

End-point assessment plan for Health and Care Intelligence Specialist apprenticeship standard

Apprenticeship standard number	Apprenticeship standard level	Integrated end-point assessment
ST0830	7	Non-integrated degree apprenticeship

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Introduction and overview

This document sets out the requirements for end-point assessment (EPA) for the Health and Care Intelligence Specialist apprenticeship standard. It is for end-point assessment organisations (EPAOs) who need to know how EPA for this apprenticeship must operate. It will also be of interest to Health and Care Intelligence Specialist apprentices, their employers and training providers.

Full time apprentices will typically spend 36 months on-programme (before the gateway) working towards the occupational standard, with a minimum of 20% off-the-job training. All apprentices must spend a minimum of 12 months on-programme.

The EPA period should only start, and the EPA be arranged, once the employer is satisfied that the apprentice is deemed to be consistently working at or above the level set out in the occupational standard, and that all of the pre-requisite gateway requirements for EPA have been met and can be evidenced to an EPAO.

For level 3 apprenticeships and above, apprentices without English and Mathematics at level 2 must achieve level 2 prior to taking their EPA.

The EPA must be completed within an EPA period lasting typically 6 months, after the EPA gateway.

The EPA consists of three discrete assessment methods.

The individual assessment methods will have the following grades:

Assessment method 1: Knowledge Test

- Fail
- Pass

Assessment method 2: Project with Presentation & Questioning

- Fail
- Pass

Assessment method 3: Professional Discussion underpinned by Portfolio

- Fail
- Pass
- Distinction

Performance in the EPA will determine the overall apprenticeship standard grade of:

- Fail
- Pass
- Distinction

EPA summary table

On-programme (typically, 36 months)	Training to develop the occupation standard's knowledge, skills and behaviours (KSBs). Compile a portfolio of evidence.
End-point assessment gateway	<ul style="list-style-type: none"> • Employer is satisfied that the apprentice is consistently working at or above the level of the occupational standard. • Have submitted a Project title to the EPAO • English and Mathematics Level 2 <p>Apprentices must complete:</p> <ul style="list-style-type: none"> • A portfolio of evidence. The format and structure of the portfolio must be agreed between the employer, the apprentice and the EPAO.
End-point assessment (which will typically take 6 months)	<p>Assessment method 1: Knowledge Test</p> <p>With the following grades:</p> <ul style="list-style-type: none"> · Fail · Pass <p>Assessment method 2: Project with Presentation & Questioning</p> <p>With the following grades:</p> <ul style="list-style-type: none"> · Fail · Pass <p>Assessment method 3: Professional Discussion underpinned by Portfolio</p> <p>With the following grades:</p> <ul style="list-style-type: none"> · Fail · Pass · Distinction

Length of end-point assessment period

The EPA will be completed within an EPA period lasting typically of 6 months, after the EPA gateway. Any supporting material which underpins an EPA assessment method should be submitted at the gateway point.

Order of assessment methods

The assessment methods can be delivered in any order.

Gateway

The EPA period should only start once the employer is satisfied that the apprentice is consistently working at or above the level set out in the occupational standard, that is to say they are deemed to have achieved occupational competence. In making this decision, the employer may take advice from the apprentice's training provider(s), but ultimately the decision must be made solely by the employer.

The EPAO determines when all gateway requirements have been met, and the EPA period will only start once the EPAO has confirmed this.

In addition to the employer's confirmation that the apprentice is working at or above the level in the occupational standard, the apprentice must have completed the following gateway requirements prior to beginning EPA:

- Achieved English and mathematics at level 2, as a minimum. For those with an education, health and care plan or a legacy statement the apprenticeship's English and maths minimum requirement is Entry Level 3. British Sign Language qualification is an alternative to English qualifications for those whom this is their primary language.

For Knowledge Test:

- No specific requirements

For Project with Presentation & Questioning:

A project title outlining a project with sufficient content to provide evidence that the apprentice can apply the knowledge, skills and behaviors required as mapped to assessment method 2 (Project with Presentation & Questioning)

For Professional Discussion underpinned by Portfolio:

- A portfolio of evidence which must have sufficient content to provide evidence that the apprentice can apply the knowledge, skills and behaviours required as mapped to assessment method 3 (AM3).
- There must be at least one piece of evidence relating to each knowledge, skill and behaviour mapped to AM3. One piece of evidence can be referenced against more than one knowledge, skill or behavioural requirement. It is expected that there will be a minimum of 15 pieces (1 per duty) and a maximum of 25 pieces of evidence.
- The portfolio should cover the KSBs for the assessment method it is underpinning and the activities that have been completed and referenced against the relevant KSBs. This should be supported by appropriate evidence, including photographic evidence and work products, such as work instructions, safety documentation, company policies and procedures as appropriate to the activities. Progress review documentation, witness testimonies, and feedback from colleagues and/or clients should also be included. Any employer contributions should focus on direct observation of evidence, for example witness statements, rather than opinions.
- The apprentice's manager/mentor will typically support the development of the portfolio in accordance with organisational policy and procedures, although the assessment organisation

will provide further guidance on the content it should not include reflective accounts or any methods of self-assessment.

