

End-Point Assessment Plan

Prosthetic and Orthotic Technician

Level 3

Introduction and overview

This document sets out the requirements for end-point assessment (EPA) for the prosthetic and orthotic technician apprenticeship standard, level 3. 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 prosthetic and orthotic technician apprentices, their employers and training providers.

Full time apprentices will typically spend three years on-programme working towards the occupational standard, with a minimum of 20% off-the-job training.

The EPA 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, the pre-requisite gateway requirements for EPA have been met and that they can be evidenced to an EPAO.

As a gateway requirement, apprentices must have compiled a portfolio. In addition, apprentices without English and mathematics at level 2 must achieve level 2 prior to taking their EPA¹.

The EPA must be completed within a three-month period after the apprentice has met the EPA gateway requirements.

EPA must be conducted by an organisation approved to offer services against this standard, as selected by the employer, from the Education & Skills Funding Agency's (ESFA) Register of End-Point Assessment Organisations (RoEPAO).

The EPA consists of two distinct assessment methods:

- Observation of practice and follow up question and answer session
- Professional discussion underpinned by portfolio

Performance in the EPA will determine the apprenticeship grade of fail, pass or distinction.

¹ For those with an education, health and care plan or a legacy statement the apprenticeships 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.

Typical progression through the Apprenticeship

| On-programme | End-point assessment gateway | End-point assessment | Grading |
|---|--|--|----------------------------------|
| <ul style="list-style-type: none"> • Training to develop the prosthetic and orthotic technician standard's knowledge, skills and behaviours • Working towards English/maths Level 2 (if required) • Collation of portfolio | <ul style="list-style-type: none"> • English/maths Level 2² • Portfolio • Employer is satisfied apprentice is consistently working at or above the level of the standard | <ul style="list-style-type: none"> • Observation of practice and follow up question and answer session • Professional discussion underpinned by prosthetic and orthotic technician portfolio | Graded fail, pass or distinction |

End-point assessment gateway

The EPA should only start once the employer is satisfied that the apprentice is consistently working at or above the level set out in the standard, the pre-requisite gateway requirements for EPA have been met and that they can be evidenced to an EPAO. Employers may wish to take advice from their apprentice's training provider(s).

Gateway requirements:

- English and mathematics at level 2²
- Prosthetic and orthotic technician portfolio completed

Prosthetic and orthotic technician portfolio requirements:

- Must include evidence that demonstrates the apprentice's competence in KSBs that will be assessed by the professional discussion.
- Evidence must relate to 'real' work completed by the apprentice; evidence from simulated activities are not allowable; reflective accounts are not allowable
- Evidence must be mapped against the knowledge, skills and behaviours (KSBs) being assessed by the prosthetic and orthotic technician professional discussion, as shown in appendix 1 and can be mapped to more than one KSB
- Examples of evidence can include:
 - Products produced by the apprentice

² For those with an education, health and care plan or a legacy statement the apprenticeships 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.

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- Observations of the apprentice at work
- Work documentation e.g. docket, specifications
- Witness statements
- Recorded questions/answers/ workbooks
- Taped evidence (video or audio)
- Photographic evidence

This is not a definitive list; other evidence sources are permissible

- It will typically contain up to 12 discrete pieces of evidence (*apprentices should aim for quality evidence that demonstrates a number of KSBs, not quantity*)
- Must be submitted to the End Point Assessment Organisation at gateway which must be a minimum of 4 days before the prosthetic and orthotic technician professional discussion

End-point assessment methods, timescales & location

The EPA consists of two distinct assessment methods:

- Observation of Practice and follow up question and answer session
- Professional discussion underpinned by prosthetic and orthotic technician's portfolio

The assessment methods can be completed in any order, allowing EPAOs flexibility in scheduling and cost-effective allocation of resources.

It is envisaged that the same independent assessor will conduct the assessment methods on the same day.

| ASSESSMENT METHOD | KSB TO BE ASSESSED BY THIS ASSESSMENT METHOD |
|---|--|
| 1) Observation of practice and follow up question and answer 120 minutes | Prosthetic and Orthotic Care Statements K1-6, S1-5, S7-8 |
| 2) Professional Discussion 60 minutes | Prosthetic & Orthotic Care Statements K4 & S6 Person Centred Care Statements K7-10 & S9-11 Governance & Safety Statements K11-20 & S12-21 Values Statement V1 & Behaviours Statement B1 |

Key

K = Knowledge Statement

S= Skills Statements

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The knowledge, skills and behaviours can be found in the occupational standard in Appendix 1.

