



MAMMOGRAPHY ASSOCIATE

Key information

Reference: ST0583

Version: 1.2

Level: 4

Minimum duration to gateway: 12 months

Typical EPA period: 3 months

Maximum funding: £10000

Route: Health and science

Date updated: 01/02/2024

Approved for delivery: 22 August 2018

Lars code: 340

EQA provider: Ofqual

Example progression routes:

Diagnostic radiographer (integrated degree)

Review: This apprenticeship standard will be reviewed after three years

End-point assessment plan

V1.2

Introduction and overview

This document explains the requirements for end-point assessment (EPA) for the mammography associate apprenticeship. End-point assessment organisations (EPAOs) must follow this when designing and delivering the EPA.

Mammography associate apprentices, their employers and training providers should read this document.

A full-time mammography associate apprentice typically spends 12 months on-programme. The apprentice must spend at least 12 months on-programme and complete the required amount of off-the-job training in line with the apprenticeship funding rules.

The EPA should be completed within an EPA period lasting typically 3 months.

The apprentice must complete their training and meet the gateway requirements before starting their EPA. The EPA will assess occupational competence.

An approved EPAO must conduct the EPA for this apprenticeship. Employers must select an approved EPAO from the apprenticeship provider and assessment register (APAR).

This EPA has 2 assessment methods.

The grades available for each assessment method are below.

Assessment method 1 - multiple-choice test:

- fail
- pass
- distinction

Assessment method 2 - professional discussion underpinned by a clinical portfolio:

- fail
- pass
- distinction

The result from each assessment method is combined to decide the overall apprenticeship grade. The following grades are available for the apprenticeship:

- fail
- pass
- distinction

EPA summary table

<p>On-programme - typically 12 months</p>	<p>The apprentice must:</p> <ul style="list-style-type: none"> • complete training to develop the knowledge, skills and behaviours (KSBs) outlined in this apprenticeship's standard • complete training towards English and mathematics qualifications in line with the apprenticeship funding rules • compile a clinical portfolio of evidence
<p>End-point assessment gateway</p>	<p>The apprentice's employer must be content that the apprentice is occupationally competent.</p> <p>The apprentice must:</p> <ul style="list-style-type: none"> • confirm they are ready to take the EPA • have achieved English and mathematics qualifications in line with the apprenticeship funding rules <p>For the professional discussion underpinned by a clinical portfolio, the apprentice must submit a clinical portfolio of evidence.</p> <p>Gateway evidence must be submitted to the EPAO, along with any organisation specific policies and procedures requested by the EPAO.</p>
<p>End-point assessment - typically 3 months</p>	<p>The grades available for each assessment method are below</p> <p>Multiple-choice test:</p> <ul style="list-style-type: none"> • fail • pass • distinction <p>Professional discussion underpinned by a clinical portfolio:</p> <ul style="list-style-type: none"> • fail • pass • distinction <p>Overall EPA and apprenticeship can be graded:</p> <ul style="list-style-type: none"> • fail • pass • distinction
<p>Re-sits and re-takes</p>	<ul style="list-style-type: none"> • re-take and re-sit grade cap: pass • re-sit timeframe: typically 2 months • re-take timeframe: typically 3 months

Duration of end-point assessment period

The EPA is taken in the EPA period. The EPA period starts when the EPAO confirms the gateway requirements have been met and is typically 3 months.

The EPAO should confirm the gateway requirements have been met and start the EPA as quickly as possible.

EPA gateway

The apprentice's employer must be content that the apprentice is occupationally competent. That is, they are deemed to be working at or above the level set out in the apprenticeship standard and ready to undertake the EPA. The employer may take advice from the apprentice's training provider, but the employer must make the decision. The apprentice will then enter the gateway.

The apprentice must meet the gateway requirements before starting their EPA.

They must:

- confirm they are ready to take the EPA
- have achieved English and mathematics qualifications in line with the apprenticeship funding rules
- submit a clinical portfolio of evidence for the professional discussion underpinned by a clinical portfolio

Portfolio of evidence requirements:

The apprentice must compile a portfolio of evidence during the on-programme period of the apprenticeship. It should only contain evidence related to the KSBs that will be assessed by this assessment method. It will typically contain **14** discrete pieces of evidence. Evidence must be mapped against the KSBs. Evidence may be used to demonstrate more than one KSB; a qualitative as opposed to quantitative approach is suggested.

Evidence sources must include:

- evidence of completion of 500 bilateral mammograms
- evidence of completed mandatory training within your NHS Trust. The list below is not exhaustive, and your Trust may require additional training:
 - Moving and Handling including practical training
 - Adult Resuscitation including practical training
 - Fit Testing (for masks) practical training
 - Infection Prevention and Control Level 1 and 2
 - Safeguarding Adults Level 1 and 2
 - Safeguarding Children Level 1 and 2
 - eConsent
 - Be Dementia Aware
 - Conflict Resolution
 - Display Screen Equipment
 - Equality, Diversity and Inclusion
 - Falls Awareness
 - Health, Safety and Welfare
 - Healthcare Waste Management
 - Fire Safety including practical
 - Mental Health Awareness
 - Data Security Awareness
 - Preventing Radicalisation – Basic Prevent Awareness

Evidence sources may include:

- workplace documentation and records, for example:
- workplace policies and procedures
- witness statements
- annotated photographs
- video clips (maximum total duration 5 minutes); the apprentice must be in view and identifiable

This is not a definitive list; other evidence sources can be included.