- The evidence provided must be valid and attributable to the apprentice; the portfolio of evidence must contain a statement from the employer and apprentice confirming this.
- The portfolio of evidence is not directly assessed. It underpins the professional discussion and therefore should not be marked by the EPAO. EPAOs should review the portfolio in preparation for the Professional Discussion but are not required to provide feedback after this review of the portfolio.

Assessment methods

Assessment method 1: Knowledge Test (This assessment method has one component.)

Overview

The rationale for this assessment method is:

The occupation requires the ability to recall from memory the underpinning knowledge in relation to standards, methods and terminology. A multiple-choice knowledge test is an effective and cost-efficient method of testing this ability.

Test Format

The test can be:

- computer based
- paper based

It will consist of 50 multiple choice questions which will consist of:

- Multiple choice questions based on a scenario / case study testing application of knowledge (10 questions)
- Non-scenario based multiple-choice questions testing theoretical knowledge (40 questions)

All questions will consist of a stem question, 1 correct answer and 3 distractors.

Test administration

Apprentices must have 90 minutes to complete the test.

The test is closed book which means that the apprentice cannot refer to reference books or materials.

Apprentices must take the test in a suitably controlled environment, that is: in a quiet space, free of distractions and influence, in the presence of an invigilator. The invigilator may be the independent assessor, or another external person employed by the EPAO or specialised (proctor) software, if the test can be taken on-line. The EPAO is required to have an invigilation policy that will set out how the test/examination is to be carried out. This will include specifying the most appropriate ratio of apprentices to invigilators to best take account of the setting and security required to administer the test/examination.

The EPAO is responsible for ensuring the security of the testing which they administer to ensure the test remains valid and reliable (this includes any arrangements made using online tools). The EPAO is responsible for verifying the validity of the identity of the person taking the test.

The EPAO must also verify the suitability of the venue in which the test takes place.

Marking

Tests must be marked by independent assessors or markers employed by the EPAO in accordance with a marking guide produced by the EPAO. Alternatively, electronic marking by computer is permissible where question types allow this, to improve reliability.

Incorrect or missing answers will be assigned 0 marks. Correct answers are assigned one mark. No partial marks will be assigned.

Question and resources development

Questions must be prepared by EPAOs and must be relevant to the occupation and employer settings. It is recommended that this is done in consultation with employers of this occupation. EPAOs should

also maintain the security and confidentiality of their questions when consulting employers. EPAOs must develop a 'test specification' and 'question banks' of sufficient size to prevent predictability and review them regularly (at least once a year) to ensure that questions are fit for purpose.

EPAOs must ensure that apprentices have a different set of questions in the case of re-sits/re-takes.

Required supporting material

As a minimum EPAOs will produce the following material to support this method:

- a test specification
- a question bank
- sample test and mark scheme
- live test and mark scheme
- analysis reports which show areas of weakness for completed tests/exams
- an invigilation policy

Assessment method 2: Project with Presentation & Questioning

(This assessment method has 2 components)

Assessment method 2 component 1: Project

Overview

The project is compiled after the apprentice has gone through the gateway.

The work-based project should be designed to ensure that the apprentice's work meets the needs of the business, is relevant to their role and allows the relevant KSBs to be demonstrated for the EPA. Therefore, the project's subject, title and scope will be agreed between the employer and the EPAO. The employer will ensure it has a real business application and the EPAO will ensure it meets the requirements of the EPA (including suitable coverage of the KSBs assigned to this assessment method). The EPAO should sign-off the project title and scope within 1 week of the gateway to confirm its suitability prior to it commencing.

The rationale for this assessment method is:

The occupation involves dealing with analytical projects or policy analysis as part of the day to day role. The use of a project for assessment is, therefore, considered to be the best method of assessment and shows the use of KSBs in practice.

Delivery

Apprentices will conduct a project in the form of a report.

The project is compiled after the apprentice has gone through the gateway process, typically taking 8 weeks. The apprentice will conduct their project and submit it to the EPAO after 12 weeks of the EPA gateway date.

The employer will ensure the apprentice has sufficient time and the necessary resources within this period to plan and undertake the project.

The project should preferably be in the form of an electronic submission. Alternative report formats may be submitted by candidates who require reasonable adjustments.

The project report must be based on real work-based assignments carried out in the employer's workplace as part of the apprentice's day to day activities. As a minimum, the apprentice must produce

a report for board/council/senior decision makers, and a lay summary for the general public and a literature review with clear recommendations.

As a minimum all projects must include:

- an introduction
- the scope of the project (including key performance indicators)
- how the outcomes were achieved
- a project plan
- analysis and findings
- project outcomes
- recommendations and conclusions

The word limit is 6,000 words.