Requirements for each assessment method are detailed below.

Method 1 – Observation of practice and follow up question and answer

The live observation of practice is undertaken in the Apprentice's work place where they will be observed carrying out day-to-day manufacturing tasks, as part of their normal working hours during the EPA period. This will include the use of the employer's resources and equipment.

It must consist of 2 components:

- Observation
- Question and Answer

The Assessment method must take 120 minutes **in total** (+/- 10% at the discretion of the assessor, to allow for the completion of an observed task or an answer). There may be gaps to allow the apprentice and independent assessor to move from one location to another or for comfort breaks; in this scenario the assessment time would be paused and recommenced accordingly.

The **observation** of apprentices will take place for a total of 90 minutes (+/- 10% at the discretion of the assessor), to allow for the completion of a number of tasks typically carried out in their normal day-to-day activity. The apprentice will be observed by one assessor (1:1 ratio).

Examples of observations might include:

1. Review of a prosthetic/orthotic specification to ensure the necessary information is recorded, proceed with manufacturing the device and devise a plan to proceed with production.
2. Set up a device to the measurements/angles specified.
3. Apply appendages/strapping to a device.
4. Review a completed device, carrying out the necessary checks to ensure it meets the specification and carry out adjustments if necessary to meet the specification.
5. Determine the necessary repairs on a pre-existing device and make appropriate repairs.

Following the 90-minute observation of practice, the apprentice will participate in a 30-minute question and answer session (+/10% at the discretion of the assessor) in which the Independent Assessor will ask questions and follow up questions to cover the knowledge, skills and behaviours not evidenced in the observation directly.

KSBs observed or covered by answers to the assessor's questions must be documented by the independent assessor.

EPAOs must develop a 'questions bank' to be used in the question and answer part of the assessment, the independent assessor will select questions from the bank and use their own follow up questions. It is recommended that questions are developed in consultation with representative employers; where they do this; they must put measures in place to ensure question security and consistency. End Point Assessment Organisations must develop and maintain a question bank of sufficient size to prevent predictability and review them regularly (and at least once a year) to ensure they are fit for purpose.

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

The observation of practice and follow up question and answer assessment will be graded fail, pass or distinction.

Independent assessors must grade the prosthetic and orthotic skills assessment components of method one holistically using the grading criteria within this document (see pages 8-10).

Method 2 – Professional discussion

Apprentices must complete a professional discussion during the EPA period. It is underpinned by the apprentice's prosthetic and orthotic portfolio. To enable the independent assessor sufficient time to plan, apprentices must submit their portfolio to their EPAO at least four days before the scheduled professional discussion.

The professional discussion is not simply a question and answer session but a two-way dialogue between the apprentice and the assessor. The professional discussion must be designed to assess the apprentice's knowledge, skills and behaviours identified for this method (in appendix 1). A structured template designed by the end-point assessment organisation must be used for managing and grading the professional discussion to ensure consistency.

The independent assessor will prepare at least **one discussion point for each domain** in the standard that can be used to provide the apprentice with the opportunity to evidence the required skills, knowledge and behaviours using a range of examples from their own practice and underpinned by their portfolio. The assessor must not use prompts or questions that would 'lead' the apprentice.

The apprentice should have no prior knowledge of the discussion points they will be asked and should not be briefed prior to taking part in the professional discussion by the independent assessor.

The professional discussion will cover the following domains:

1. Prosthetic/ Orthotic Care
2. Person Centred Care
3. Governance and Safety

The professional discussion must last 60 minutes (+/-10% at the discretion of the assessor, to allow answers to be completed).

The location of the professional discussion will be determined by the end-point assessment organisation in consultation with the employer and the apprentice; however, it is recommended it takes place in the apprentice's workplace. The professional discussion must take place face to face and not remotely using technology such as Skype, telephone etc., and where possible on the same day.

The professional discussion will be graded fail, pass or distinction.

Independent assessors must grade the professional discussion holistically using grading criteria within this document.

It is recommended that end point assessment organisations work with employers to develop specifications for the professional discussion including a 'question bank' that is of sufficient size to mitigate predictability and that these are reviewed regularly to ensure they are fit for purpose. End point assessment organisations must have procedures in place to ensure the security and confidentiality of the specifications.

The specifications must be used to assess how the apprentice has met the knowledge, skills and behaviours required of this assessment method thereby ensuring the assessment method has sufficient standardisation and that the assessment is conducted robustly yet fairly.

