An exploration of practice-based learning in prosthetics and orthotics in the United Kingdom

Contents

Glossary of terms

- **Allied Health Professions (AHP)**
  A group of fourteen health professions regulated by the Health and Care Professions Council (HCPC).

- **British Association of Prosthetists and Orthotists (BAPO)**
  The professional body representing prosthetists and orthotists in the UK.

- **Blended Learning**
  Blended learning approaches use multiple methods to deliver learning by combining face-to-face interactions with online, digital activities.

- **Collaborative Learning in Practice (CLiP)**
  A model in practice-based learning emphasises coaching and peer-to-peer learning, where students take the lead in their practice, supported by registered staff coaches and mentors, fostering a collaborative and supportive environment.

- **Common Placement Assessment Form (CPAF)**
  A standardised assessment form used to assess physiotherapy learners in practice-based learning settings.

- **Contracted Service Provision**
  Services provided by external prosthetic and orthotic companies, procured by the NHS to provide services to the NHS.

- **Educator Capacity**
  The number of qualified educators available to provide training and support to learners.

- **The four pillars of practice**
  The four pillars of practice are fundamental concepts used across allied health professions, including Prosthetics and Orthotics (P&O), to ensure a well-rounded and comprehensive approach to professional learning, development and practice. PBL activity during pre-registration education should cover all four pillars.

- **Clinical and Technical Practice Pillar**
  This pillar focuses on the direct patient care and technical skills required to provide high-quality, safe, and effective services. It includes the knowledge, skills, and behaviours necessary to perform clinical tasks and procedures, as well as the technical aspects of prosthetic and orthotic device design, fitting, and maintenance.

- **Education and Facilitating Learning Pillar**
  This pillar emphasises the importance of education and continuous learning for both the practitioner and others. It involves teaching, mentoring, and facilitating learning opportunities for students, peers, and other healthcare professionals. It also includes self-development and reflective practice to ensure ongoing professional growth.

- **Leadership and Management Pillar**
  This pillar covers the skills and behaviours needed to lead and manage within the healthcare environment. It includes strategic planning, team leadership, resource management, and the ability to influence and drive change. Effective leadership ensures that services are delivered efficiently, and that the workforce is motivated and supported.

- **Evidence, Research, and Development Pillar**
  This pillar focuses on the use of evidence-based practice and the contribution to research and development within the profession. It involves sourcing, evaluating, and applying high-quality evidence to inform clinical practice, as well as engaging in research and audit activities to advance the field. This pillar ensures that practice is grounded in the latest scientific knowledge and innovations.

- **Freedom of Information (FOI)**
  A request for information held by public authorities, used in this context to gather data about workforce capacity.

- **Health and Care Professions Council (HCPC)**
  The regulatory body for health and care professions in the UK, responsible for setting standards for education and training.

- **Higher Education Institution (HEI)**
  Universities (and sometimes colleges) that provide higher education and training programmes.

- **NHS Education for Scotland (NES)**
  The education and training body for NHS Scotland.

- **NHS England (NHSE)**
  The body responsible for overseeing the NHS in England.

- **In-house Service Provision**
  Prosthetic and orthotic services provided by the NHS for the NHS.

- **PBL Capacity**
  The available resources, such as workforce size, physical space, and facilities, to provide practice-based learning (PBL) activities.

- **PBL Demand**
  The requests or needs within the system to deliver PBL activities, often influenced by the number of learners and programme requirements

- **Peer Enhanced E-learning Placements (PEEP)**
  Learning placements that use peer support and e-learning to enhance the practice-based learning experience.

- **Practice-Based Learning (PBL)**
  Learning that takes place in a practical, real-world setting, such as within an NHS P&O department or a company providing P&O services.

- **Professional, Statutory, and Regulatory Bodies (PSRBs)**
  Organisations that set standards, regulate professions, and/or have statutory authority over specific professions, often engaging with higher education institutions to accredit, approve, or recognise programmes leading to professional qualifications.

- **Standards of Proficiency (SOPs)**
  The standards set by the HCPC that professionals must meet to be registered and to lawfully practice.

- **Standards of Education and Training (SETs)**
  The standards set by the HCPC that education programmes must meet to deliver approved education and training that prepares learners for professional practice.

- **Scottish Credit and Qualifications Framework (SCQF)**
  A national framework that provides a way to compare and understand Scottish qualifications.

- **Technology Enabled Care Services (TECS)**
  Services that use technology to provide care, such as telehealth, telecare, and telemedicine.

- **Virtual Simulation Placements (VSPs)**
  Remote learning experiences that use virtual simulations to provide practice-based learning opportunities.

- **VR (Virtual Reality)**
  Technology that creates a simulated environment for learners to engage in practice-based learning activities.

- **Whole Time Equivalent (WTE)**
  A unit that indicates the workload of an employed person or PBL hours required, in a way that makes workloads comparable across various contexts.

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Funding

Foreword

The Prosthetics and Orthotics (P&O) profession in the United Kingdom is at a pivotal juncture. As the smallest of the Allied Health Professions (AHPs), and with complex commissioning arrangements across the sector, it faces unique challenges and opportunities. This document provides a comprehensive analysis of the current state of practice-based learning (PBL) within the P&O profession, highlighting the critical need for growth and innovation to meet future demands.