A tolerance of plus or minus 10% is allowed (at the apprentice's discretion).

Appendices, references, diagrams etc. are not included in the total word limit.

The project must map, in an appendix, how it evidences the relevant KSBs for this assessment method.

When the project is submitted, the employer and the apprentice should verify that the submitted work is that of the apprentice.

Marking

The independent assessor will review and mark the project report, presentation and questioning together in a timely manner as determined by the EPAO, and without extending the EPA unnecessarily. Similarly, all quality control processes will also be conducted in a timely manner as determined by the EPAO.

Supporting material

EPAOs will produce the following material to support this assessment method:

- Outline of the assessment method's requirements
- Marking materials
- Examples of projects

Assessment method 2 component 2: Presentation & Questioning

Overview

Apprentices will prepare and deliver a presentation that appropriately covers the KSBs assigned to this method of assessment. Apprentices will have 10 working days in which to prepare and submit the presentation after the submission of the project to the independent assessor.

The presentation will be based on the project report and will cover the following:

- A summary of the project report
- An explanation of how and why the techniques used were selected
- How the outcomes were achieved

The presentation can be conducted either face-to-face or via online video conferencing. If using an online platform, EPAOs must ensure appropriate measures are in place to prevent misrepresentation and

ensure the apprentice is not being aided in any way, e.g. use of a 360-degree camera to allow the independent assessor to view the assessment environment during the presentation.

The independent assessor must assess the project report, presentation and questioning against the KSBs as set out in this plan, holistically and using the grading criteria.

Delivery

The presentation will last for 60 minutes typically including a presentation of 45 minutes and questioning for 15 minutes. The independent assessor has the discretion to increase the time of the presentation by up to 10% to allow the apprentice to complete their last point.

Questioning should be used to assess knowledge, skills and behaviours mapped to this method and that are not covered by the presentation. Questions can be taken from an EPAO question bank, be those generated by the independent assessor or a mixture of both. A minimum of 6 question must be asked. The independent assessor must use the assessment tools and procedures set by the EPAO to record the interview.

Video conferencing can be used to conduct the presentation and questioning, but the EPAO must have processes in place to verify the identity of the apprentice and ensure that the apprentice is not being aided in some way. The apprentice may deliver the presentation in a format of their choice and the EPAO must ensure that they have access to the following:

- PowerPoint
- flip chart
- notes
- computer

The independent assessor will make a grading decision based on their holistic assessment of the project report, presentation and questioning.

A question bank must be developed by EPAOs. The question bank must be of sufficient size to prevent predictability and the EPAO must review it regularly (at least once a year) to ensure that it, and its content, are fit for purpose. The questions relating to the underpinning KSBs, must be varied yet allow assessment of the relevant KSBs.

EPAOs must ensure that apprentices have a different set of questions in the case of re-sits/re-takes.

Independent assessors must be developed and trained by the EPAO in the conduct of questioning and reaching consistent judgement.

Venue

EPAOs must ensure that the presentation and questioning elements are conducted in a suitable controlled environment in one of the following:

- employer's premises
- other suitable venue selected by the EPAO (for example a training provider)

The venue should be a quiet room, free from distraction and external influence.

Requirements

- Apprentices must receive appropriate notice of their presentation and the available time for questions. There should be a minimum of 10 working days' notice of the time, date and venue.
- Audio and/or video record of the presentation and questioning may be captured.
- Independent assessors must assess the presentation using the grading criteria in this document.

- The independent assessor must:
 - a. plan the assessment prior to it taking place
 - b. ensure that the location for the assessment is appropriate
 - c. ensure the presentation and questioning takes place in a room free from distractions with no other people present except those for QA purposes with prior approval from the EPAO
 - d. ensure any special needs of the apprentice are taken into consideration in line with the EPAO's Reasonable Adjustments Policy
 - e. ensure that the apprentice understands the assessment process, the possible outcomes and the grading system
 - f. do what they can to ensure that the apprentice is at ease
 - g. ensure that the grading criteria and relevant documentation are to hand before commencing
 - h. document the outcomes using the EPAO's standard documentation
 - i. ensure the apprentice is not informed of the outcome of the assessment at this stage
 - j. confirm the specification has been fully covered and the rules have been followed
 - k. send documentation to the EPAO within the agreed time

Supporting material

EPAOs will produce the following materials to ensure that this assessment method is marked consistently and accurately:

- Outline of the assessment method's requirements
- Standard documentation for recording of assessment results
- Examples of projects
- Marking materials
- A question bank (as set out above)
- A feedback sheet for apprentices who fail this assessment method giving detail to allow the employer and the EPAO to decide how the project can be reworked. Apprentices will not be required to resubmit a new project.