The portfolio of evidence should not include reflective accounts or any methods of self-assessment. Any employer contributions should focus on direct observation of performance (for example, witness statements) rather than opinions. The evidence provided should be valid and attributable to the apprentice; the portfolio of evidence should contain a statement from the employer and apprentice confirming this.

The EPAO should not assess the portfolio of evidence directly as it underpins the discussion. The independent assessor should review the portfolio of evidence to prepare questions for the discussion. They are not required to provide feedback after this review.

Gateway evidence must be submitted to the EPAO, along with any organisation specific policies and procedures requested by the EPAO.

Order of assessment methods

The assessment methods can be delivered in any order.

The result of one assessment method does not need to be known before starting the next.

Multiple-choice test

Overview

In the multiple-choice test, the apprentice answers questions in a controlled and invigilated environment. It gives the apprentice the opportunity to demonstrate the knowledge mapped to this assessment method.

Rationale

This assessment method is being used because:

- an examination is a well-recognised method of assessing underpinning knowledge and understanding
- it is a method which is widely used in the health sector and forms an appropriate companion to the other assessment method to ensure all KSBS are fully assessed
- it ensures that apprentices are given the best opportunity to demonstrate the full range of KSBS
- it allows for standardisation within the use of a large question bank from the end point assessment organisations (EPAO)
- it allows for flexibility in terms of when, where and how it is taken
- it does not require independent assessor time, reducing cost; the knowledge test can be administered, invigilated and marked by an independent person appointed by the EPAO
- it allows for larger volumes of apprentices to be assessed at one time

Delivery

The multiple-choice test must be structured to give the apprentice the opportunity to demonstrate the knowledge mapped to this assessment method to the highest available grade.

The test can be computer or paper based.

The test will consist of 60 multiple-choice questions.

Multiple-choice questions must have four options, including one correct answer.

The apprentice must be given at least 10 days' notice of the date and time of the test.

Test administration

The apprentice 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 whilst taking the test.

The test must be taken in the presence of an invigilator who is the responsibility of the EPAO. The EPAO must have an invigilation policy setting out how the test must be conducted. It must state the ratio of apprentices to invigilators for the setting and allow the test to take place in a secure way.

The EPAO must verify the apprentice's identity and ensure invigilation of the apprentice for example, with 360-degree cameras and screen sharing facilities.

The EPAO is responsible for the security of the test including the arrangements for on-line testing. The EPAO must ensure that their security arrangements maintain the validity and reliability of the test.

Marking

The test must be marked by an independent assessor or marker employed by the EPAO. They must follow a marking scheme produced by the EPAO. Marking by computer is allowed where question types support this.

A correct answer gets 1 mark.

Any incorrect or missing answers get zero marks.

The EPAO is responsible for overseeing the marking of the test.

Assessment location

The apprentice must take the test in a suitably controlled and invigilated environment that is a quiet room, free from distractions and influence. The EPAO must check the venue is suitable.

The test can take place remotely if the appropriate technology and systems are in place to prevent malpractice.

Question and resource development

The EPAO must develop a purpose-built assessment specification and question bank. It is recommended this is done in consultation with employers of this occupation. The EPAO should maintain the security and confidentiality of EPA materials when consulting with employers. The assessment specification and question bank must be reviewed at least once a year to ensure they remain fit-for-purpose.

The assessment specification must be relevant to the occupation and demonstrate how to assess the KSBs mapped to this assessment method. The EPAO must ensure that questions are refined and developed to a high standard. The questions must be unpredictable. A question bank of sufficient size will support this.

The EPAO must ensure that the apprentice has a different set of questions in the case of re-sits or re-takes.

The EPAO must produce the following materials to support the test:

- assessment materials for independent assessors and markers which includes:
 - training materials
 - administration materials
 - moderation and standardisation materials
 - guidance materials
 - grading guidance
 - test specification
 - sample test and mark schemes
 - live tests and mark schemes
 - question bank
- EPA guidance for the apprentice and the employer

The EPAO must ensure that the EPA materials are subject to quality assurance procedures including standardisation and moderation.

Professional discussion underpinned by a clinical portfolio

Overview

In the professional discussion, an independent assessor and apprentice have a formal two-way conversation. It gives the apprentice the opportunity to demonstrate the KSBs mapped to this assessment method.

The apprentice can refer to and illustrate their answers with evidence from their portfolio of evidence.

Rationale

This assessment method is being used because:

- it gives the apprentice the opportunity to demonstrate their depth of understanding across the KSBs
- it engages the apprentice in detailed and technical discussions
- is reliable and authentic as the apprentice will refer to their clinical practice and portfolio of evidence in the professional discussion
- a professional discussion replicates what happens in clinical practice between colleagues
- this method allows opportunity for clarification of points raised from the portfolio of evidence
- it allows the assessment of KSBs which cannot be assessed via an examination method
- this is a well-recognised assessment method widely used in the health sector

Delivery

The professional discussion must be structured to give the apprentice the opportunity to demonstrate the KSBs mapped to this assessment method to the highest available grade.

An independent assessor must conduct and assess the professional discussion.

- clinical mammography
- mammography science
- quality assurance
- professional practice
- team working
- health and safety

The EPAO must give an apprentice 10 days' notice of the professional discussion.

The independent assessor must have at least 2 weeks to review the supporting documentation.

The apprentice must have access to their clinical portfolio of evidence during the professional discussion.