Our investigation reveals that while there is ample workforce capacity for the system to accommodate learners, significant gaps remain within PBL, particularly in prosthetics. The NHS long-term workforce plan underscores the necessity of expanding both the number of PBL opportunities and the educator workforce to ensure a sustainable future for the profession. This project, commissioned by NHS England and delivered by BAPO, represents a concerted effort to address these challenges.

Through extensive data collection, stakeholder engagement, and the development of standardised assessment principles, we have established a baseline understanding of P&O PBL capacity. This report not only identifies the current limitations but also explores potential solutions, including the integration of technology and innovative learning models.

We extend our gratitude to all contributors, including education providers, NHS services, contracted services, and various stakeholder groups, whose insights and cooperation have been invaluable. Their collective efforts have laid the groundwork for a more coordinated and effective approach to PBL in P&O.

As we move forward, it is imperative that we continue to build on these findings, fostering a well-rounded, skilled, and adaptable workforce capable of meeting the evolving needs of the healthcare sector.

Dr Nicky Eddison
Consultant Orthotist, BAPO Chair

Executive Summary

This document provides a comprehensive analysis of the current state of practice-based learning (PBL) within the Prosthetics and Orthotics (P&O) profession in the United Kingdom. As the smallest of the Allied Health Professions (AHPs), combined with the complex commissioning arrangements across the private and public sectors not experienced by most other AHPs, P&O faces unique challenges in expanding its workforce and sustaining the education and training pipeline to meet future demand.

Currently, the procurement of P&O services does not formally recognise the contributions made by contracted companies offering PBL within contracting and procurement processes. As a result, PBL provision relies on informal 'goodwill' arrangements between education providers and contracted service providers. Discussion around the contracting of services is out of scope for this project, however, it is important to recognise the potentially precarious position of PBL provision for the sector when the future sustainability of the profession relies on it.

The availability of NHS placements is influenced by multiple factors and is further complicated by the contracting arrangements for prosthetic and orthotic services, particularly in England.

Key Findings

1 **Workforce and Capacity:** Workforce figures show that the PBL demand as a proportion of the workforce size is small (27%) and thus, the PBL demand should be comfortably met by the P&O workforce. The fact that it is not indicates other barriers are present.

2 **Allocation of placements:** The four universities offering a P&O pre-registration programme don't currently work together to consider the allocation of PBL placements. The use of an allocation system will provide equitable utilisation of the available capacity. In addition, the universities and PBL providers need to come together to collectively agree the sequencing of PBL activities to maximise capacity and minimise the overlap of learners requiring PBL allocation at any given time.

3 **Education and Training:** Increasing educator capacity is essential. The number of practice educators with appropriate training is low, creating a barrier for PBL expansion and risking a poor experience for the educator and the learner. To enable the educator capacity to increase, it is essential that the educator workforce is a key consideration in integrated workforce and service planning. Currently, the procurement of P&O services does not formally recognise the contributions made by contracted companies offering PBL within contracting and procurement processes. As a result, PBL provision relies on informal 'goodwill' arrangements between education providers and contracted service providers.

4 **Supervision models:** P&O PBL educators tend to offer a 1-1 model of supervision. To optimise the learner experience and increase capacity, a move away from the traditional one learner and one educator model to a model that includes peer-to-peer support, 2:1 or 3:1 learner-to-supervision ratio with two or three learners and one educator, coaching models of supervision, and near peer supervision is required.

5 **Standardised Assessment:** All four universities utilise their own unique assessment document and criteria for learners undergoing PBL. A standardised unified assessment would streamline the process, save time, and distribute the workload among practice educators, enhancing consistency, and efficiency and allow the assessment to be adapted to any length of placement.

6 **Technology:** P&O PBL doesn't currently utilise any form of simulation. The PBL landscape is changing, there are examples of our allied health colleagues utilising simulation technology within their PBL whilst continuing to meet professional, statutory, and regulatory requirements. P&O needs to consider how it can diversify its PBL activities and incorporate emerging technologies.

Conclusion

Addressing PBL capacity challenges is crucial for the P&O profession's sustainability and growth. By implementing the recommendations and diversifying PBL delivery, the profession will benefit in several ways, including but not limited to:

• Enhancing the learner PBL experience
• Assurance that PBL capacity meets demand
• Delivery of comprehensive PBL to prepare learners for P&O careers
• Meet professional, statutory, and regulatory body expectations
• Strengthen the sector's ability to handle increased learner numbers
• Provide necessary PBL hours to meet demand
• Develop a well-rounded, skilled, and adaptable future workforce
• Enable HEI programmes to increase learner numbers enabling the P&O profession to expand to meet demand.

This is the first time the issues facing PBL in prosthetics and orthotics has been explored in depth. It is essential to seize the moment and build on this work, taking forward the recommendations within this report.

List of Tables and Figures

1 Introduction

1.1   In the United Kingdom (UK) there are four education providers delivering a range of approved pre-registration education programmes. Each of these provides education and training in prosthetics and orthotics, leading to a dual qualification. Each of these programmes meets the eligibility requirements to allow graduates to apply to register with the Health and Care Professions Council (HCPC) as a prosthetist/orthotist.