Assessment method 3: Professional discussion underpinned by Portfolio

(This assessment method has one component)

Overview

This assessment will take the form of a professional discussion which must be appropriately structured to give the apprentice the opportunity to demonstrate their competence and excellence and cover the KSBs assigned to this assessment method. Questioning should assess the KSBs assigned to this assessment method and the apprentice may use their portfolio to support their responses.

The rationale for this assessment method is:

A professional discussion supported by portfolio will allow the assessment of KSBs that cannot be validly assessed in a knowledge test and cannot be appropriately covered in a project.

Delivery

The professional discussion must last for 90 minutes. The independent assessor has the discretion to increase the time of the professional discussion by up to 10% to allow the apprentice to complete their last answer.

For this method, the independent assessor must combine questions from the EPAO's question bank and those generated by themselves.

The professional discussion will be conducted as follows:

It will be undertaken by an independent assessor. The independent assessor's role will be to manage, open and close the session, ask independent assessor generated questions and make the final assessment decision based on their own assessment. The method is underpinned by the portfolio submitted as a gateway requirement. Questioning should be used to assess KSBs mapped to this method and to explore the apprentice's ability to deal with KSBs in a variety of circumstances. Apprentices will be expected to refer to examples in their portfolio to support their answers. A minimum of 15 questions should be asked. Questions can be taken from an EPAO question bank, be those generated by the independent assessor or a mixture of both.

Video conferencing can be used to conduct the professional discussion but the EPAO must have processes in place to verify the identity of the apprentice and ensure the apprentice is not being aided in some way.

The purpose of the professional discussion is to:

- assess the KSBs mapped to this method
- explore aspects of the work, including how it was carried out, in more detail
- require the apprentice to draw on their evidence to demonstrate the KSBs

The independent assessor must use the assessment tools and procedures that are set by the EPAO to record the professional discussion.

The independent assessor will make all grading decisions.

Venue

The professional discussion should take place in a quiet room, free from distractions and influence.

The professional discussion can take place in one of the following:

- employer's premises
- a suitable venue selected by the EPAO (for example a training provider's premises)

Other relevant information

A question bank must be developed by EPAOs which must be of sufficient size to prevent predictability and be reviewed regularly (at least once a year) to ensure that it, and its content, are fit for purpose. The questions relating to the underpinning KSBs must be varied yet allow assessment of the relevant KSBs.

EPAOs must ensure that apprentices have a different set of questions in the case of re-sits/re-takes.

Independent assessors must be developed and trained by the EPAO in the conduct of the professional discussion and reaching consistent judgement.

EPAOs will produce the following material to support this assessment method:

- outline of the assessment method's requirements
- marking materials
- question bank (as detailed above)

Reasonable adjustments

The EPAO must have in place clear and fair arrangements for making reasonable adjustments for this apprenticeship standard. This should include how an apprentice qualifies for reasonable adjustment and what reasonable adjustments will be made. Adjustments must maintain the validity, reliability and integrity of the assessment methods outlined in this assessment plan.

Weighting of assessment methods

All assessment methods are weighted equally in their contribution to the overall EPA grade.

Grading

Assessment method 1: Knowledge Test

KSBs	Fail	Pass
K1 K3 K4 K5 K6 K7 K8 K9 K10 K12 K17 K18 K19 K22 K24 K30	0 to 34 marks	35 to 50 marks

Assessment method 2: Project with Presentation & Questioning

For this method the apprentice will need to meet all the pass criteria to pass.

KSBs	Fail	Pass
K2 K13 K14 K16 S1 S3 S4 S7 S8 S9 S12 S15 S28	Does not meet all the pass criteria	<p>The apprentice meets all the pass criteria:</p> <p>K2, S3 Evaluates the statistical, epidemiological or scientific concepts used to produce intelligence with reference to the impact on people and organisations and uses advanced statistical or epidemiological techniques to describe or investigate the epidemiology of a disease, disease determinant, health condition or service use. Discusses the strengths and weaknesses of the chosen techniques.</p> <p>K13 Demonstrates and discusses the principles of effective oral and written communication to influence others.</p> <p>K14 Demonstrates understanding of the different information needs, use of data visualisations and language suited to (a) senior decision-makers and (b) the general public. Discusses how these audiences use analytical outputs for decision-making.</p> <p>K16, S1 Apply best practice when collecting data and evidence from different sources and</p>

		<p>evaluates strengths and weaknesses of different approaches.</p> <p>S4, S8 Presents the outputs from an advanced statistical or epidemiological analysis in a well-structured report which explains the methods, results and conclusion and includes an evaluation of how the risks associated with presenting the information were managed.</p> <p>S7 Produces data visualisations for a range of audiences and contexts using statistical programming software.</p> <p>S9 Explains and illustrates the process by which they can determine which analysis questions and hypotheses can be answered given data available, highlighting common pitfalls.</p> <p>S12 Justifies their overall project approach, specific data collection and analysis methods and conclusions with reference to a relevant body of scientific or good practice evidence, quoting published sources and citing references where appropriate.</p> <p>S15 Designs and presents a management or board level presentation which would be suitable for supporting decision making.</p> <p>S28 Apply project management techniques, explains how deadlines were achieved and how the project fits into business objectives.</p>
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Assessment method 3: Professional Discussion underpinned by Portfolio

For this method the apprentice will need to meet all the pass criteria to pass. To obtain a distinction the apprentice will need to fully meet at least six of the distinction criteria.

