	30

Learning outcome
The learner will:
1. Understand current legislation, national guidelines, policies, protocols and good practice related to identifying data requirements in a health context
Assessment criteria
The learner can:
1.1 summarise the current legislation, national guidelines, policies, protocols and good practice guidelines for information management in a health context
1.2 describe the health and business context for data and information requirements
1.3 explain the different ways in which routine and ad hoc data and information are used in a health context

Learning outcome
The learner will:
2. Be able to find and select data requirements in a health context
Assessment criteria
The learner can:
2.1 respond to the target audiences needs for the data and information
2.2 consult with colleagues and the target audience to identify requirements for data and information
2.3 describe the objectives and purpose of the data
2.4 describe any sensitivity of the data and information involved
2.5 identify the data and information available
2.6 gain agreement to access the sources of data and information identified
2.7 select the data and information relevant to the target audience
2.8 describe any data limitations which may constrain the audiences requirements
2.9 describe any system limitations which may constrain the audiences requirements

Learning outcome
The learner will:
3. Be able to prepare resources to retrieve the agreed data and information
Assessment criteria
The learner can:
3.1 identify any variables that may affect the data and information to be
provided
3.2 check the audience Understands the meaning and significance of any variables
3.3 agree conformity with information governance in line with local policy and protocol
3.4 identify the resources required and the limitations, assumptions, costs and timescales that will affect the work to be carried out
3.5 record the details required for the specification in line with local policy and protocol
3.6 agree reporting responsibilities and mechanisms with the target audience
3.7 describe the classification systems, coding classifications and terminology used in a health context
3.8 explain how to identify audience requirements for data and information
3.9 describe ways in which it is or is not possible to meet requirements for data and information
3.10 describe ways in which data and information is grouped in a health context

Unit 305 Communicate in a business environment

UAN:	K/601/2527
Level:	3
Credit value:	3
GLH:	14

Learning outcome
The learner will:
1. Understand the purpose of planning communication

Assessment criteria
The learner can:
1.1 explain the benefits of knowing the purpose of communication
1.2 explain the reasons for knowing the audience to whom communications are presented
1.3 explain the purpose of knowing the intended outcomes of communications
1.4 describe different methods of communication and when to use them

Learning outcome
The learner will:
2. Understand how to communicate in writing

Assessment criteria
The learner can:
2.1 identify relevant sources of information that may be used when preparing written communication
2.2 explain the communication principles for using electronic forms of written communication in a business environment
2.3 explain different styles and tones of language and situations when they may be used for written communications
2.4 explain the reasons for selecting and using language that suits the purpose of written communication
2.5 describe ways of organising, structuring and presenting written information so it meets the needs of different audiences
2.6 describe ways of checking written information for accuracy of content
2.7 explain the purpose of accurate use of grammar, punctuation and spelling in written communication
2.8 explain what is meant by plain English, and why it is used

2.9 explain the purpose of proofreading and checking work
2.10 explain the purpose of recognising work that is 'important' and work that is 'urgent'
2.11 describe organisational procedures for saving and filing written communications

Learning outcome
The learner will:
3. Understand how to communicate verbally
Assessment criteria
The learner can:
3.1 describe ways of verbally presenting information and ideas clearly
3.2 explain ways of making contributions to discussions that help to achieve objectives
3.3 describe ways of adapting verbal contributions to suit different audiences, purposes and situations
3.4 describe how to use and interpret body language
3.5 describe how to use and interpret tone of voice
3.6 describe methods of active listening
3.7 describe the benefits of active listening
3.8 explain the purpose of summarising verbal communication

Learning outcome
The learner will:
4. Understand the purpose and value of feedback in developing communication skills
Assessment criteria
The learner can:
4.1 describe ways of getting feedback on whether communications achieved their purpose
4.2 explain the purpose and benefits of using feedback to further develop communication skills

Learning outcome
The learner will:
5. Be able to plan communication
Assessment criteria
The learner can:
5.1 identify the purpose of communications and the audience(s)
5.2 select methods of communication to be used
5.3 confirm methods of communication, as required