The following institutions have programmes in the UK:
- The University of Derby runs the only pre registration level 6 prosthetic and orthotic (P&O) apprenticeship programme in the UK
- The University of Salford runs a pre registration level 6 three-year degree programme
- Keele University runs a two-year accelerated level 7 pre-registration degree programme
- The University of Strathclyde runs a level 6 (SCQF Level 7) pre-registration four-year degree programme.

1.2   For several years, P&O education providers have raised concerns about the scarcity of PBL opportunities for prosthetic and orthotic learners. This is particularly the case for prosthetic placements.

1.3   NHS England, the Office for Students (OfS), the British Association of Prosthetists and Orthotists (BAPO), and the P&O higher education institutions (HEIs) have previously committed to finding solutions for the shortfall in meeting the demand for P&O PBL. However, despite these commendable efforts, the problem persists.

1.4   As part of a wider suite of projects, known as the Professional Bodies Education Reform Commission (PBERC), NHS England commissioned and funded BAPO to review the practice-based learning provision for the P&O profession.

Several elements of work were executed within the scope of this project and used to inform this report. These include:
- Exploring and establishing P&O PBL capacity
- Establishing an evidence base to support current capacity estimates
- Working with education providers to identify the volume of PBL learning required to meet programme needs and demand
- Exploring the sequencing of PBL activity to establish where in the PBL cycle the peaks and troughs on demand lie
- Exploring the use of simulation within curricula to support PBL activity
- Working with P&O education providers to develop a set of principles for standardising assessment of PBL activity (This is a related but separate commissioned project, completed by the author at Vectis Health Care Solutions, and is part of the PBERC).

1.5   To meet the project brief it has been necessary to collect significant information from a variety of sources. We would like to thank all who have contributed their time responding and participating in various engagement activities.

The capacity assessment could not have happened without the cooperation of the P&O contracted services and the NHS in-house service providers across the UK.

There are also several P&O stakeholder groups to thank for their contribution to this project. These include:
- The BAPO Training and Education Network (TEN), and the subgroup that formed for the duration of this project representing the four education providers offering P&O pre registration programmes
- The British Healthcare Trades Association (BHTA)
- The National Orthotic Managers Group (NOMAG)
- The Prosthetic Managers Group (PMG)
- The Scottish Clinical Orthotic Leads Group (SCOL)
- The BAPO Educator Network that formed as this project became established.

2 Context

2.1 The P&O Profession in the UK is the smallest of the AHP professions. Registrant data published by the HCPC indicates the total number of prosthetists and orthotists on the register, as of January 2025, was 1,243. However, workforce mapping data indicates that not all registrants are employed in the sector.[1]

2.2 The growth of the profession is necessary to meet future demand. The NHS long term workforce plan[2] has ambitious targets to increase AHP apprenticeships as a route of entry into the profession. By 2031/32, the number of apprenticeships as a % of annual intake is set to rise to 35% compared to 6% currently. The overall proportion of P&O entrants joining the workforce via an apprenticeship route by 2031/32 being between 25 and 50%. This contrasts with HCPC registrant data that shows minimal growth in registrant numbers. Over the last decade, between 2015 and 2025 there has been a net increase in registrants on the HCPC register of 238.[3]

2.3 Recently published data providing a first-time understanding of the prosthetic and orthotic workforce[4] has determined that to maintain the suggested ratios of P&O staff to population size, P&O employment levels in the UK would need to increase by between 142 to 477 to reach the levels recommended by the World Health Organisation (WHO).

2.4 The education and training of prosthetists and orthotists leads to a dual practice qualification and requires learners to complete education and training in both prosthetic and orthotic practice to be eligible for HCPC registration.

2.5 Despite there being fewer prosthetists (27% of the UK practicing registrants)[5] compared to orthotists (66% of the UK practicing registrants with the remaining 7% being dual practicing registrants), learners complete an equal volume of PBL activity in each specialism during their training, usually in the form of block placements. Given this, it is inevitable that capacity pressures are more likely for prosthetics than orthotics. This position is reflected anecdotally by HEI programme leads and educators. Adding to the challenge, the University of Strathclyde's P&O programme is unable to secure all their learners' PBL requirements within Scotland, so they are forced to seek placements in England to fulfil their programme requirements. This places further stress on the system for English learners needing PBL hours in England.

2.6 To achieve the anticipated workforce growth forecast, it is essential to ensure that there is sufficient capacity and capability within the P&O educator workforce to support the education and training of increased numbers of prosthetic and orthotic learners.

P&O is facing a critical shortage of registered professionals. There are significant challenges across several areas of the profession, including but not limited to,
- Increasing the learner pipeline at levels 3 and 6
- Practice-based learning provision
- Practice educator capability
- Preceptorship for new graduates as well as pre-preceptorship for learners
- Career development
- Improving retention of the workforce
- Reducing attrition of the workforce

1 Eddison N, et al. N. Profile of the UK prosthetic and orthotic workforce and mapping of the workforce for the 21st century. The British Association of Prosthetists and Orthotists. 2023 https://www.bapo.com/wp-content/uploads/2023/11/BAPO_Workforce_Mapping_Document_FINAL-TO-BE-RELEASED-6.11.23-compressed.pdf

2 https://www.england.nhs.uk/publication/nhs-long-term-workforce-plan/

3 https://www.hcpc-uk.org/resources/data/2019/registrant-snapshot/

4 Eddison N, Healy A, Leone E, Jackson C, Pluckrose B, Chockalingam N. The UK prosthetic and orthotic workforce: current status and implications for the future. Hum Resour Health. 2024 Jan 8;22(1):3. doi: 10.1186/s12960-023-00882-w. PMID: 38191415; PMCID: PMC10773099

5 Eddison, N., Healy, A., Leone, E. et al. The UK prosthetic and orthotic workforce: current status and implications for the future. Hum Resour Health 22, 3 (2024). https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-023-00882-w

2.7 To help alleviate some of these pressures and to aid in increasing the number of learners in prosthetics and orthotics, additional education programs have been introduced in recent years, including the introduction of a degree apprenticeship route provided at the University of Derby and a level 7 pre-registration MSc route at Keele University. Both these courses have the potential to improve the pipeline into the profession and sustain the workforce.