KSBs	Themes	Fail	Pass	Distinction
K11 K15 K20 K21 K23 K25 K26 K27 K28 K29 S2 S5 S6 S10 S11 S13 S14 S16 S17 S18 S19 S20 S21 S22 S23	1. Communication S13, S14, S16, S21, B3	Does not meet the pass criteria	S13 Explains how they developed understanding of a typical information user's needs and use that understanding to compile a tailored report or presentation. S14 Discusses the rationale behind written advice or guidance that they have produced on data collection, analysis or interpretation. S16 Provides examples of communicating sensitively and accurately with technical and non-technical audiences. S21 Provides examples of building effective partnership working with different stakeholder groups including public sector. B3 Discusses examples of providing a customer focused response both in own organisation and external stakeholders.	S16 Discusses how communication techniques with a range of technical and non-technical stakeholders can be adapted in order to change or influence a decision or outcome. S21 Critically analyse the factors that contribute to the success or failure of effective partnership working arrangements.

S24 S25 S26 S27 S29 S30 B1 B2 B3 B4 B5 B6 B7	2. Analysis 2a Wider Context (K11, K29, B2)	Does not meet the pass criteria	<p>K11 Explains how analysis and interpretation of health and care data can influence local policy and strategy across the organisation.</p> <p>K29 Gives an example of a situation where careful consideration of data use and analysis was required to balance patient rights versus public interest.</p> <p>B2 Discusses actions with respect to required data protection legislation and frameworks, ethical considerations, safety and security measures when working with personal or sensitive data.</p>	<p>K11, K29 Explains the impact on down-stream decision making when analysis is carried out incorrectly.</p>
	2b Data Sources (S6, S11)	Does not meet the pass criteria	<p>S6 Provides an example of designing and specifying a quantitative data flow including the collection, storage and collation elements of the data flow and explain how this could be modified for qualitative data.</p> <p>S11 Provides an example of designing and administering an online or paper-based survey and evaluates the main strengths and weaknesses of surveys.</p>	<p>S6 Evaluates the differences between the design and specification of quantitative and qualitative data flows.</p>
	2c Data Preparation (S2, S5)	Does not meet the pass criteria	<p>S2 Gives examples of how the extraction, importing, cleaning and manipulation of both quantitative and qualitative data has been undertaken.</p>	<p>S2 Evaluates the strengths and weaknesses of different approaches to the extraction, importing, cleaning and manipulation of both quantitative and qualitative data.</p>

			S5 Explains how they carry out record linkage in line with relevant information governance requirements and assesses the benefits of record linkage (e.g. 'tracking' care events along a temporal and changing care setting continuum) and the potential risks of information breach.	
	2d Data Analysis (S10, S27, S30)	Does not meet the pass criteria	<p>S10 Gives examples of investigating patterns and variations in diseases, determinants, or other factors affecting health and care outcomes, and explains how conclusions were generated from this investigation.</p> <p>S27 Discusses a finance and outcomes model that they have generated, justifying the modelling technique used, and explaining how it has been used to inform planning.</p> <p>S30 Relates experience of using cost benefit models and highlights specific issues in relation to these, explaining how these could be overcome.</p>	S10 Critiques their choice of analytical methods for investigating patterns and variations in diseases, determinants, or other factors affecting health and care outcomes. Justifies their choice, whilst being able to provide a critique of the chosen methods compared to other potential choices.
	2e Compliance (S17, S29)	Does not meet the pass criteria	S17 Explains how they comply with relevant information governance regulations (e.g. NHS Act 2006, Health and Social Care Act 2012, Data Protection Act 2018, Human Rights Act). Describe the principles of data protection (e.g. as set out in the General Data Protection Regulation) and data security standards (e.g. as	S17 Evaluates how information governance requirements have been considered and demonstrates that data have been used appropriately and professionally. Explains areas of risk and potential for non-compliance in working practices, and the decisions and processes that are in place to manage them.