The apprentice can refer to and illustrate their answers with evidence from their clinical portfolio of evidence however, the clinical portfolio of evidence is not directly assessed.

The professional discussion must last for 90 minutes. The independent assessor can increase the time of the professional discussion by up to 10%. This time is to allow the apprentice to respond to a question if necessary.

The apprentice may choose to end the assessment method early. The apprentice must be confident they have demonstrated competence against the assessment requirements for the assessment method. The independent assessor or EPAO must ensure the apprentice is fully aware of all assessment requirements. The independent assessor or EPAO cannot suggest or choose to end any assessment methods early, unless in an emergency. The EPAO is responsible for ensuring the apprentice understands the implications of ending an assessment early if they choose to do so. The independent assessor may suggest the assessment continues. The independent assessor must document the apprentice's request to end any assessment early.

The independent assessor must ask at least 15 questions. The independent assessor must use the questions from the EPAO's question bank or create their own questions in line with the EPAO's training. Follow-up questions are allowed where clarification is required.

The independent assessor must make the grading decision.

The independent assessor must keep accurate records of the assessment. They must record:

- the apprentice's answers to questions
- the KSBs demonstrated in answers to questions
- the grade achieved

Assessment location

The professional discussion must take place in a suitable venue selected by the EPAO for example, the EPAO's or employer's premises.

The professional discussion can be conducted by video conferencing. The EPAO must have processes in place to verify the identity of the apprentice and ensure the apprentice is not being aided.

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

Question and resource development

The EPAO must develop a purpose-built assessment specification and question bank. It is recommended this is done in consultation with employers of this occupation. The EPAO must maintain the security and confidentiality of EPA materials when consulting with employers. The assessment specification and question bank must be reviewed at least once a year to ensure they remain fit-for-purpose.

The assessment specification must be relevant to the occupation and demonstrate how to assess the KSBs mapped to this assessment method. The EPAO must ensure that questions are refined and developed to a high standard. The questions must be unpredictable. A question bank of sufficient size will support this.

The EPAO must ensure that the apprentice has a different set of questions in the case of re-sits or re-takes.

The EPAO must produce the following materials to support the professional discussion underpinned by a clinical portfolio:

- independent assessor assessment materials which include:
 - training materials
 - administration materials
 - moderation and standardisation materials
 - guidance materials
 - grading guidance
 - question bank
 - EPA guidance for the apprentice and the employer
- The EPAO must ensure that the EPA materials are subject to quality assurance procedures including standardisation and moderation.

Grading

Professional discussion underpinned by a clinical portfolio

Fail - does not meet pass criteria

THEME KSBS	PASS APPRENTICES MUST DEMONSTRATE ALL OF THE PASS DESCRIPTORS	DISTINCTION APPRENTICES MUST DEMONSTRATE ALL OF THE PASS DESCRIPTORS AND ALL OF THE DISTINCTION DESCRIPTORS
Clinical mammography K1 K5 K6 K11 K21 K29 S1 S2 S3 S4 S5 S6 S7 S15 S18 S19 S21 S23 S24 S25 S26 B1 B2	<p>Explain legal, ethical, professional and local frameworks and protocols within the mammography context and how these impact on own scope of practice when delivering person-centred care. (K1, K11, K21, S25)</p> <p>Explain how to operate mammography equipment safely and effectively to position and immobilise individuals, adapting technique, when necessary, to achieve images of high quality, referring to an appropriate member of the team where required. (K5, K6, S4, S5, S15, S18)</p> <p>Explain how they prepare the equipment, environment and individual for mammography examinations including positively identifying individuals whilst ensuring their, and any accompanying companion's dignity, beliefs, culture, values, and preferences are respected. (K29, S1, S2, S3, S24, B1, B2)</p> <p>Explain how they assess the technical quality of images produced against required standards for breast screening programmes and explain actions they take to correct any issues they identify. (S19)</p> <p>Explain how they securely store images and use information management systems securely to ensure accurate records are maintained while adhering to confidentiality and how they advise individuals of the results process. (S6, S7, S21, S23, S26)</p>	<p>Evaluate record keeping processes and systems providing suggestions for improvement. (S6, S7, S21)</p> <p>Evaluate actions they take to correct any technical quality issues they identify. (S19)</p>
Mammography science S8 S9 S10	<p>Explain how they work in accordance with ionising radiation regulations and comply with legal, ethical, professional and local frameworks to maintain the safety of all individuals in the working environment. (S8, S9, S10)</p>	<p>None.</p>
Quality assurance K32 S20 S27 S28 S29	<p>Describe the purpose, principles and methods of quality control and quality assurance in mammography and how they participate in quality control, accurately record results and report failures. (K32, S27, S28)</p> <p>Explain own role in adhering to quality standards of performance and participating in image assessment and peer review to adhere to breast screening programme standards. (S20, S29)</p>	<p>Evaluate the importance of individual quality control tests and their impact and relevance to mammography. (S27)</p>
Professional practice K22 K27 K35 K36 K41 K43 S16 S17 S22 S30 S31 S34 S35 S36 S37 S40 B3	<p>Describe the responsibilities and professional values of a mammography associate and how these relate to national and local strategies for improving public health and supporting individuals to make informed choices and maximise their health and well-being. (K22, K36, S30)</p> <p>Explain the importance of using an empathetic approach with discretion and how they apply interpersonal and communications skills to meet the needs of individuals. (K27, S22)</p> <p>Explain the value of timed health promotion interventions and how these can promote preventative health behaviours and help individuals make informed choices to improve their health. (K35, S31)</p> <p>Explain the importance of personal health, resilience, and wellbeing of a mammography associate and how they can act as a role model for others within the scope of own role. (K41, S40)</p>	<p>Evaluate methods of communication used in difficult situations to achieve a positive outcome. (K27, S22)</p> <p>Evaluate the impact of reflection and feedback received on their practice. (K43, S35)</p>