2.8 Since the introduction of new education providers, there has been an inevitable increase in the demand for prosthetic and orthotic placements. Technically, the degree apprenticeship route should not heighten the demand for practice-based learning sites. However, because some apprenticeship employers do not offer both prosthetic and orthotic services, employing an apprentice under the current dual registration training model has placed an increased burden on practice learning opportunities for the non-dominant service. This is one of the unintended consequences of introducing the apprenticeship route and is unique to prosthetics and orthotics.

2.9 The availability of NHS placements is influenced by multiple factors and is further complicated by the contracting arrangements for prosthetic and orthotic services in England.

2.10 Currently, the procurement of P&O services does not formally recognise the contributions made by contracted companies offering PBL within contracting and procurement processes. As a result, PBL provision relies on informal 'goodwill' arrangements between education providers and contracted service providers. Discussion around the contracting of services is out of scope for this project, however, it is important to recognise the potentially precarious position of PBL provision for the sector when the future sustainability of the profession relies on it[6].

2.11 Understanding capacity is an important factor when establishing where shortfalls might be identified in a system's ability to meet demand. Demand in this context, refers to the requests made of and within the system to deliver PBL activity.

2.12 The capacity is the resource available to provide the requested practice-based learning activity. For there to be a sustainable PBL pipeline to support the required growth of the workforce, and to support the training and education needs of learners, capacity must be known. There has never been a capacity assessment for PBL activity for P&O therefore it is unsurprising that the challenges outlined persist.

2.13 Capacity, however, is only one part of the challenge. Practice-based learning is recognised in the NHS Long Term Plan[7] as a crucial investment in the future NHS and social care workforce. The plan envisions 21st-century care requiring a well-rounded, skilled, and adaptable AHP workforce.

2.14 PBL continues to evolve, with learners engaging in activities that extend beyond patient-facing clinical experiences. The increasing diversity of these activities aims to adequately prepare the future workforce[8]. To build diverse career paths for graduate prosthetists and orthotists (POs), learners need early exposure to a variety of PBL opportunities encompassing the four pillars of practice: clinical and technical, education and facilitating learning, leadership and management, and evidence, research, and development. (BAPO has adapted the wording of the clinical pillar to reflect the technical focus of P&O clinical practice)[9].

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6   To note: there is another BAPO commissioned project funded by NHS England examining commissioning and contracting, with a focus on training and education. Please contact BAPO directly for information on the outputs of this project.

7   https://www.longtermplan.nhs.uk/publication/nhs-long-term-plan/

8   https://www.hee.nhs.uk/our-work/allied-health-professions/developing-practice-based-learning-mental-health-learning-disability-settings-allied-health/what-constitutes

9   https://www.ahpf.org.uk/files/BAPO-Careers-Development-Framework-for-Prosthetists-and-Orthotists.pdf

2.15 The three university-based pre-registration education programmes (as opposed to the apprenticeship route) offer a mix of long and short block placements, requiring learners to cover both prosthetic and orthotic learning. Each programme varies in its placement structure. For instance, at Keele University learners attend shorter, more frequent placements. In contrast, both the University of Salford and the University of Strathclyde require learners to complete two long block placements, each lasting between 13 and 17 weeks.

2.16 The phasing of placements also varies. At the University of Strathclyde, each learner receives a placement in one discipline (either Prosthetic or Orthotic) in their third year of study and a placement in the opposite discipline in their fourth year. The University of Salford, in contrast, provide learners with both prosthetic and orthotic placements in their third (and final) year of study.

2.17 If apprentices are not employed by a dual service provider, they will require 20 weeks of PBL activity practice placements in their non-dominant discipline. For example, if a learner is based in an orthotics-only centre, the university must arrange for 20 weeks of PBL in a prosthetic centre away from the apprentice's place of employment.

2.18 Each of the non-apprenticeship programmes requires approximately 1000 hours of PBL activity. Currently, this does not include any simulated learning. Although each HEI includes some learning across the four pillars of practice, the predominant content is centred on the clinical and technical pillar.

2.19 All programmes offer annual educator training and updates. Each provider also familiarises educators with the HEI approach to PBL assessment. Each programme has different criteria for assessment both in terms of what is assessed and the formative and summative elements of assessment.

2.20 The HCPC is responsible for monitoring and approval of AHP education programs within the UK. The standards of education and training (SETs) reflect what education and training programmes must do to prepare learners for professional practice. As a regulator, the HCPC works with education providers to ensure that the training programs meet the Standards and produce qualified professionals who are fit to practice.