			<p>set out in the Data Security and Protection Toolkit).</p> <p>S29 Explains the role of the analyst in protecting and safeguarding vulnerable people. Assesses the risks of poor information sharing between multi-agency partnerships.</p>	
	<p>3. Professional Development (K25, K26, K27, K28, S19, S23, S24, S25, S26 B4)</p>	<p>Does not meet the pass criteria</p>	<p>K25, S24 Describes the principles of adult learning and demonstrates how they have designed and delivered effective training and evaluated its impact.</p> <p>K26, K28, S23, B4 Discusses the importance of professional development and how they identify gaps in their own and others knowledge and skills. Discusses how they support someone wishing to work in analytical and intelligence roles in the health and care system.</p> <p>K27, S25, S26 Compares the use of coaching and mentoring to support effective learning and demonstrates how they have applied a range of both coaching and mentoring interventions and techniques relevant to the health and care system, selecting the most appropriate method to meet the needs of an individual or group.</p> <p>S19 Evaluates the significance of human factors in the development and</p>	<p>K28, S23, B4 Cites best practice examples of developing themselves and others and compares and contrasts these to practices observed in their own organisation.</p>

			implementation of strategies for the collection, analysis and use of data.	
	4. Leadership and Management (K15, K20, K21, K23, S18, S20, S22, B1, B5, B6, B7)	Does not meet the pass criteria	<p>K15 Discusses the principles of partnership working, including effective negotiation, across different organisations using examples from own experience.</p> <p>K20, S18, B6 Compares the role of an effective leader with that of a manager and explains how they have demonstrated leadership skills to influence the use of analysis in their organisation.</p> <p>K21 Discusses the strengths and weaknesses of different organisational models for delivering an analytical service.</p> <p>K23, S22 Discusses how resources are effectively managed to run an analytical team and provide an example of how they have managed resources within a team.</p> <p>S20 Communicates vision of the purpose and impact of data and intelligence and how they influence the wider strategy and priorities of their organisation.</p> <p>B1 Explains how they ensure that people are treated with dignity and respect for diversity, beliefs and culture.</p>	<p>S18, S22 Describes examples of how their own leadership or resource management has had a positive impact in their workplace.</p> <p>K15, S20 Compares and contrasts the most effective techniques to manage the expectations of customers and stakeholders.</p>

			<p>B5 Explains how their professional practice demonstrates the personal qualities of adaptability, reliability, discretion, resilience, self-awareness, and team working to a professional standard.</p> <p>B7 Explains how they would challenge inappropriate behaviour and use of information.</p>	
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Overall EPA grading

All EPA methods must be passed for the EPA to be passed overall.

Apprentices must pass all three assessment methods to gain an overall pass. Apprentices must gain a distinction in the professional discussion and a pass in the other two assessment methods in order to gain an overall distinction.

Grades from individual assessment methods should be combined in the following way to determine the grade of the EPA as a whole:

Assessment method 1: Knowledge Test	Assessment method 2: Project & Presentation	Assessment method 3: Professional Discussion	Overall grading
Fail	Any grade	Any grade	Fail
Any grade	Fail	Any grade	Fail
Any grade	Any grade	Fail	Fail
Pass	Pass	Pass	Pass
Pass	Pass	Distinction	Distinction

Re-sits and re-takes

Apprentices who fail one or more assessment method will be offered the opportunity to take a re-sit or a re-take. A re-sit does not require further learning, whereas a re-take does.

Apprentices should have a supportive action plan to prepare for the re-sit or a re-take. The apprentice's employer will need to agree that either a re-sit or re-take is an appropriate course of action.

An apprentice who fails an assessment method, and therefore the EPA in the first instance, will be required to re-sit or re-take any failed assessment method(s) only.

The timescales for a resit/retake are agreed between the employer and EPAO. A resit is typically taken within 2 months of the EPA outcome notification. The timescale for a retake is dependent on how much re-training is required and is typically taken within 4 months of the EPA outcome notification. All assessment methods must be taken within a 6 months period of each other otherwise the entire EPA will need to be resat/retaken.

Re-sits and re-takes are not offered to apprentices wishing to move from pass to distinction.

Where any assessment method is re-sat or re-taken, the apprentice will be awarded a maximum EPA grade of pass unless the EPAO determines there are exceptional circumstances requiring a re-sit or re-take.

Roles and responsibilities

Role	Responsibility
Apprentice	<ul style="list-style-type: none"> • participate in development opportunities to improve their knowledge skills and behaviours as outlined in the occupational standard • meet all gateway requirements when advised by the employer • understand the purpose and importance of EPA and undertake EPA
Employer	<ul style="list-style-type: none"> • support the apprentice to achieve the KSBs outlined in the occupational standard to their best ability • determines when the apprentice is working at or above the level outlined in the standard and is ready for EPA • select the EPAO • confirm all EPA gateway requirements have been met • confirm arrangements with EPAO for the EPA (who, when, where) in a timely manner • ensure the apprentice is well prepared for the EPA • should not be involved in the delivery of the EPA
EPAO	<p>As a minimum EPAOs should:</p> <ul style="list-style-type: none"> • understand the occupational role • appoint administrators/invigilators and markers to administer/invigilate and mark the EPA • provide training and CPD to the independent assessors they employ to undertake the EPA • provide adequate information, advice and guidance documentation to enable apprentices, employers and providers to prepare for the EPA • deliver the end-point assessment outlined in this EPA plan in a timely manner • prepare and provide all required material and resources required for delivery of the EPA in line with best practices • use appropriate assessment recording documentation to ensure a clear and auditable mechanism for providing assessment decision feedback to the apprentice • have no direct connection with the apprentice, their employer or training provider, i.e. there must be no conflict of interest • maintain robust internal quality assurance (IQA) procedures and processes, and conduct these on a regular basis • conform to the requirements of the nominated external quality assurance body • organise standardisation events and activities in accordance with this plan's IQA section