	Explain how engagement in appraisals, feedback and reflective practice influences training and development activities, clinical practice, management of own work and courage to challenge areas of concern. (K43, S16, S17, S34, S35, S36, S37, B3)	
Team working K38 K39 S32 S38 S39 B4	Describe the role and function of the multidisciplinary team and the effectiveness of team working. (K38, K39, S32) Explain how they participate in activities in response to changing service needs which support quality improvement of mammography services and impact local, regional, and national quality improvement initiatives. (S38, S39, B4)	None.
Health and safety S11 S12 S13 S14 S33	Explain the required appropriate action in response to risks and incidents and the importance of promoting a positive, safe, and effective working environment. (S11, S33) Explain how they safeguard individuals in accordance with legal and organisational requirements and maintain health and safety in the workplace, including infection control and providing basic life-support where required. (S12, S13, S14)	None.

Multiple-choice test

GRADE	MINIMUM MARKS REQUIRED	MAXIMUM MARKS REQUIRED
Fail	0	29
Pass	30	47
Distinction	48	60

Overall EPA grading

Performance in the EPA determines the overall grade of:

- fail
- pass
- distinction

An independent assessor must individually grade the multiple-choice test in line with this EPA plan.

The EPAO must combine the individual assessment method grades to determine the overall EPA grade.

If the apprentice fails one assessment method or more, they will be awarded an overall fail.

To achieve an overall pass, the apprentice must achieve at least a pass in all the assessment methods. In order to achieve an overall EPA distinction, apprentices must achieve a distinction in both of the EPA methods. Independent assessors must individually grade the professional discussion supported by a clinical portfolio of evidence according to the requirements set out in this EPA plan. EPAOs must combine the individual assessment method grades to determine the overall EPA grade. Apprentices who fail one or more assessment method will be awarded an overall EPA fail.

Grades from individual assessment methods must be combined in the following way to determine the grade of the EPA overall.

MULTIPLE-CHOICE TEST	PROFESSIONAL DISCUSSION UNDERPINNED BY A CLINICAL PORTFOLIO	OVERALL GRADING
Any grade	Fail	Fail
Fail	Any grade	Fail
Pass	Pass	Pass
Pass	Distinction	Pass
Distinction	Pass	Pass
Distinction	Distinction	Distinction

Re-sits and re-takes

If the apprentice fails one assessment method or more, they can take a re-sit or a re-take at their employer's discretion. The apprentice's employer needs to agree that a re-sit or re-take is appropriate. A re-sit does not need further learning, whereas a re-take does. The apprentice should have a supportive action plan to prepare for a re-sit or a re-take.

The employer and the EPAO should agree the timescale for a re-sit or re-take. A re-sit is typically taken within 2 months of the EPA outcome notification. The timescale for a re-take is dependent on how much re-training is required and is typically taken within 3 months of the EPA outcome notification.

Failed assessment methods must be re-sat or re-taken within a 6-month period from the EPA outcome notification, otherwise the entire EPA will need to be re-sat or re-taken in full.

Re-sits and re-takes are not offered to an apprentice wishing to move from pass to a higher grade.

The apprentice will get a maximum EPA grade of pass they need to re-sit or re-take one or more assessment methods, unless the EPAO determines there are exceptional circumstances.

Roles and responsibilities

ROLES	RESPONSIBILITIES
Apprentice	<p>As a minimum, the apprentice should:</p> <ul style="list-style-type: none"> • complete on-programme training to meet the KSBs as outlined in the apprenticeship standard for a minimum of 12 months • complete the required amount of off-the-job training specified by the apprenticeship funding rules and as arranged by the employer and training provider • understand the purpose and importance of EPA • prepare for and undertake the EPA including meeting all gateway requirements
Employer	<p>As a minimum, the apprentice's employer must:</p> <ul style="list-style-type: none"> • select the training provider • work with the training provider to select the EPAO • work with the training provider, where applicable, to support the apprentice in the workplace and to provide the opportunities for the apprentice to develop the KSBs • arrange and support off-the-job training to be undertaken by the apprentice • decide when the apprentice is working at or above the apprenticeship standard and is ready for EPA • ensure the apprentice is prepared for the EPA • ensure that all supporting evidence required at the gateway is submitted in line with this EPA plan • confirm arrangements with the EPAO for the EPA in a timely manner, including who, when, where • provide the EPAO with access to any employer-specific documentation as required for example, company policies • ensure that the EPA is scheduled with the EPAO for a date and time which allows appropriate opportunity for the apprentice to meet the KSBs • ensure the apprentice is given sufficient time away from regular duties to prepare for, and complete the EPA • ensure that any required supervision during the EPA period, as stated within this EPA plan, is in place • ensure the apprentice has access to the resources used to fulfil their role and carry out the EPA for workplace based assessments • remain independent from the delivery of the EPA • pass the certificate to the apprentice upon receipt
EPAO	<p>As a minimum, the EPAO must:</p> <ul style="list-style-type: none"> • conform to the requirements of this EPA plan and deliver its requirements in a timely manner • conform to the requirements of the apprenticeship provider and assessment register • conform to the requirements of the external quality assurance provider (EQAP) • understand the apprenticeship including the occupational standard and EPA plan • make all necessary contractual arrangements including agreeing the price of the EPA • develop and produce assessment materials including specifications and marking materials, for example mark schemes, practice materials, training material • maintain and apply a policy for the declaration and management of conflict of interests and independence. This must ensure, as a minimum, there is no personal benefit or detriment for those delivering the EPA or from the result of an assessment. It must cover: <ul style="list-style-type: none"> • apprentices • employers • independent assessors • any other roles involved in delivery or grading of the EPA • have quality assurance systems and procedures that ensure fair, reliable and consistent assessment and maintain records of internal quality assurance (IQA) activity for external quality assurance (EQA) purposes • appoint independent, competent, and suitably qualified assessors in line with the requirements of this EPA plan • appoint administrators, invigilators and any other roles where required to facilitate the EPA • deliver induction, initial and on-going training for all their independent assessors and any other roles involved in the delivery or grading of the EPA as specified within this EPA plan. This should include how to record the rationale and evidence for grading decisions where required