Learning outcome
The learner will:
6.   Be able to communicate in writing

Assessment criteria
The learner can:
6.1   find and select information that supports the purpose of written communications
6.2   present information using a format, layout, style and house style suited to the purpose and method of written communications
6.3   organise structure and present written information so that it is clear and accurate, and meets the need of different audiences
6.4   Organise structure and present written information so that it is clear and accurate, and meets the need of different audiences
6.5   use accurate grammar, spelling and punctuation, and plain English to make sure that meaning of written communication is clear
6.6   proofread and check written communications and make amendments, as required
6.7   confirm what is 'important' and what is 'urgent'
6.8   produce written communications to meet agreed deadlines
6.9   keep a file copy of written communications sent

Learning outcome
The learner will:
7.   Be able to communicate verbally

Assessment criteria
The learner can:
7.1   verbally present information and ideas to others clearly and accurately
7.2   make verbal contributions to discussion(s) that suit the audience, purpose and situation
7.3   use body language and tone to meet the needs of the audience, purpose and situation
7.4   actively listen to information given by other people, and make relevant verbal responses
7.5   ask relevant verbal questions to clarify own Understanding, as required
7.6   summarise verbal communication(s) and make sure that the correct meaning has been understood

Learning outcome
The learner will:
8   Be able to identify and agree ways of further developing communication skills

Assessment criteria
The learner can:
8.1   get feedback to confirm whether communication has achieved its purpose
8.2   use feedback to identify and agree ways of further developing own communication skills

Unit 306   Produce coded clinical data for external audit purposes

UAN:	A/602/2690
Level:	3
Credit value:	5
GLH:	38

Learning outcome
The learner will:
1.   Understand current legislation, national guidelines, policies, protocols and good practice related to producing coded clinical data for an external audit
Assessment criteria
The learner can:
1.1   summarise the current legislation, national guidelines, policies, protocols and good practice guidelines for clinical coding at local and national levels

Learning outcome
The learner will:
2.   Understand procedures involved in producing clinical data
Assessment criteria
The learner can:
2.1   explain the meaning of a range of clinical terminology
2.2   describe the importance of the sequence of codes, the primary diagnosis and procedures/interventions
2.3   describe a range of uses of clinical coded data
2.4   describe ways in which health records are assembled and used
2.5   describe where to find a range of sources of clinical data

Learning outcome
The learner will:
3.   Be able to prepare to produce coded clinical data
Assessment criteria
The learner can:
3.1   explain how and where to access information relating to clinical terminology
3.2   describe how rules and conventions are applied to clinical data to achieve clinical codes
3.3   explain the ways in which classifications and nomenclatures are used in clinical coding

3.4	agree a timescale for producing coded clinical data
3.5	identify clinical data after searching the health records
3.6	extract the clinical data identified
3.7	identify any requirements for additional clinical data
3.8	access any additional clinical data

Learning outcome
The learner will:
4. Be able to carry out the production of coded clinical data
Assessment criteria
The learner can:
4.1 explain when and how to refer any issues concerning the clarity and
accuracy of the clinical data to the appropriate person for resolution
4.2 evaluate any procedures, interventions and investigations carried
out to establish the primary procedure and any relevant secondary
procedures
4.3 establish the level of detail of clinical data to meet national
standards

Learning outcome
The learner will:
5. Be able to complete the production procedure
Assessment criteria
The learner can:
5.1 establish the correct sequence and order of codes related to a
single episode in accordance with national standards
5.2 record data in line with local policy and protocol
5.3 enter data into the system in line with local policy and protocol
5.4 complete the process of assigning the correct codes from clinical
data within agreed timescales
5.5 select the classification cross map in accordance with national rules
and standards from an identified clinical concept

Unit 307 Prepare, conduct and report the results of a clinical coding

UAN:	J/602/2692
Level:	3
Credit value:	5
GLH:	38

Learning outcome
The learner will:
1. Understand current legislation, national guidelines, policies, protocols and good practice related to reporting on the results of a clinical coding audit
Assessment criteria
The learner can:
1.1 summarise the current legislation, national guidelines, policies, protocols and good practice guidelines for the production of a clinical coding audit at local and national levels
1.2 describe the clinical coding audit process in accordance with local and national standards
1.3 describe the impact of the clinical audit process on data validation