	<ul style="list-style-type: none"> • organise and conduct moderation of independent assessors' marking in accordance with this plan • have, and operate, an appeals process • arrange for certification with the relevant training provider
Independent assessor	<p>As a minimum an independent assessor should:</p> <ul style="list-style-type: none"> • understand the occupational standard and end-point assessment plan • deliver the end-point assessment in line with the EPA plan • comply with the IQA requirements of the EPAO • be independent of the apprentice, their employer and training provider(s), i.e. there must be no conflict of interest • satisfy the criteria outlined in this EPA plan • hold or be working towards an independent assessor qualification, e.g. A1 and have had training from their EPAO in terms of good assessment practice, operating the assessment tools and grading • have the capability to assess the apprentice at this level • attend the required number of EPAOs standardisation and training events per year (as defined in the IQA section)
Training provider	<p>As a minimum the training provider should:</p> <ul style="list-style-type: none"> • work with the employer to ensure that the apprentice is given the opportunities to develop the KSBs outlined in the standard and monitor their progress during the on-programme period • advise the employer, upon request, on the apprentice's readiness for EPA prior to the gateway • take no part in the EPA itself

Internal Quality Assurance (IQA)

Internal quality assurance refers to the requirements that EPA organisations must have in place to ensure consistent (reliable) and accurate (valid) assessment decisions. EPA organisations for this EPA must:

- appoint independent assessors who have knowledge of the following occupational areas: Masters qualification or equivalent experience and have worked for a minimum of 3 years at a senior level in Health and Care Intelligence
- appoint independent assessors who have recent relevant experience of the occupation/sector at least the same level as the apprentice gained in the last year
- appoint independent assessors who are competent to deliver the end-point assessment
- provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading
- have robust quality assurance systems and procedures that support fair, reliable and consistent assessment across the organisation and over time
- operate induction training and standardisation events for independent assessors when they begin working for the EPAO on this standard and before they deliver an updated assessment method for the first time
- ensure independent assessors attend standardisation events on an ongoing basis and at least once per year

Affordability

Affordability of the EPA will be aided by using at least some of the following practice:

- online assessment
- using an employer's premises

Professional body recognition

Professional body recognition is not relevant to this occupational apprenticeship.

Mapping of knowledge, skills and behaviours (KSBs)

Assessment method 1: Knowledge Test

Knowledge
K1 The application of advanced level applied statistics, epidemiology and analysis.
K3 The strengths and weaknesses of statistical and epidemiological methods, analytical tools and approaches.
K4 The principles of developing data-driven models to understand activity, financial impact or outcomes.
K5 Economic forecasting, economic evaluation and scenario modelling of population health needs, resource and the rationale for longer-term investment in health and care delivery.
K6 A wide range of health and care data sources (e.g. demographic, health, social care, economic, finance, local and national NHS and other relevant data sources) and their relative strengths, weaknesses and uses.
K7 Clinical terminologies in common use across the health and care sector.
K8 Health and care data standards, the Data Dictionary, and data flows across the NHS and social care system; including the latest developments in these areas.
K9 The design principles, and technical aspects of, systems for the input, storage and dissemination of health and care statistical and epidemiological information.
K10 Health and care systems and processes, operational structures and patient pathways (e.g. hospital activity systems).
K12 The major factors influencing health needs and inequalities, including health behaviours and the wider determinants of health.
K17 Key techniques for assessing evidence and examples of best practice (e.g. critical appraisal, systematic reviews, meta-analysis and economic evaluation).
K18 The requirements for responsible, legal and ethical access and use of health and care data, including data protection considerations, protection of identifiable personal healthcare data, and understanding and consideration of the risks of statistical disclosure issues especially when presenting and publishing health information.
K19 The legal implications of sharing data and data linkage across organisations and the associated requirements, such as data sharing agreements and data mapping audits.
K22 Organisational theory and behaviour and theories of organisational change.
K24 The principles of effective project management and commonly used project management approaches.
K30 Local child and adult protection procedures and who to contact for further advice.

Assessment method 2: Project with Presentation & Questioning

Knowledge
K2 The statistical, epidemiological, social and scientific concepts underpinning the interpretation of health data to produce intelligence and the impact of these on both people and organisations.
K13 The principles of using effective written and oral communications to influence others.
K14 The information needs of decision-makers (e.g. in the NHS, central and local government) and how they use information to support decision-making and how the publication of health information may impact the wider population.
K16 Sources of evidence and examples of best practice and how to access them.