	<ul style="list-style-type: none"> • conduct standardisation with all their independent assessors before allowing them to deliver an EPA, when the EPA is updated, and at least once a year • conduct moderation across all of their independent assessors' decisions once EPAs have started according to a sampling plan, with associated risk rating of independent assessors • monitor the performance of all their independent assessors and provide additional training where necessary • develop and provide assessment recording documentation to ensure a clear and auditable process is in place for providing assessment decisions and feedback to all relevant stakeholders • use language in the development and delivery of the EPA that is appropriate to the level of the apprenticeship • arrange for the EPA to take place in a timely manner, in consultation with the employer • provide information, advice, and guidance documentation to enable apprentices, employers and training providers to prepare for the EPA • confirm the gateway requirements have been met before they start the EPA for an apprentice • arrange a suitable venue for the EPA • maintain the security of the EPA including, but not limited to, verifying the identity of the apprentice, invigilation and security of materials • where the EPA plan permits assessment away from the workplace, ensure that the apprentice has access to the required resources and liaise with the employer to agree this if necessary • confirm the overall grade awarded • maintain and apply a policy for conducting appeals
Independent assessor	<p>As a minimum, an independent assessor must:</p> <ul style="list-style-type: none"> • be independent, with no conflict of interest with the apprentice, their employer or training provider, specifically, they must not receive a personal benefit or detriment from the result of the assessment • have, maintain and be able to evidence up-to-date knowledge and expertise of the occupation • have the competence to assess the EPA and meet the requirements of the IQA section of this EPA plan • understand the apprenticeship's occupational standard and EPA plan • attend induction and standardisation events before they conduct an EPA for the first time, when the EPA is updated, and at least once a year • use language in the delivery of the EPA that is appropriate to the level of the apprenticeship • work with other personnel, where used, in the preparation and delivery of assessment methods • conduct the EPA to assess the apprentice against the KSBs and in line with the EPA plan • make final grading decisions in line with this EPA plan • record and report assessment outcome decisions • comply with the IQA requirements of the EPAO • comply with external quality assurance (EQA) requirements
Training provider	<p>As a minimum, the training provider must:</p> <ul style="list-style-type: none"> • conform to the requirements of the apprenticeship provider and assessment register • ensure procedures are in place to mitigate against any conflict of interest • work with the employer and support the apprentice during the off-the-job training to provide the opportunities to develop the KSBs as outlined in the occupational standard • deliver training to the apprentice as outlined in their apprenticeship agreement • monitor the apprentice's progress during any training provider led on-programme learning • ensure the apprentice is prepared for the EPA • work with the employer to select the EPAO • advise the employer, upon request, on the apprentice's readiness for EPA • ensure that all supporting evidence required at the gateway is submitted in line with this EPA plan • remain independent from the delivery of the EPA
Marker	<p>As a minimum, the marker must:</p> <ul style="list-style-type: none"> • attend induction training as directed by the EPAO • have no direct connection or conflict of interest with the apprentice, their employer or training provider

	<ul style="list-style-type: none"> mark test answers in line with the EPAO's mark scheme and procedures
Invigilator	<p>As a minimum, the invigilator must:</p> <ul style="list-style-type: none"> attend induction training as directed by the EPAO not invigilate an assessment, solely, if they have delivered the assessed content to the apprentice invigilate and supervise the apprentice during tests and in breaks during assessment methods to prevent malpractice in line with the EPAO's invigilation procedures

Reasonable adjustments

The EPAO must have reasonable adjustments arrangements for the EPA.

This should include:

- how an apprentice qualifies for a reasonable adjustment
- what reasonable adjustments may be made

Adjustments must maintain the validity, reliability and integrity of the EPA as outlined in this EPA plan.

Special considerations

The EPAO must have special consideration arrangements for the EPA.

This should include:

- how an apprentice qualifies for a special consideration
- what special considerations will be given

Special considerations must maintain the validity, reliability and integrity of the EPA as outlined in this EPA plan.

Internal quality assurance

Internal quality assurance refers to the strategies, policies and procedures that an EPAO must have in place to ensure valid, consistent and reliable EPA decisions.