Learning outcome
The learner will:
2. Be able to prepare to carry out a clinical coding audit
Assessment criteria
The learner can:
2.1 conduct pre-interviews with health professionals
2.2 analyse pre-audit questionnaires
2.3 agree the scope of the piece of work with health professional(s)
2.4 agree a timescale for the piece of work
2.5 define the audit methodologies
2.6 implement the audit methodologies
2.7 locate and abstract the specified audit data according to national standards
2.8 describe how clinical data is indexed, stored and cross mapped to clinical terms within classification systems
2.9 describe how to use information systems and technologies to analyse and present data
2.10 explain the importance of sequence codes and the primary diagnosis

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Learning outcome
The learner will:
3.   Be able to carry out a clinical coding audit
Assessment criteria
The learner can:
3.1   carry out data validation according to national standards
3.2   examine supporting operational processes
3.3   analyse the audit data
3.4   complete auditing processes within the agreed timescale
3.5   describe where the best sources of clinical data may be found

Learning outcome
The learner will:
4.   Be able to record and present the results of a clinical coding audit
Assessment criteria
The learner can:
4.1   complete records in line with local policy and protocol
4.2   explain how health records are assembled and used
4.3   present the audit data
4.4   produce a final report in line with local policy and protocol

Unit 308 Quality management of ICT products and services

UAN:	T/500/7210
Level:	3
Credit value:	12
GLH:	100

Learning outcome
The learner will:
1. Understand specified organisational quality management procedures
Assessment criteria
The learner can:
1.1 explain specified parts of organisational quality management procedures including: • customer agreements   • activity planning   • third-party monitoring   • change control   • work-in-progress   • testing   • defects and defective components   • audit and inspection   • customer feedback   • communication

Learning outcome
The learner will:
2. Be able to monitor quality management procedures
Assessment criteria
The learner can:
2.1 monitor compliance with relevant parts of procedures by: • participating in audits of working practices and inspections of   work   • gathering and recording information on quality   • initiating suitable actions to deal with identified failures in quality.
2.2 provide guidance to immediate colleagues on quality

Unit 309   Understanding Bilingualism in work

UAN:	K/504/9423
Level:	3
Credit value:	2
GLH:	15

Learning outcome
The learner will:
1. Understand the importance of bilingualism in Wales.
Assessment criteria
The learner can:
1.1   define the meaning of 'bilingualism'
1.2   summarise the current legislation relating to bilingualism in Wales.

Learning outcome
The learner will:
2.   Understand the personal benefits of being bilingual.
Assessment criteria
The learner can:
2.1   analyse the personal benefits of being bilingual.

Learning outcome
The learner will:
3   Understand the advantages within service industries / businesses of   having bilingual staff.
Assessment criteria
The learner can:
3.1   evaluate the benefits to users/customers of engaging with bilingual   staff
3.2   evaluate the benefits to an employer/business of having bilingual   staff

Learning outcome
The learner will:
4   Understand the application of bilingualism within a chosen vocational area
Assessment criteria
The learner can:
4.1   assess the opportunities for using bilingual skills within his/her own vocational area
4.2   analyse the impact of having bilingual workforce on a chosen service or business
4.3   explain his/her own responsibility in relation to bilingualism in the workplace

Unit 310 Maintaining quality standards in the health sector

UAN:	F/502/3412
Level:	3
Credit value:	2
GLH:	13

Learning outcome
The learner will:
1. Understand how to provide a quality service within legislation, policies and procedures
Assessment criteria
The learner can:
1.1 explain the importance of meeting quality standards as determine by legislation, policies and procedures
1.2 explain how others could be encouraged to meet quality standards
1.3 explain the benefits of maintaining quality standards

Learning outcome
The learner will:
2. Understand the importance of working with others to provide a quality service
Assessment criteria
The learner can:
2.1 explain personal responsibilities for working with others
2.2 explain accountability when working with others
2.3 explain the importance of working effectively with others to provide a quality service

Learning outcome
The learner will:
3. Know how to monitor quality standards
Assessment criteria
The learner can:
3.1 describe methods of monitoring quality standards
3.2 state how to inform other staff of quality issues
3.3 describe how resources can be monitored and maintained
3.4 outline the benefits of monitoring quality to maintain and improve standards

Learning outcome
The learner will:
4. Understand the importance of prioritising own workload to reduce risks to quality