2.21 Working with education providers the HCPC ensures that training programs meet and continue to meet their standards. All education providers are required to embed the standards of proficiency (SOPs) within their programmes. The Standards are reviewed regularly (the latest update for the SOPs came into force in September 2023) to ensure they are contemporary and relevant. Education providers must ensure that learners meet the threshold SOPs, for them to become eligible to apply to the register.

2.22 The HCPC recognises that there are challenges with the availability of PBL across all professions, in all nations, and cites a range of impacting factors such as funding, staffing, pressures on services, and workloads etc. However, it also recognises that to support growth, innovation is needed to find solutions to capacity challenges.[10]

2.23 In the last five years, technology in PBL has exploded, introducing a plethora of new learning experiences that contribute to the diversification of practice-based learning. For example, it is not uncommon for learners to have remote learning experiences using Technology Enabled Care Services (TECS)[11,12] such as telehealth, telecare, and telemedicine, or virtual simulation placements (VSPs), Peer Enhanced E-learning Placements (PEEP) and Virtual Reality (VR). These opportunities provide alternative ways to achieve practice placement hours while continuing to meet regulatory requirements.[13]

10   https://www.hcpc-uk.org/education/insight-from-our-assessments/capacity-of-practice-based-learning/
11   https://www.e-lfh.org.uk/technology-enabled-care-services-practice-learning-toolkit-now-available/
12   https://learninghub.nhs.uk/Resource/2350/Item
13   https://www.hcpc-uk.org/education/insight-from-our-assessments/capacity-of-practice-based-learning/

2.24   Service providers across all AHP professional groups have a limited number of clinical facilities and therefore the physical capacity to offer PBL activity is limited by this. However, capacity is not just about physical space. With an innovative spirit, it is possible to increase capacity without needing more physical space.

2.25   The recently published AHP Educator Career Development Framework[14], along with the NHS England AHP Education Workforce Capability and Career Framework[15], acknowledges that every AHP has an obligation to support the learning and development of others.

2.26   The AHP Educator Career Framework emphasises that AHPs responsible for education should achieve excellence and effectiveness in their practice. They should be inclusive, utilise an evidence-based approach, and ensure that AHP education is sustainable across a broad range of settings, supporting the four pillars of professional practice.

2.27   With the complexity of P&O PBL evolving and the number of educators in practice set to increase, there is a stronger need than ever to streamline the assessment process for learners and practice educators across educational programs in the UK. There are good practice examples where AHP professional bodies have developed and moved toward a standardised unified assessment approach. For instance, the Chartered Society of Physiotherapy (CSP) has been using a single assessment document for some years. The Common Placement Assessment Form (CPAF) is a standardised assessment form that can be used to assess all physiotherapy learners in PBL settings, regardless of the university they attend.

2.28   While the aspirations of this project have not extended to developing a common assessment tool, it has committed to developing principles for standardising the assessment of PBL learning.

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14   https://www.councilofdeans.org.uk/ahp-framework/
15   https://www.hee.nhs.uk/our-work/allied-health-professions/allied-health-professional-education-workforce-capability-career-framework

3 Methodology

3.1 Several steps were taken to gather the necessary data needed to support the elements of the project described in 1.4. Table 1 outlines the stakeholder engagement undertaken throughout this project. Table 2 outlines the method used to gather data and the data obtained.

3.1.1 Table 1: Stakeholder engagement

Stakeholder group	Engagement type
BAPO Education and Training Network (TEN)	Online attendance x1 meeting
TEN subgroup (HEI education providers)	Group set up and Chair x 7 engagement and collaboration sessions
'Work out loud'[16] group (TEN subgroup plus additional members)	Synchronous and asynchronous engagement via MS Teams and Padlet*.
British Healthcare Trade Association (BHTA)	Attended and presented at scheduled online P&O section meetings x2
National Orthotic Managers Group (NOMAG)	Attended and presented at scheduled meetings x3 (1 in person and 2 online)
National Prosthetic Managers Group (PMG)	Attend and present at scheduled online meeting x1
Scottish Clinical Orthotic Leads Group (ScOL)	Liaise with the chairperson of the group for forward cascading of key information.

One-to-one meetings with the following individuals:

- Clare Carson: Practice Education Lead (Prosthetics & Orthotics) NHS Education for Scotland
- Nikki Munro: Orthotic Manager NHS NHSGGC
- Steve Secombe: Chief Clinical Officer Blatchford.
- Dominic Hannett: Director at Opcare
- Christine McMonagle: Senior Teaching Fellow National Centre for Prosthetics and Orthotic, University of Strathclyde
- Mark McAloon: Programme Director MSc Prosthetics and Orthotics University of Keele
- Robert Fulford: Head of Prosthetics and Orthotics University of Salford.
- Fran Quinn-Thomas Director of AHP Placements, University of Keele.
- Juliet Borwell Clinical Education & Practice Learning Senior Specialist, Workforce, Training and Education Directorate, NHS England South East

3.1.2 Table 2: Data gathered

Data gathered	Method of collection
Capacity data for in-house prosthetic and orthotic services	Freedom of Information (FOI) requests to Trusts and Health Boards in the UK
Capacity data for contracted companies providing prosthetic and orthotic services to the UK	An online questionnaire circulated via BHTA
Demand data for practice-based learning places from HEIs providing prosthetic and orthotic services	Online questionnaire
Iterative development of principles to support the standardisation of PBL assessment for P&O	Padlet feedback and MS Teams meetings