EPAOs for this EPA must adhere to the requirements within the roles and responsibilities table.

They must also appoint independent assessors who:

- have recent relevant experience of the occupation or sector to at least occupational level 5 gained in the last 2 years or significant experience of the occupation or sector
- have professional body membership with:
Diagnostic radiographer registered with the Health and Care Professions Council (HCPC).

Value for money

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

- utilising digital remote platforms to conduct applicable assessment methods
- assessing multiple apprentices simultaneously where the assessment method permits this
- using the employer's premises
- conducting assessment methods on the same day

Professional recognition

This apprenticeship is not aligned to professional recognition.

KSB mapping table

KNOWLEDGE	ASSESSMENT METHODS
K1 Principles of person-centred care.	Professional discussion underpinned by a clinical portfolio
K2 Normal breast anatomy, physiology, and pathology.	Multiple-choice test
K3 Types of abnormalities of the breasts that need to be observed and recorded.	Multiple-choice test
K4 Principles of informed consent and the actions to take if consent is withdrawn.	Multiple-choice test
K5 Effective positioning and immobilisation of individuals.	Professional discussion underpinned by a clinical portfolio
K6 Adapt techniques to optimise image quality.	Professional discussion underpinned by a clinical portfolio
K7 The role of other imaging and treatment modalities including ultrasound (US), magnetic resonance imaging (MRI), radiotherapy, chemotherapy and immunotherapy.	Multiple-choice test
K8 The relationship between anatomy, pathophysiology and the imaging process.	Multiple-choice test
K9 The basic design, function and operation of mammography image acquisition and display equipment.	Multiple-choice test
K10 Processes for recording, storing and sharing personal information securely, including the safe use of technology complying with organisational and legal requirements.	Multiple-choice test
K11 Relevant legal, ethical, professional, and local frameworks and protocols in the mammography context.	Professional discussion underpinned by a clinical portfolio
K12 Maintaining health and safety in the workplace.	Multiple-choice test
K13 How radiation is produced and its interaction with matter.	Multiple-choice test
K14 The radiobiological effects of radiation - short and long-term risks.	Multiple-choice test
K15 Radiation protection of self and others.	Multiple-choice test
K16 The application of ionising radiation regulations.	Multiple-choice test
K17 The meaning of risk in the workplace, ways to raise concerns and own responsibilities in relation to incidents, errors and near misses.	Multiple-choice test
K18 Principles of infection control.	Multiple-choice test

K19 Basic life support techniques.	Multiple-choice test
K20 Principles of safe moving and assisting individuals and moving and handling equipment.	Multiple-choice test
K21 Operate within your own scope of practice, legislation, and policies.	Professional discussion underpinned by a clinical portfolio
K22 Responsibilities and professional values of a mammography associate.	Professional discussion underpinned by a clinical portfolio
K23 When it is necessary to refer to an appropriate member of the multi-disciplinary breast care team, including the supervisory radiographer, for concerns and queries outside scope of practice.	Multiple-choice test
K24 Standards and criteria for assessing the technical quality of images.	Multiple-choice test
K25 Systems for image acquisition, storage, and retrieval.	Multiple-choice test
K26 Individual and unit performance targets relating to the quality of mammography images.	Multiple-choice test
K27 Principles of effective interpersonal and communication skills.	Professional discussion underpinned by a clinical portfolio
K28 Advise individuals of the results process and give additional information within the scope of your responsibility.	Multiple-choice test
K29 Meet the care needs of individuals and their accompanying companions with sensitivity and respect.	Professional discussion underpinned by a clinical portfolio
K30 Principles of confidentiality, duty of candour and disclosure.	Multiple-choice test
K31 Principles of equality, diversity and inclusion.	Multiple-choice test
K32 The purpose, principles and methods of quality control and quality assurance in mammography.	Professional discussion underpinned by a clinical portfolio
K33 Relevant national standards and local guidelines for quality control and assurance.	Multiple-choice test
K34 The responsibility of mammographers to identify individual clinical mammography learning needs to ensure breast screening programme standards are met.	Multiple-choice test
K35 Value of appropriately timed health promotion interventions.	Professional discussion underpinned by a clinical portfolio
K36 National and local strategies, priorities, and initiatives for promoting and improving public health.	Professional discussion underpinned by a clinical portfolio
K37	Multiple-choice test

Wider determinants of health such as the contribution of social influences, health literacy, individual circumstances, behaviours and lifestyle choices on health and wellbeing.	
K38 The role and function of the multi-disciplinary breast care team.	Professional discussion underpinned by a clinical portfolio
K39 Principles of effective team-working.	Professional discussion underpinned by a clinical portfolio
K40 Techniques for managing challenging situations, unsafe work practices, addressing comments, compliments, conflict, and complaints.	Multiple-choice test
K41 Importance of personal health, resilience, and wellbeing.	Professional discussion underpinned by a clinical portfolio
K42 Purpose and value of supervision, appraisals and personal development planning.	Multiple-choice test
K43 Reflective practice and how to use it effectively.	Professional discussion underpinned by a clinical portfolio
K44 Importance of continuing personal and professional development.	Multiple-choice test
K45 Principles of audit and research applied in mammography services.	Multiple-choice test
K46 How audit and research lead to the maintaining standards and improving the quality of mammography services.	Multiple-choice test