End-point assessment organisations must ensure there are standard templates for the recording of responses and that independent assessors are trained in how to robustly complete the documentation.

End-point assessment and apprenticeship grading

Independent assessors must individually grade each assessment method, according to the requirements set out in this plan. The observation of practice and follow up question and answer and professional discussion must be graded fail, pass or distinction. Both assessment methods are of equal weighting, EPAOs must combine the grades of the two assessment methods to determine the overall EPA grade as defined below:

Apprenticeship classification

| Professional Discussion | Observation of practice and follow up question and answer | EPA grade |
|--------------------------------|--|------------------|
| Fail | Fail | Fail |
| Pass | Fail | Fail |
| Fail | Pass | Fail |
| Distinction | Fail | Fail |
| Fail | Distinction | Fail |
| Pass | Pass | Pass |
| Distinction | Pass | Pass |
| Pass | Distinction | Pass |
| Distinction | Distinction | Distinction |

Professional Discussion Grading Criteria

Assessment Method: Professional Discussion

| Domain from the standard being assessed utilising this method | Fail | Pass | Distinction |
|---|---|---|---|
| Prosthetic/Orthotic Care Values & Behaviours | The apprentice has failed to meet the pass criteria | <ul style="list-style-type: none"> How their role supports prosthetic and orthotic care and can give appropriate examples of how their role works in the organisation they work (S6, K4, V1, B1) | <ul style="list-style-type: none"> Examples of when the limits of their role has been tested and what actions they have undertaken to ensure patient safety isn't compromised (S6, K4, V1 and B1) |
| Person Centred Care | The apprentice has failed to meet the pass criteria | <ul style="list-style-type: none"> The importance of using appropriate communication skills in providing prosthetic/orthotic care in the context of their role and relevant legislation and is able to appropriately discuss issues pertaining to privacy, dignity and the impact disability has on providing care appropriate to their role (S9, S10, K7, K10) How they accurately record information and how this information is used in patient care (S11) | <ul style="list-style-type: none"> How they have appropriately challenged poor communications in the workplace; reflecting what happened as a result of this challenge and can appropriately discuss how their care giving has been suitably adapted in the context of the client group they are attending (S9, S10) How they have identified ways to improve record keeping and what benefits this had on patient care (S11) |
| Governance and Safety | The apprentice has failed to meet the pass criteria | <ul style="list-style-type: none"> How they work safely in a prosthetic/orthotic environment and can give correct examples of how their practice supports the safeguarding of | <ul style="list-style-type: none"> When they have encountered unsafe practice in prosthetic/orthotic care and what they have then done to establish a safe |

| | | | |
|--|--|--|---|
| | | <p>vulnerable adults and children (S12, S16 K13)</p> <ul style="list-style-type: none"> • How risk assessments should take place in practice and why it's important in the protection of individuals (including themselves) S13 K14 • How they safeguard confidential information and maintain patient records (S17, S18, S19, K15, K16, K18) • How they obtain informed consent as part of their role (S15, K12) • How they have worked collaboratively to provide a safe effective service to patients and how they have worked with other professionals/agencies in practice (S14 S20 S21, K11 K17, K19, K20) | <p>environment for themselves and others (S12 K13)</p> <ul style="list-style-type: none"> • Approaches to risk assessment strategies and how they have employed these (S13, K14) • The impact of poor record keeping and what corrective action they would take to improve standards (S17, S18, S19, K15, K16, K18) • What the challenges are in obtaining informed consent and what actions they would undertake if they couldn't obtain consent (S15, K12) • Why collaborative working helps to ensure safe effective services to patients and what the impact of non-collaboration has on a patient's outcomes (S14, S20, S21, K11, K17, K19, K20) |
|--|--|--|---|

Observation of practice and follow up question and answer Grading Criteria**Assessment Method: Observation of practice and follow up question and answer prosthetic orthotic assessment**