Assessment criteria
The learner can:
4.1 review factors that can affect own workload
4.2 evaluate how prioritising work will ensure the maintenance and improvement of a quality service

Unit 311 Principles of managing information and producing documents in a business environment

UAN:	M/601/7647
Level:	3
Credit value:	4
GLH:	32

Learning outcome
The learner will:
1. Understand how to design and monitor information systems
Assessment criteria
The learner can:
1.1 describe the types of information that need to be managed in a business environment
1.2 describe ways of contributing to the design and development of an information system
1.3 explain the purpose and benefits of monitoring the use of an information system and ways of doing so

Learning outcome
The learner will:
2. Understand how to research information
Assessment criteria
The learner can:
2.1 explain the purpose of agreeing objectives and deadlines for researching information
2.2 explain how to identify and select sources of information
2.3 identify methods of checking information for reliability and accuracy
2.4 identify restrictions that apply to the use of researched information

Learning outcome
The learner will:
3. Understand how to organise, report and evaluate the relevance of information
Assessment criteria
The learner can:
3.1 explain different ways of organising and reporting information
3.2 explain how to evaluate the relevance of information

Learning outcome
The learner will:
4. Understand how to store information
Assessment criteria
The learner can:
4.1 explain different ways of storing information and the purpose of doing so
4.2 compare different information storage and archive systems and their main features

Learning outcome
The learner will:
5. Understand how to design and produce documents
Assessment criteria
The learner can:
5.1 identify reasons for designing and producing high quality and attractive documents
5.2 compare different types and styles of documents that may be designed and produced and ways of doing so
5.3 describe reasons for agreeing the purpose, content, layout, style, quality standards and deadlines for the design and production of documents
5.4 describe ways of researching, organising and checking content needed for documents

Learning outcome
The learner will:
6. Understand how to maintain security and confidentiality in a business environment
Assessment criteria
The learner can:
6.1 explain the purpose of maintaining security and confidentiality in a business environment
6.2 describe ways of maintaining security and confidentiality in a business environment

| Unit 312 | Analyse and present health related data and information |

UAN:	T/602/2686
Level:	3
Credit value:	4
GLH:	30

Learning outcome
The learner will:
1. Understand current legislation, national guidelines, policies, protocols and good practice related to the analysis and presentation of health related data and information

Assessment criteria
The learner can:
1.1 summarise the current legislation, national guidelines, policies, protocols and good practice guidelines for the analysis and presentation of health related data and information
1.2 describe the health and business context for data and information requirements
1.3 explain the importance of the quality of data and information in a health context

Learning outcome
The learner will:
2. Be able to prepare to analyse data and information and present outputs in a health context

Assessment criteria
The learner can:
2.1 describe tools and techniques data and information
2.2 assess the available tools and techniques for their relevance and applicability to the work being carried out
2.3 select tools and techniques paying attention to the quality of the data and information available
2.4 determine the resources required to apply the selected tools and techniques
2.5 record the rationale for the selection of tools and techniques

Learning outcome
The learner will:

3.	Be able to carry out analysis of data and information

Assessment criteria

The learner can:
3.1 check conformity with information governance in line with local policy and protocol
3.2 identify and highlight any anomalies and limitations in the data analysis or information
3.3 identify and highlight any anomalies and limitations in the data analysis or information
3.4 summarise and draw justifiable conclusions from the analysis

Learning outcome

The learner will:
4. Be able to review and present outputs of the analysis

Assessment criteria

The learner can:
4.1 inform the appropriate person(s) where there are any implications that require decision-making
4.2 clarify any assumptions made and degrees of uncertainty in the data and information
4.3 record changes to the source data and information in line with local policy and protocol
4.4 select a presentation method that is appropriate to the data and information and audience
4.5 present the outputs of the analysis in line with local policy and protocol

Unit 313 Contribute to decision-making in a business environment

UAN:	Y/601/2524
Level:	3
Credit value:	3
GLH:	12

Learning outcome
The learner will:
1. Understand the purpose and process of decision-making
Assessment criteria
The learner can:
1.1   identify situations where decision-making is required
1.2   explain key stages in the decision-making process