16   Ikigai, LLC (2023). Working Out Loud. [Online] Available from: https://www.workingoutloud.com/

*   A Padlet is a virtual bulletin board for collating and sharing information

3.2   In-house and contracted services data collection

To collect data about P&O PBL activity within NHS Trusts and Health Boards an FOI was distributed during July/August 2024. Similarly, a questionnaire was compiled and distributed to contracted companies providing P&O services. The questions covered the following areas:

- P&O Services provided at the Trust/ Health Board
- The range of P&O staff roles
- The number of WTE registered prosthetists orthotists employed at the Trust
- The number of support staff
- The operational details of the P&O department
- The number of learners supported
- Barriers to supporting learners
- Plans for increasing the number of learners supported

3.3   Education provider data collection

HEIs were sent a questionnaire to complete in August 2024. The questions covered the following areas.

- The sequencing of PBL activity across the academic year
- The length of the PBL blocks and the total number of weeks learners are on placement
- Placement models currently in use
- Coverage of PBL activity
- Educator training provided by the HEI

Developing PBL principles for standardising assessment

3.4   A project to develop principles to standardise PBL assessment was commissioned by BAPO and funded by NHS England. The outputs from the project form an integral part of the PBERC project. The author, who led and completed the work under Vectis Health Care Solutions, executed it in tandem with the elements described in 3.1 and 3.2. The interconnectedness of these workstreams deeply enmeshes them. Therefore, the findings from across the projects are reported.

3.5   The stakeholder groups described in 1.4 participated in developing principles for the standardising of PBL assessments. Initially, the project underwent general stakeholder airing, with the TEN subgroup, NOMAG, PMG, and BHTA. Next, a Padlet was set up to gather general feedback from key stakeholder groups. The purpose of this early engagement was to gauge support for the project and to understand the sector's perceived challenges, pitfalls, and potential successes. From here the main project commenced and an initial set of principles was drafted based on the early feedback.

3.6   Further asynchronous engagement was conducted using the 'work out loud' approach across four rounds of iterative development over a six-week period, utilising Padlet to collect feedback. The draft principles were then circulated to stakeholder groups for final rating. A simple star rating was used to gauge agreement, where 1 star indicated the least agreement, and 5 stars indicated the most agreement.

4 Findings

4.1 This section presents the findings from each of the four elements described in section 1.4. It begins by exploring PBL capacity from various perspectives, including contracted services, in-house NHS services, and education providers.

Exploring PBL capacity - Contracted Services

4.2 An online form was utilised for the questionnaire. This was distributed to 26 companies, known to provide prosthetic and orthotic services. Thirteen companies responded. Two of the respondents confirmed that they did not directly provide clinical services or employ clinical staff. Of those remaining, ten confirmed that they provided clinical services to the NHS.

The following tables and figures provide details of questionnaire responses.

4.2.1 Table 3: Breakdown of respondents by discipline

Do you directly employ (i.e., directly pay the salary) HCPC registered prosthetists and orthotists?		
	Number (n=13)	% of total (n=13)
Yes, we employ prosthetists	0	0
Yes, we employ orthotists	6	46
Yes, we employ prosthetists and orthotists	5	38
No, we do not employ clinical staff	2	15

4.2.2 Table 4: NHS service providers

Do you provide a contracted service to the NHS?		
	Number (n=13)	% of total (n=13)
Yes, we provide a contracted orthotic service to the NHS	7	54
Yes, we provide a contracted prosthetic and orthotic service to the NHS	3	23
No, we do not provide a contracted service to the NHS	3	23

4.2.3   **Table 5: P&O staff groups (other than registered POs)**

Do you directly employ any other prosthetic and orthotic staff?		
	Groups employed by number of employers (n=13)	% of total (n=13)
Apprentices	6	25
Patient facing support workers and technicians	6	25
Technicians (manufacturing)	10	42
We don't employ these staffing groups	2	8

4.2.4   **Table 6: Whole-time equivalent (WTE) Staff employed**

Please confirm how many whole-time equivalent (WTE) HCPC registered prosthetists and orthotists make up your workforce (n=10)		
	Total WTE	Total % of WTE (n=431.94)
Prosthetists	158.97	36.8
Orthotists	241.18	55.79
Dual practice (in addition to the above)	31.8	7.3
Total combined	431.95	

4.2.5   **Table 7: Headcount of HCPC registered POs**

Please confirm how many people make up your whole time equivalent (WTE) HCPC registered prosthetists and orthotists. (n=10)		
	Headcount by discipline	% of headcount by discipline
Prosthetists	171	36.7
Orthotists	261	56.1
Dual practice	33	7
Total combined	465	

4.2.6   **Table 8: Number of learners supported**

What is the current number of learners supported by the service per week (WTE)?		
	Total WTE per discipline	% of total (n=40) per discipline
Orthotic	26.5	63.75
Prosthetic support*	13.5	33.75