| Domain from the standard being assessed utilising this method | Fail | Pass The apprentice is able to: | Distinction The apprentice is able to: |
|---|---|--|---|
| Prosthetic/ Orthotic Care | The apprentice has failed to meet the pass criteria | <ul style="list-style-type: none"> • Demonstrate how a device is manufactured from a prescription using the correct technology and materials; underpinned by basic knowledge of the structure and function of the human body (S1, S5, K1, K2, K4, K5) • Demonstrate how the device is fit for use and compare it for accuracy against the given prescription (S2, S3, S5) • Demonstrate how they make patients/carers aware of routine care of the prescribed Prosthesis/Orthosis and to understand when the item needs to be returned for advanced maintenance (S4) <p>Explain how the manufacturing of devices works and how to maintain the machinery and is able to explain how they would identify and report problems. (S7, S8, K3, K6)</p> | <ul style="list-style-type: none"> • Articulate the rationale for their decision making in the demonstration of how a device is manufactured and can suggest a range of possible delivery options (S1, S5, K2, K4, K5) • Demonstrate what actions are required to be undertaken if a device does not meet a patient's need and what they would do to make the necessary changes to minimise risk to patients (S2, S3, S5) • Explain how a range of tests can be used to perform advanced maintenance to keep the item safe for use & can explain this to patients (S4, S7, S8, K3, K6) • Show how national standards and regular audit can help to improve standards of health and Safety with a particular focus on maintaining a safe environment for staff and patients (S7, S8, K3, K6) |

Re-sit and re-take information

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 the only the part they failed.

Any assessment method re-sit or re-take must be taken during the maximum EPA period, otherwise the entire EPA must be taken again, unless in the opinion of the EPAO exceptional circumstances apply outside the control of the apprentice or their employer.

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

Where any assessment method has to be 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.

End-point assessment organisations

Employers must choose an independent EPAO approved to deliver the EPA for this apprenticeship from the Education & Skills Funding Agency's (ESFA) Register of End-Point Assessment Organisations (RoEPAO).

Requirements for independent assessors

EPAOs must appoint:

- independent assessors to assess and grade the prosthetic and orthotic skills assessment and professional discussion
- quality assurance staff to undertake moderation of EPA

Independent assessors must meet the following requirements:

- be independent of the apprentice, their employer and training provider(s) i.e. there must be no conflict of interest
- be technicians who have worked in a supervisory role within a Prosthetic and Orthotic job for a minimum of five years or are Registered Prosthetist/ Orthotists working in a senior or supervisory role
- undertake a minimum of two-days' EPAO standardisation training per year

Independent assessors must hold an assessor qualification. They must be independent of the apprentice, their employer and training provider i.e. there must be no conflict of interest.

Internal quality assurance

Internal quality assurance refers to the requirements that EPAOs must have in place to ensure consistent, reliable, accurate and valid assessment decisions. EPAOs for this EPA must undertake the following:

- appoint independent assessors that meet the requirements as detailed in this plan
- provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading
- have quality assurance systems and procedures that support fair, reliable and consistent assessment across organisation and over time
- operate regular standardisation events that enable assessors to attend a minimum of two events per year
- operate moderation of assessment activity and decisions, through examination of documentation and observation of activity, with a minimum of 20% of each independent assessors' assessments moderated
- conform to the requirements of the EQA provider

Assessment tools and materials

EPAOs must produce assessment tools and supporting materials for the EPA that follow best assessment practice, as follows:

- Question and specification banks for prosthetic and orthotic observation of practice and follow up question and answer assessment
- Question bank for professional discussion
- Documentation for recording assessment evidence and decisions
- Guidance for independent assessors on conducting and grading the EPA
- Guidance for apprentices, their employers and training providers on the EPA

External quality assurance

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External quality assurance for this apprenticeship standard will be undertaken by the Institute for Apprenticeships.

Implementation

Affordability

The following factors should ensure the EPA is affordable:

- All assessment methods have the potential to take place at employers' premises, reducing the need for capital investment and room hire, and minimising the time the apprentice is away from the workplace
- The prosthetic and orthotic observation in the workplace, reducing down time of the apprentice

Volumes

It is anticipated that there will be 25 starts per year.