SKILL	ASSESSMENT METHODS
S1 Prepare equipment and environments appropriately for mammography.	Professional discussion underpinned by a clinical portfolio
S2 Identify individuals attending for mammography appropriately.	Professional discussion underpinned by a clinical portfolio
S3 Prepare individuals appropriately for mammography.	Professional discussion underpinned by a clinical portfolio
S4 Employ effective positioning and immobilisation to achieve images of high quality.	Professional discussion underpinned by a clinical portfolio
S5 Operate mammography equipment safely and effectively within protocol.	Professional discussion underpinned by a clinical portfolio
S6 Maintain required and accurate records of the procedure complying with quality, confidentiality and data protection requirements.	Professional discussion underpinned by a clinical portfolio
S7 Use information management systems effectively.	Professional discussion underpinned by a clinical portfolio
S8 Comply with, and practise safely within, relevant legal, ethical, professional, and local frameworks and protocols for the delivery of clinical mammography.	Professional discussion underpinned by a clinical portfolio
S9 Maintain the radiation safety of all individuals in the working environment in line with current legislation.	Professional discussion underpinned by a clinical portfolio
S10 Work in accordance with ionising radiation regulations.	Professional discussion underpinned by a clinical portfolio
S11 Take appropriate action in response to concerns, risks, incidents or near misses arising in the workplace.	Professional discussion underpinned by a clinical portfolio
S12 Safeguard individuals in accordance with legal and organisational requirements.	Professional discussion underpinned by a clinical portfolio
S13 Use techniques for infection control.	Professional discussion underpinned by a clinical portfolio
S14 Provide basic life-support techniques, when required.	Professional discussion underpinned by a clinical portfolio
S15 Move and handle equipment or other items safely and assist individuals as appropriate.	Professional discussion underpinned by a clinical portfolio
S16 Manage self and own work effectively	Professional discussion underpinned by a clinical portfolio
S17 Recognise and respond appropriately to strengths and limitations in own knowledge, skills, and attributes.	Professional discussion underpinned by a clinical portfolio

S18 Refer to an appropriate member of the multi-disciplinary breast care team where required for concerns and queries outside scope of practice.	Professional discussion underpinned by a clinical portfolio
S19 Assess the technical quality of images produced against required standards for breast screening programmes.	Professional discussion underpinned by a clinical portfolio
S20 Adhere to quality standards of performance for breast screening programmes.	Professional discussion underpinned by a clinical portfolio
S21 Transfer and store images using appropriate systems.	Professional discussion underpinned by a clinical portfolio
S22 Apply effective interpersonal and communication skills to engage with individuals.	Professional discussion underpinned by a clinical portfolio
S23 Report and share information related to individuals securely in line with local and national policies, maintaining confidentiality.	Professional discussion underpinned by a clinical portfolio
S24 Ensure own actions promote equality, diversity and inclusion.	Professional discussion underpinned by a clinical portfolio
S25 Work individually, collaboratively and in partnership to deliver person-centred care.	Professional discussion underpinned by a clinical portfolio
S26 Advise individuals of the results process and give any necessary additional information within the scope of your responsibility.	Professional discussion underpinned by a clinical portfolio
S27 Participate in quality control tests of mammography equipment and accurately record results.	Professional discussion underpinned by a clinical portfolio
S28 Report any failed equipment tests to a senior member of staff.	Professional discussion underpinned by a clinical portfolio
S29 Participate in image assessment and peer review to adhere to breast screening programme standards.	Professional discussion underpinned by a clinical portfolio
S30 Engage in effective health promotion by actively seeking out and acting on opportunities to support individuals to maximise their health and well-being within the scope of the role.	Professional discussion underpinned by a clinical portfolio
S31 Promote preventative health behaviours and support individuals to make informed choices to improve their health and wellbeing within the scope of the role.	Professional discussion underpinned by a clinical portfolio
S32 Work effectively within the multi-disciplinary breast care team.	Professional discussion underpinned by a clinical portfolio
S33 Promote a positive, safe, and effective working environment.	Professional discussion underpinned by a clinical portfolio
S34 Make use of supervision and pastoral care.	Professional discussion underpinned by a clinical portfolio

S35 Make use of reflective practice to engage in continuing professional development.	Professional discussion underpinned by a clinical portfolio
S36 Participate in training and development activities and evaluate the impact of learning on own practice.	Professional discussion underpinned by a clinical portfolio
S37 Seek out and respond to feedback and engage in appraisals.	Professional discussion underpinned by a clinical portfolio
S38 Identify opportunities to improve the quality of the mammography service provided and contribute to local, regional, and national quality improvement initiatives.	Professional discussion underpinned by a clinical portfolio
S39 Participate in and support others with quality improvement activities in the workplace.	Professional discussion underpinned by a clinical portfolio
S40 Act as a role model for others within the scope of own role.	Professional discussion underpinned by a clinical portfolio
BEHAVIOUR	ASSESSMENT METHODS
B1 Treat individuals with dignity, respecting their beliefs, culture, values and preferences.	Professional discussion underpinned by a clinical portfolio
B2 Adopt an empathic approach and demonstrate discretion.	Professional discussion underpinned by a clinical portfolio
B3 Demonstrate courage to challenge areas of concern.	Professional discussion underpinned by a clinical portfolio
B4 Be adaptable and responsive to changing service needs.	Professional discussion underpinned by a clinical portfolio