Learning outcome
The learner will:
2. Understand how to prepare to contribute to decision-making
Assessment criteria
The learner can:
2.1 Understand the purpose of knowing the context in which a decision
is being made
2.2 describe the role and responsibilities of a person contributing to
decision-making
2.3 describe possible limitations on a person contributing to decision-
making
2.4 identify sources of information that can be used to inform decision-
making
2.5 explain how to research information to be used to inform decision-
making

Learning outcome
The learner will:
3. Understand how to contribute to decision-making
Assessment criteria
The learner can:
3.1   explain the purpose of contributing to meetings and other

discussions where decisions are being made, and ways of doing so
3.2 explain how to structure own ideas and information
3.3 explain the purpose and benefits of respecting other people's contributions to the decision-making process
3.4 explain the purpose of listening and responding to other people during the decision-making process, and ways of doing so
3.5 explain how to use evidence, argument, questioning and assertiveness to influence outcomes
3.6 explain the purpose of collective responsibility

Learning outcome
The learner will:
4. Be able to prepare contributions to decision-making
Assessment criteria
The learner can:
4.1 identify sources of information needed
4.2 research and collect information to add value to the decision-making process

Learning outcome
The learner will:
5. Be able to make contributions to decision-making
Assessment criteria
The learner can:
5.1 present information to others and develop ideas, using accurate and current information
5.2 make constructive, relevant and timely contributions to meeting(s) or other discussions to contribute to making a decision
5.3 provide additional information, when asked, to contribute to making a decision
5.4 contribute to identifying and agreeing criteria for making a decision
5.5 contribute to structuring ideas and information in a way that helps other people Understand own ideas
5.6 listen to other people's contributions adapting own ideas as necessary
5.7 contribute to reviewing information provided for a decision to be made
5.8 confirm support for an agreed decision

Unit 314 Analyse and report data

UAN:	Y/601/2538
Level:	3
Credit value:	6
GLH:	30

Learning outcome
The learner will:
1. Understand how to organise and evaluate data that has been researched
Assessment criteria
The learner can:
1.1 describe purpose and benefits of organising data so that it can be analysed
1.2 explain how to evaluate the relevance, validity and reliability of data
1.3 explain how to analyse and prepare researched data so results will be accurate and free from bias
1.4 explain the differences between primary and secondary research methods
1.5 explain the differences between quantitative and qualitative research methods
1.6 describe how to search for relevant data sources

Learning outcome
The learner will:
2. Understand how to report data that has been researched
Assessment criteria
The learner can:

2.1 describe ways of reporting data so that it
    a) meets agreed aims and objectives
    b) is accurate and free from bias

Learning outcome
The learner will:
3. Be able to analyse and evaluate data
Assessment criteria
The learner can:
3.1 organise data so that it can be analysed and reported
3.2 select relevant, valid and reliable data to analyse
3.3 apply analysis and evaluation techniques, as required
3.4 review data to produce accurate, unbiased results and conclusions
3.5 check the accuracy of the analysis, and make adjustments, if required
3.6 obtain feedback on data analysis, if required

Learning outcome
The learner will:
4. Be able to report data
Assessment criteria
The learner can:
4.1 present data in agreed format
4.2 present data to agreed time scale

Unit 315   Data management software

UAN:	A/502/4560
Level:	3
Credit value:	4
GLH:	30

Learning outcome
The learner will:
1. Be able to enter, edit and maintain data records in a data management system
Assessment criteria
The learner can:
1.1 discuss when and how to change or create a new data entry form
1.2 enter data accurately into records to meet requirements
1.3 configure characteristics of groups of records
1.4 discuss and explain how to locate and amend data records
1.5 check data records meet needs, using IT tools and making corrections as necessary
1.6 interpret and respond appropriately to a range of data and application error messages
1.7 evaluate and explain the risks to data security and procedures used for data protection
1.8 manage data files effectively, in line with local and/or legal guidelines for the storage and use of data where available

Learning outcome
The learner will:
2. Be able to retrieve and display data records to meet requirements
Assessment criteria
The learner can:
2.1 determine and explain what queries and reports need to be run to output the required information
2.2 create and use queries to search for and retrieve information from the system
2.3 create, define and set up reports to output information to meet requirements
2.4 use the file handling techniques of the software to import and export data
2.5 use available techniques to combine and link data