Appendix 1: Knowledge Skills and Behaviours of the apprenticeship Standard

| | Values | Behaviours |
|---------------------------|--|---|
| | V1. Professionalism, skilled, caring, compassionate, conscientious, honest & trustworthy. | B1. You will treat people with dignity, respecting individual's diversity, beliefs, culture, needs, values, privacy & preferences. You will show respect & empathy for those with whom you work with, have the courage to challenge areas of concern & work to evidence based best practice/consensus. You will also be adaptable, reflective, reliable & consistent, show discretion, resilience, self-awareness & demonstrate leadership. You will be focussed on problem solving & demonstrate tenacity. |
| | Skills: | Knowledge: |
| Prosthetic/ Orthotic Care | <p>S1.Manufacture the prescribed device using manual and computer aided technologies and correct materials to agreed timescales</p> <p>S2. Ensure the devise is fit for use and purpose and complies with the manufacturer/department/company quality assurance and legal requirements</p> <p>S3.Test that the device is working correctly and modify if required</p> <p>S4. Support patient/carer to maintain the devise</p> <p>S5.Check that the completed device meet the prescription provided</p> <p>S6. Act within the limits of your competence and authority</p> <p>S7. Use and maintain manufacturing machinery to carry out your duties</p> <p>S8. Identify problems with the manufacturing machinery and report any defects</p> | <p>K1.The basic structure and function of the human body and function of the musculoskeletal system relevant to prosthetics and orthotics and required for the role.</p> <p>K2. The structure and properties of materials and their appropriate application to prosthetic or orthotic hardware and clinical practice; a range of modelling techniques; how to measure and adjust a model</p> <p>K3 How manufacturing machinery and equipment works and how to maintain it to a high standard at all times, when and where to report faults; quality control and how it applies in prosthetic/orthotic design and delivery</p> <p>K4. How to and where to correctly record the relevant manufacturing details in line with your department/company's policies your responsibilities and duties; the limits of your competence and authority why it is important to work in ways agreed by your employer</p> <p>K5. The patient, measurement, material and component information required to manufacture the device that has been requested</p> <p>K6. Computer aided design technology relevant to the manufacturing of related devices.</p> |
| Person Centred Care | S9.Provide on-going support to Prosthetists/ Orthotists and in some instances patients\ carers | K7. Equality, diversity and inclusion legislation; how to treat people with dignity and respect; understanding how disability affects and influences prosthetic and orthotic management; the requirement to adapt practice to meet the needs of individuals dealing with |

| | | |
|-----------------------|---|---|
| | <p>S10. Apply a range of communication interventions and interpersonal skills to support individuals receiving prosthetic/orthotic care.</p> <p>S.11 Utilise IT systems to read and record information, and where appropriate using IT systems as part of the manufacturing process.</p> | <p>emotional needs due to a range of circumstances and experiences</p> <p>K8. How to recognise how communication affects engagement of an individual and to be able to apply a range of communication techniques; taking into account an individual's emotional state, age, capacity, learning and physical ability, culture, ethnicity and religious beliefs</p> <p>K9. Ways to assist the communication requirements of individuals; including recognising the need to use interpersonal skills to encourage the active participation of individuals</p> <p>K10. the limits of prosthetic/orthotic technical practice in the context of individual care and when to refer back to the Prosthetist/ Orthotist</p> |
| Governance and Safety | <p>S12. Work safely and within competency level</p> <p>S13. Undertake risk assessments using a range of techniques</p> <p>S14. Work collaboratively in partnership with other team members, individuals and carers</p> <p>S15. Within your scope of practice (e.g. repairs / maintenance) obtain informed consent for prosthetic/orthotic care</p> <p>S16. Safeguard individuals, including vulnerable adults and children</p> <p>S17. Safeguard confidential information relating to individuals at all times</p> <p>S18. Maintain records that are fit for purpose and process them accordingly.</p> <p>S19. Comply with local and national standards regarding reporting of medical device failures and incidents</p> <p>S20. Work as part of a team, seek help and guidance when you are not sure, escalate concerns in a timely manner to the correct person</p> <p>S21. Support or supervise colleagues as required, delegate well- defined tasks appropriately</p> | <p>K11. How to work collaboratively with those who provide services to individuals; recognising the limits of prosthetic/orthotic technical practice and when to seek advice</p> <p>K12. What is meant by informed consent and how to secure it across the age range and in line with cognitive ability; the importance of providing individuals with information that allows them to make informed decisions and safely manage their condition and supplied devices</p> <p>K13. What is meant by duty of care; medical ethics; safeguarding of adults and children and how it applies to your role;</p> <p>K14. Health and safety legislation, policies and procedures; ways to assess risks that ensures safety and security of the prescribed device</p> <p>K15. How to maintain confidentiality and apply the principles of information governance</p> <p>K16. The importance of managing records and data in accordance with legislation, protocols and best practice.</p> <p>K17. The need to participate in training, supervision and mentoring</p> <p>K18. Quality guidelines and device design principles that apply to individual devices; incident reporting and escalation</p> <p>K19. The need to keep skills and knowledge up to date and the importance of career-long learning; the</p> |

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| | | <p>value of reflection on practice and the need to record the outcome of such reflections</p> <p>K20. Models and theories of support and supervision and how to safely delegate in line with legal and professional guidelines</p> |
|--|--|--|