Mapping of KSBs to grade themes

Professional discussion underpinned by a clinical portfolio

KSBS GROUPED BY THEME	KNOWLEDGE	SKILLS	BEHAVIOUR
Clinical mammography K1 K5 K6 K11 K21 K29 S1 S2 S3 S4 S5 S6 S7 S15 S18 S19 S21 S23 S24 S25 S26 B1 B2	Principles of person-centred care. (K1) Effective positioning and immobilisation of individuals. (K5) Adapt techniques to optimise image quality. (K6) Relevant legal, ethical, professional, and local frameworks and protocols in the mammography context. (K11) Operate within your own scope of practice, legislation, and policies. (K21) Meet the care needs of individuals and their accompanying companions with sensitivity and respect. (K29)	Prepare equipment and environments appropriately for mammography. (S1) Identify individuals attending for mammography appropriately. (S2) Prepare individuals appropriately for mammography. (S3) Employ effective positioning and immobilisation to achieve images of high quality. (S4) Operate mammography equipment safely and effectively within protocol. (S5) Maintain required and accurate records of the procedure complying with quality, confidentiality and data protection requirements. (S6) Use information management systems effectively. (S7) Move and handle equipment or other items safely and assist individuals as appropriate. (S15) Refer to an appropriate member of the multi-disciplinary breast care team where required for concerns and queries outside scope of practice. (S18) Assess the technical quality of images produced against required standards for breast screening programmes. (S19) Transfer and store images using appropriate systems. (S21) Report and share information related to individuals securely in line with local and national policies, maintaining confidentiality. (S23) Ensure own actions promote equality, diversity and inclusion. (S24) Work individually, collaboratively and in partnership to deliver person-centred care. (S25) Advise individuals of the results process and give any necessary additional information within the scope of your responsibility. (S26)	Treat individuals with dignity, respecting their beliefs, culture, values and preferences. (B1) Adopt an empathic approach and demonstrate discretion. (B2)
Mammography science S8 S9 S10	None	Comply with, and practise safely within, relevant legal, ethical, professional, and local frameworks and protocols for the delivery of clinical mammography. (S8)	None

		<p>Maintain the radiation safety of all individuals in the working environment in line with current legislation. (S9)</p> <p>Work in accordance with ionising radiation regulations. (S10)</p>	
<p>Quality assurance K32 S20 S27 S28 S29</p>	<p>The purpose, principles and methods of quality control and quality assurance in mammography. (K32)</p>	<p>Adhere to quality standards of performance for breast screening programmes. (S20)</p> <p>Participate in quality control tests of mammography equipment and accurately record results. (S27)</p> <p>Report any failed equipment tests to a senior member of staff. (S28)</p> <p>Participate in image assessment and peer review to adhere to breast screening programme standards. (S29)</p>	<p>None</p>
<p>Professional practice K22 K27 K35 K36 K41 K43 S16 S17 S22 S30 S31 S34 S35 S36 S37 S40 B3</p>	<p>Responsibilities and professional values of a mammography associate. (K22)</p> <p>Principles of effective interpersonal and communication skills. (K27)</p> <p>Value of appropriately timed health promotion interventions. (K35)</p> <p>National and local strategies, priorities, and initiatives for promoting and improving public health. (K36)</p> <p>Importance of personal health, resilience, and wellbeing. (K41)</p> <p>Reflective practice and how to use it effectively. (K43)</p>	<p>Manage self and own work effectively (S16)</p> <p>Recognise and respond appropriately to strengths and limitations in own knowledge, skills, and attributes. (S17)</p> <p>Apply effective interpersonal and communication skills to engage with individuals. (S22)</p> <p>Engage in effective health promotion by actively seeking out and acting on opportunities to support individuals to maximise their health and well-being within the scope of the role. (S30)</p> <p>Promote preventative health behaviours and support individuals to make informed choices to improve their health and wellbeing within the scope of the role. (S31)</p> <p>Make use of supervision and pastoral care. (S34)</p> <p>Make use of reflective practice to engage in continuing professional development. (S35)</p> <p>Participate in training and development activities and evaluate the impact of learning on own practice. (S36)</p> <p>Seek out and respond to feedback and engage in appraisals. (S37)</p> <p>Act as a role model for others within the scope of own role. (S40)</p>	<p>Demonstrate courage to challenge areas of concern. (B3)</p>

Team working K38 K39 S32 S38 S39 B4	The role and function of the multi-disciplinary breast care team. (K38) Principles of effective team-working. (K39)	Work effectively within the multi-disciplinary breast care team. (S32) Identify opportunities to improve the quality of the mammography service provided and contribute to local, regional, and national quality improvement initiatives. (S38) Participate in and support others with quality improvement activities in the workplace. (S39)	Be adaptable and responsive to changing service needs. (B4)
Health and safety S11 S12 S13 S14 S33	None	Take appropriate action in response to concerns, risks, incidents or near misses arising in the workplace. (S11) Safeguard individuals in accordance with legal and organisational requirements. (S12) Use techniques for infection control. (S13) Provide basic life-support techniques, when required. (S14) Promote a positive, safe, and effective working environment. (S33)	None

Version log

Version	Change detail	Earliest start date	Latest start date	Latest end date
1.2	Occupational standard, end-point assessment plan and funding band revised	01/02/2024	Not set	Not set
1.1	End-point assessment plan revised.	26/10/2020	31/01/2024	Not set
1.0	Retired	22/08/2018	25/10/2020	Not set

Crown copyright © 2024. You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. Visit www.nationalarchives.gov.uk/doc/open-government-licence