Unit 316 Service improvement in the health sector

UAN:	J/502/3413
Level:	3
Credit value:	3
GLH:	20

Learning outcome
The learner will:
1. Understand how to evaluate own work and that of others to identify potential improvements
Assessment criteria
The learner can:
1.1 illustrate how to benchmark own work and that of others
1.2 explain how feedback can be obtained and used to identify potential service improvements
1.3 review the policies and strategies for service improvements

Learning outcome
The learner will:
2. Understand how to make constructive suggestions about how services can be improved
Assessment criteria
The learner can:
2.1 explain key issues related to potential improvements
2.2 explain why service improvements are required
2.3 discuss how service improvements could be implemented

Learning outcome
The learner will:
3. Understand how to discuss and agree improvements with others
Assessment criteria
The learner can:
3.1 explain the importance of agreeing changes with others
3.2 illustrate how working with others can support service improvements

Learning outcome

The learner will:
4. Understand how to make agreed improvements to own work and how to support others to make changes
Assessment criteria
The learner can:
4.1 evaluate strategies for making changes effective within own work role 4.2 explain how to support others in implementing changes

Unit 317 Deliver, monitor and evaluate customer service to external customers

UAN:	F/601/2551
Level:	3
Credit value:	3
GLH:	12

Learning outcome
The learner will:
1. Understand the meaning of external customers
Assessment criteria
The learner can:
1.1 describe what is meant by external customers

Learning outcome
The learner will:
2. Know the types of products and services relevant to external customers
Assessment criteria
The learner can:
2.1 describe the products and services offered by the organisation to external customers

Learning outcome
The learner will:
3. Understand how to deliver customer service that meets or exceeds external customer expectations
Assessment criteria
The learner can:
3.1 explain the purpose and value of identifying customer needs and expectations
3.2 explain why customer service must meet or exceed customer expectations
3.3 explain the value of meeting or exceeding customer expectations
3.4 explain the purpose and value of building positive working relationships

Learning outcome
The learner will:
4. Understand the purpose of quality standards and timescales for customer service to external customers

Assessment criteria
The learner can:
4.1 identify quality standards for own organisation and work
4.2 explain the value of agreeing quality standards and timescales
4.3 explain how to set and meet quality standards and timescales with external customers

Learning outcome
The learner will:
5. Understand how to deal with customer service problems for external customers

Assessment criteria
The learner can:
5.1 describe the types of problems that external customers may have
5.2 explain the consequences of not meeting external customer needs and expectations
5.3 explain ways of dealing with external customer services problems
5.4 explain the purpose and value of a complaints procedure

Learning outcome
The learner will:
6. Understand how to monitor and evaluate external customer service and the benefits of this

Assessment criteria
The learner can:
6.1 explain the purpose and benefits of monitoring external customer satisfaction and how to do so
6.2 describe techniques for collecting and evaluating external customer feedback
6.3 explain the benefits of continuous improvement

Learning outcome
The learner will:
7. Be able to build positive working relationships with external customers

Assessment criteria
The learner can:
7.1 identify external customers
7.2 confirm external customer needs in terms of products and services
7.3 confirm external customer needs in terms of quality standards and timescales
7.4 agree procedures to be followed if external customer needs are not met

Learning outcome

The learner will:
8. Be able to deliver external customer services to agreed quality standards and timescales

Assessment criteria
The learner can:
8.1 provide external customer service(s) to agreed quality standards
8.2 provide external customer service(s) to agreed timescales
8.3 check external customer needs and expectations have been met

Learning outcome
The learner will:
9. Be able to deal with customer service problems and complaints for external customers

Assessment criteria
The learner can:
9.1 follow procedures, within agreed timescale, to
a) process problems and complaints
b) resolve problems and complaints
c) refer problems and complaints, where necessary

Learning outcome
The learner will:
10. Be able to monitor and evaluate services to external customers

Assessment criteria
The learner can:
10.1 obtain and record external customer feedback
10.2 analyse and evaluate external customer feedback
10.3 take actions that will lead to improvement in service(s) to external customers

Unit 318 Identify information requirements in a health context

UAN:	K/602/2684
Level:	3
Credit value:	4
GLH:	30

Learning outcome
The learner will:
1. Understand current legislation, national guidelines, policies, protocols and good practice related to identifying data requirements in a health context
Assessment criteria
The learner can:
1.1 summarise the current legislation, national guidelines, policies, protocols and good practice guidelines for information management in a health context
1.2 describe the health and business context for data and information requirements
1.3 explain the different ways in which routine and ad hoc data and information are used in a health context