Skills
S1 Collect data by utilising a variety of tools (e.g. databases, software systems, APIs, digital devices).
S3 Undertake advanced statistical and epidemiological analysis.
S4 Interpret and present advanced statistical and epidemiological analyses being mindful of the risks associated with presenting and publishing health information.
S7 Develop data visualisations appropriate for a range of audiences and contexts using a variety of analytical tools including statistical programming software and industry standard packages (e.g. R, Tableau, PowerBI).
S8 Professionally interpret and present health and care intelligence analyses and recommendations in a well-structured report.
S9 Formulate analysis questions and hypotheses which are answerable given the data available.
S12 Review, and critically appraise evidence and research including survey design and analysis. Summarise and disseminate relevant literature.
S15 Develop and deliver management/Board level presentations which influence senior decision makers, both non-technical and technical.
S28 Apply a range of project management techniques to lead and / or manage complex health and care intelligence projects.

Assessment method 3: Professional Discussion underpinned by Portfolio

Knowledge
K11 The context of NHS, central and local government intelligence, including organisational structures and responsibilities, planning cycles, common policy issues, purpose of different types of quantitative assessments, audits and plans.

K15 The key principles of partnership working, the basics of negotiation and different organisational cultures.
K20 The role of effective leadership in an organisation and how leadership differs from management.
K21 The role of the analytical function within an organisational structure and the strengths and weaknesses of different models for organising analytical teams.
K23 The processes by which resources are effectively managed, including how to analyse and interpret budget reports, how costs for services are calculated, and how to prepare simple financial statements.
K25 How adults learn and how to design effective training in areas of healthcare analysis and intelligence.
K26 How to identify gaps in the knowledge and skills required to fulfil analytical and intelligence roles in the health and care system.
K27 Coaching and mentoring techniques to support the effective learning and development of others.
K28 The importance of continuing professional development and how to maintain specialist knowledge and practice in an ever transforming environment.
K29 The key issues to be considered when balancing patient's rights versus the public interest, including acceptability of access to NHS data by different public and private agencies, and how this is discussed in the public domain.

Skills
S2 Extract, import, clean, and manipulate a wide range of quantitative and qualitative data.
S5 Undertake linkage of health and care data accurately and in accordance with the relevant information governance requirements.
S6 Design and specify data flows, collection, storage and collation mechanisms for both qualitative and quantitative data.
S10 Investigate patterns and variations in determinants, diseases, and other factors affecting health and care outcomes.
S11 Design and undertake surveys, audits or research (e.g. to investigate patterns of disease or support service development).
S13 Work with users of information to clarify their information needs, focusing on understanding the problem to solve or decision to inform, and tailor reports and presentations accordingly.
S14 Provide advice and guidance to internal and external stakeholders at all organisational levels, on data collection, analysis and interpretation.
S16 Communicate sensitively, accurately and appropriately to audiences from technical and non-technical backgrounds.
S17 Comply with, implement and advise on local and national data protection and confidentiality legislation, policies, procedures and any other relevant legal frameworks.

S18 Demonstrate effective leadership and change management skills to influence the use of analysis within an organisation, managing analytical teams and adhering to the principles of continuous improvement.
S19 Evaluate the significance of human factors in the effective development and implementation of organisational strategies for collection, analysis and use of data.
S20 Develop and communicate a vision of how data, intelligence and evidence can be used to influence and improve decision making in an organisation.
S21 Develop effective partnership working arrangements with a range of colleagues across departments and organisations, in particular the public sector and voluntary sectors and academia.
S22 Manage the resources of an analytical team, including staff and budget management.
S23 Support the professional development of others in the health and care system.
S24 Design and deliver effective training and evaluate its impact.
S25 Apply a range of coaching interventions and techniques relevant to the health and care system, selecting the most appropriate method to meet the needs of an individual or group.
S26 Determine when mentoring is appropriate for others in the health and care system and either act in a mentoring capacity or identify the appropriate individual(s) to act as mentors.
S27 Develop, maintain and enhance activity and financial and outcomes models, sense checking and refining the model based on various scenarios and advising on the best option for planning future activity and income or expenditure.
S29 Protect and safeguard vulnerable people and promote the welfare of children, young people and vulnerable adults.
S30 Apply economic principles and tools to calculate value for money by determining costs, benefits and return on investment of interventions and services.

Behaviours
B1 Treat people with dignity, and respect diversity, beliefs and culture.
B2 Act with integrity with respect to ethical, legal and regulatory frameworks ensuring the protection of personal data, safety and security.
B3 Be customer focused both within own organisation and with external stakeholders.
B4 Be self-directed in learning and reflection to constantly improve and work towards evidence-based best practice.
B5 Be adaptable, reliable and consistent, demonstrating discretion, resilience, self-awareness and team working.
B6 Act as a role model to peers and demonstrate leadership.
B7 Constructively challenge inappropriate behaviour and use of information when necessary.