*   This figure is likely to be an underrepresentation of the total support for prosthetic learners as some responses have not specified prosthetic support.
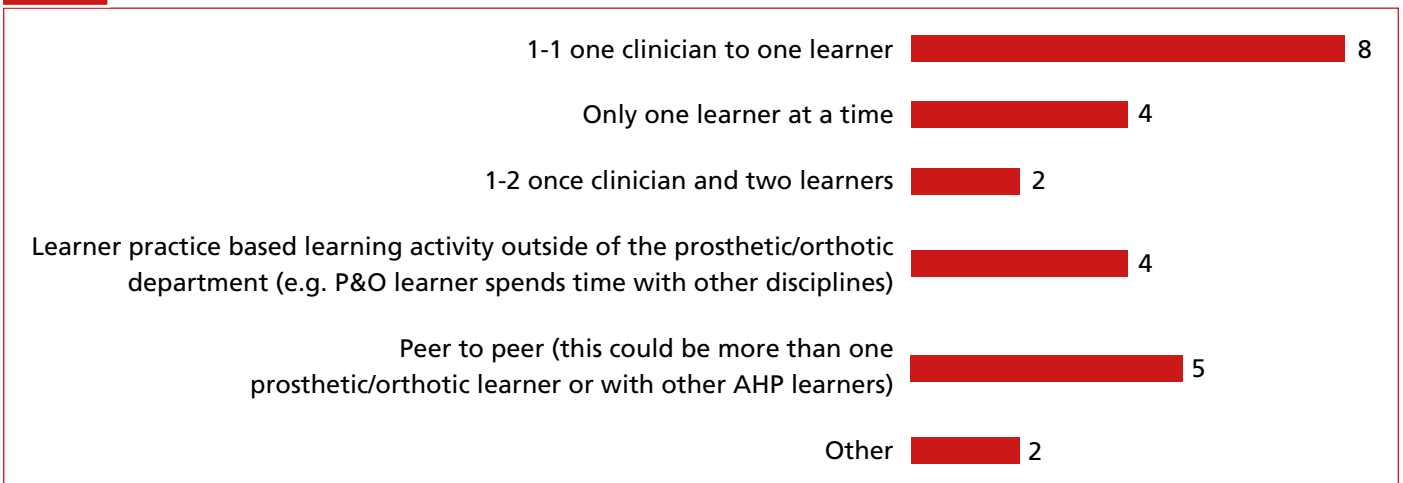
4.2.7 **Figure 1: Does your service have any of the following which may be a barrier to learner support capacity? (N=13)**
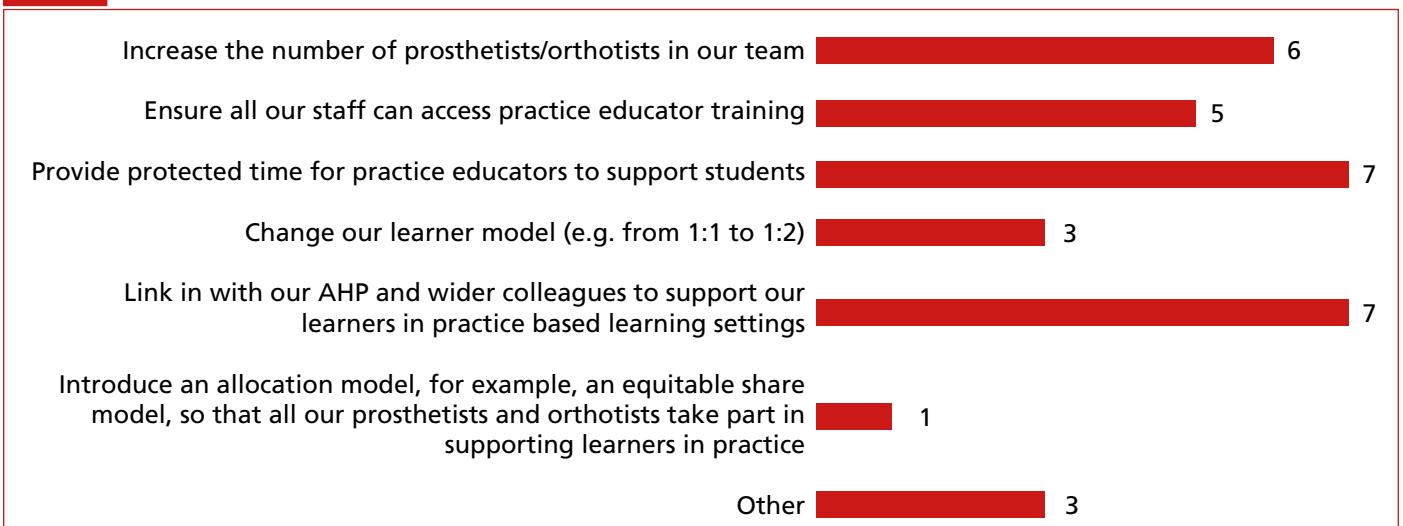
Category	Value
Staff vacancies - unable to recruit	3
Staff vacancies - currently recruiting	4
No trained practice educators	1
No access to practice educator training	1
High sickness absence	1
High workload	3
Other	5
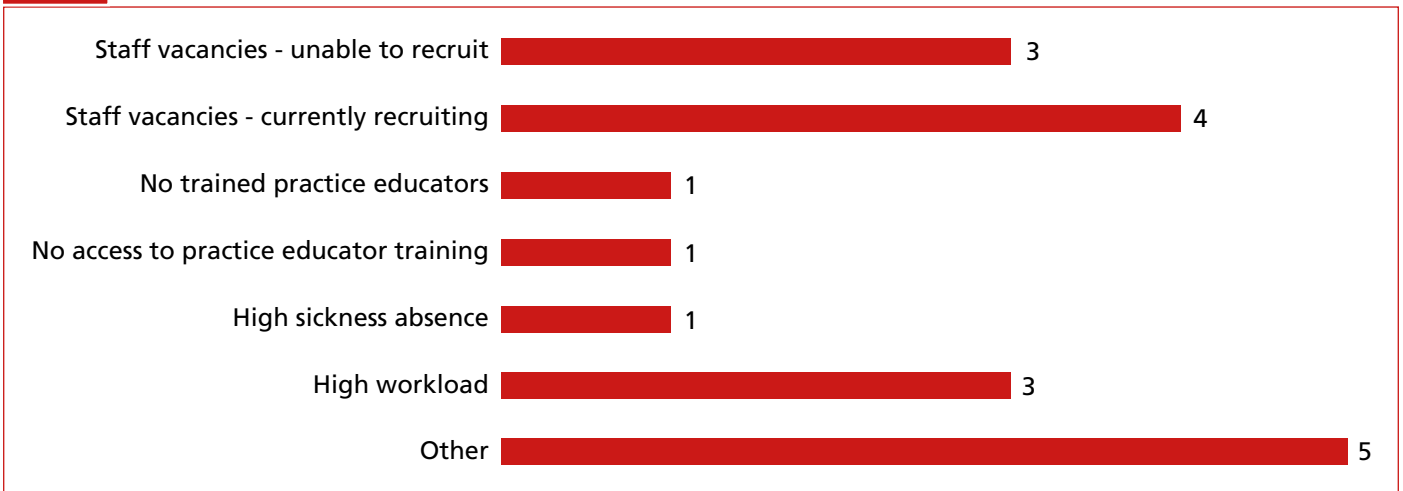
4.2.8 **Figure 2: Which model of practice-based learning do you offer? (N=13)**