Learning outcome
The learner will:
2. Be able to find and select data requirements in a health context
Assessment criteria
The learner can:
2.1 respond to the target audiences needs for the data and information
2.2 consult with colleagues and the target audience to identify requirements for data and information
2.3 describe the objectives and purpose of the data
2.4 describe any sensitivity of the data and information involved
2.5 identify the data and information available
2.6 gain agreement to access the sources of data and information identified
2.7 select the data and information relevant to the target audience
2.8 describe any data limitations which may constrain the audiences requirements
2.9 describe any system limitations which may constrain the audiences requirements

Learning outcome
The learner will:
3. Be able to prepare resources to retrieve the agreed data and information
Assessment criteria
The learner can:
3.1 identify any variables that may affect the data and information to be provided
3.2 check the audience Understands the meaning and significance of any variables
3.3 agree conformity with information governance in line with local policy and protocol
3.4 identify the resources required and the limitations, assumptions, costs and timescales that will affect the work to be carried out
3.5 record the details required for the specification in line with local policy and protocol
3.6 agree reporting responsibilities and mechanisms with the target audience
3.7 describe the classification systems, coding classifications and terminology used in a health context
3.8 explain how to identify audience requirements for data and information
3.9 describe ways in which it is or is not possible to meet requirements for data and information
3.10 describe ways in which data and information is grouped in a health context

Unit 319   Plan and manage a project

UAN:	J/600/9750
Level:	4
Credit value:	8
GLH:	30

Learning outcome
The learner will:
1.   Understand the principles, processes, tools and techniques of project management.
Assessment criteria
The learner can:
1.1   describe the roles and responsibilities of a project manager.
1.2   explain how to apply principles, processes, tools and techniques of project management.

Learning outcome
The learner will:
2.   Be able to agree the scope and objectives of a project.
Assessment criteria
The learner can:
2.1   agree SMART (Specific, Measurable, Achievable, Realistic, and Time-
bound) objectives and scope of the project with project sponsor(s)
and stakeholders.

Learning outcome
The learner will:
3.   Be able to identify the budget in order to develop a project plan.
Assessment criteria
The learner can:
3.1   identify budget and time-scales in order to develop the project plan with stakeholders
3.2   consult with stakeholders to negotiate the project plan.
3.3   identify potential risks and contingencies.
3.4   establish criteria and processes for evaluating the project on completion

Learning outcome
The learner will:
4.   Be able to implement a project plan.
Assessment criteria
The learner can:
4.1   allocate roles and responsibilities to project team members.
4.2   provide resources identified in the project plan.
4.3   brief project team members on the project plan and their roles and responsibilities.
4.4   implement a project plan using project management tools and techniques

Learning outcome
The learner will:
5.   Be able to manage a project to its conclusion
Assessment criteria
The learner can:
5.1   apply a range of project management tools and techniques to monitor, control and review progress
5.2   provide support to project team members

Unit 320 Manage and evaluate an information system

UAN:	A/601/2564
Level:	4
Credit value:	6
GLH:	20

Learning outcome
The learner will:
1. Understand how to manage an information system
Assessment criteria
The learner can:
1.1 analyse how to plan and agree implementation of the information system
1.2 analyse the purpose and benefits of managing information to meet requirements
1.3 explain the purpose and benefits of providing training to users and providing on-going support
1.4 explain the purpose of complying with legal and organisation requirements when using an information system
1.5 explain the purpose and benefits of monitoring use of an information system
1.6 analyse ways of monitoring use of an information system
1.7 explain the purpose and benefits of maintaining and updating an information system
1.8 analyse ways of maintaining and updating an information system
1.9 analyse the types of problems that may occur with an information system and how to deal with them

Learning outcome
The learner will:
2. Understand how to review and further develop an information system
Assessment criteria
The learner can:
2.1 explain the purpose and benefits of continuously improving an information system
2.2 analyse ways of evaluating an information system
2.3 explain how to identify problems in an information system and analyse them
2.4 analyse ways of resolving problems in an information system

Learning outcome
The learner will:
3. Be able to manage an information system
Assessment criteria
The learner can:
3.1 provide training on the use of an information system
3.2 provide on-going support to users
3.3 monitor use of, accuracy and productivity of an information system to meet organisational requirements
3.4 make sure legal and organisational requirements for handling information are followed
3.5 make sure an information system is maintained and updated, if required
3.6 identify, analyse and resolve problems when they occur

Learning outcome
The learner will:
4. Be able to evaluate an information system
Assessment criteria
The learner can:
4.1 collect feedback on performance of an information system
4.2 evaluate feedback and prioritise development needs of an information system, if required
4.3 provide information to enable further information system development

City & Guilds Level 3 Diploma in Health Informatics (7450-03)

Unit 321 Deliver training through demonstration and instruction

UAN:	M/602/4520
Level:	3
Credit value:	3
GLH:	21

Learning outcome
The learner will:
1. Understand how to deliver training through demonstration and instruction
Assessment criteria
The learner can:
1.1 identify key current national guidelines, policies or protocols relevant to the subject area in which the training is to be delivered
1.2 describe the resources required to deliver the training
1.3 describe what constitutes an appropriate environment for the delivery of the training
1.4 explain how to overcome barriers that learners may encounter whilst undertaking training
1.5 assess the use of demonstration and instruction as a teaching strategy
1.6 explain the skills required for the effective delivery of demonstration and instruction as a teaching method

Learning outcome
The learner will:
2. Be able to deliver training by demonstration and instruction
Assessment criteria
The learner can:
2.1 explain the learning aims and objectives of the training session to the learners
2.2 deliver the training programme to the learners through demonstration and instruction
2.3 maintain communication with learners during demonstration and instruction
2.4 check the learners' Understanding at regular intervals
2.5 encourage learners to ask questions and seek clarification during training
2.6 provide learners with opportunities and support to demonstrate the learning achieved through the training
2.7 respond to the learners' needs during the training
2.8 provide constructive feedback to learners on their progress

Learning outcome
The learner will:
3.   Be able to review learning and training
Assessment criteria
The learner can:
3.1   gather feedback from learners on the effectiveness of the training
3.2   assess whether the training programme delivers the required learning outcomes
3.3   review the effectiveness of the training programme
3.4   identify ways to improve or adapt the training

Appendix 1 Relationships to other qualifications

Literacy, language, numeracy and ICT skills development

This qualification can develop skills that can be used in the following qualifications:

- Functional Skills (England) – see **www.cityandguilds.com/functionalskills**
- Essential Skills (Northern Ireland) – see **www.cityandguilds.com/essentialskillsni**
- Essential Skills Wales – see **www.cityandguilds.com/esw**

Appendix 2   Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **www.cityandguilds.com**.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:
* The centre and qualification approval process
* Assessment, internal quality assurance and examination roles at the centre
* Registration and certification of candidates
* Non-compliance
* Complaints and appeals
* Equal opportunities
* Data protection
* Management systems
* Maintaining records
* Assessment
* Internal quality assurance
* External quality assurance.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:
* Regulatory Arrangements for the Qualifications and Credit Framework (2008)
* SQA Awarding Body Criteria (2007)
* NVQ Code of Practice (2006)
and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information such on such things as:
* **Walled Garden:** how to register and certificate candidates on line

- **Qualifications and Credit Framework (QCF)**: general guidance about the QCF and how qualifications will change, as well as information on the IT systems needed and FAQs
- **Events**: dates and information on the latest Centre events
- **Online assessment**: how to register for e-assessments.

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www.cityandguilds.com

Useful contacts

UK learners **General qualification information**	**E: learnersupport@cityandguilds.com**
International learners General qualification information	F: +44 (0)20 7294 2413 E: **intcg@cityandguilds.com**
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	F: +44 (0)20 7294 2413 E: **centresupport@cityandguilds.com**
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: **singlesubjects@cityandguilds.com**
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	F: +44 (0)20 7294 2413 E: **intops@cityandguilds.com**
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	F: +44 (0)20 7294 2413 E: **walledgarden@cityandguilds.com**
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 E: **business@cityandguilds.com**
Publications Logbooks, Centre documents, Forms, Free literature	F: +44 (0)20 7294 2413