Category	Value
1-1 one clinician to one learner	8
Only one learner at a time	4
1-2 once clinician and two learners	2
Learner practice based learning activity outside of the prosthetic/orthotic department (e.g. P&O learner spends time with other disciplines)	4
Peer to peer (this could be more than one prosthetic/orthotic learner or with other AHP learners)	5
Other	2

4.2.9 **Figure 3: What are your organisational plans to sustain or improve the ability of the service you are contracted to supply to support learners in practice-based learning settings? (N=13)**

Category	Value
Increase the number of prosthetists/orthotists in our team	6
Ensure all our staff can access practice educator training	5
Provide protected time for practice educators to support students	7
Change our learner model (e.g. from 1:1 to 1:2)	3
Link in with our AHP and wider colleagues to support our learners in practice based learning settings	7
Introduce an allocation model, for example, an equitable share model, so that all our prosthetists and orthotists take part in supporting learners in practice	1
Other	3

Exploring PBL Capacity - In-house NHS services

4.3   Freedom of Information requests were sent to 207 Trusts and Health Boards across the UK. From those sent, 180 acknowledgements were received. The total number of returned and processed responses was 159.

Out of the 180 acknowledgements 18 were returned emails, where the address was not recognised or could not be delivered. Three responses declined to respond based on the very small size of the service, and concerns over the potential lack of anonymity.

4.3.1   **Table 9: Shows the breakdown of responses (N=159)**

Service	Number (N=159)	% total
Contracted out service	64	40
In-house orthotic service	28	17.6
In-house prosthetic service	4	2.5
In-house prosthetic and orthotic service	10	6.2
No service provided	34	21.3
Unknown	19	11.9

4.3.2   **Table 10: Breakdown of employed P&Os**

Do you directly employ (i.e., directly pay the salary) HCPC registered prosthetists and orthotists? (N=40)		
	Number employed (n=42)	% of Total
Orthotics	28	17.6
Prosthetics	4	2.5
Prosthetics and Orthotics	10	6.2

4.3.3   **Table 11: P&O staff groups (other than registered POs)**

Do you directly employ any other prosthetic and orthotic staff?		
	Staff groups employed by number of employers (n=40)	% of total (n=40)
Apprentices	6	15
Patient facing support workers and technicians	8	20
Technicians (manufacturing)	13	32
We don't employ these staffing groups	13	32
Other (administration roles)	4	10
Unknown	2	5

4.3.4   **Table 12: Whole-time equivalent (WTE) Staff employed**

| How many HCPC registered prosthetists and orthotists are employed in your service (WTE)		
		% total (n=208)
Prosthetics	49.54	23.81
Orthotists	135.5	65.1
Dual practice	23	11

4.3.5   **Table 13: Headcount making up the WTE workforce in 4.3.4**

How many HCPC registered prosthetists and orthotists make up the WTE?		
		% total (n=271)
Prosthetists	63	23
Orthotists	182	67.1
Dual practice	26	9.59

4.3.6   **Table 14: Learner support**

What is the current number of learners supported by the service (WTE)?		
	Total WTE per discipline	% total per discipline(n=23.51)
Orthotic support	13.33	56.6
Prosthetic support	10.18	43.3

4.3.7   **Figure 4: Does your service have any of the following which may be a barrier to learner support capacity?**
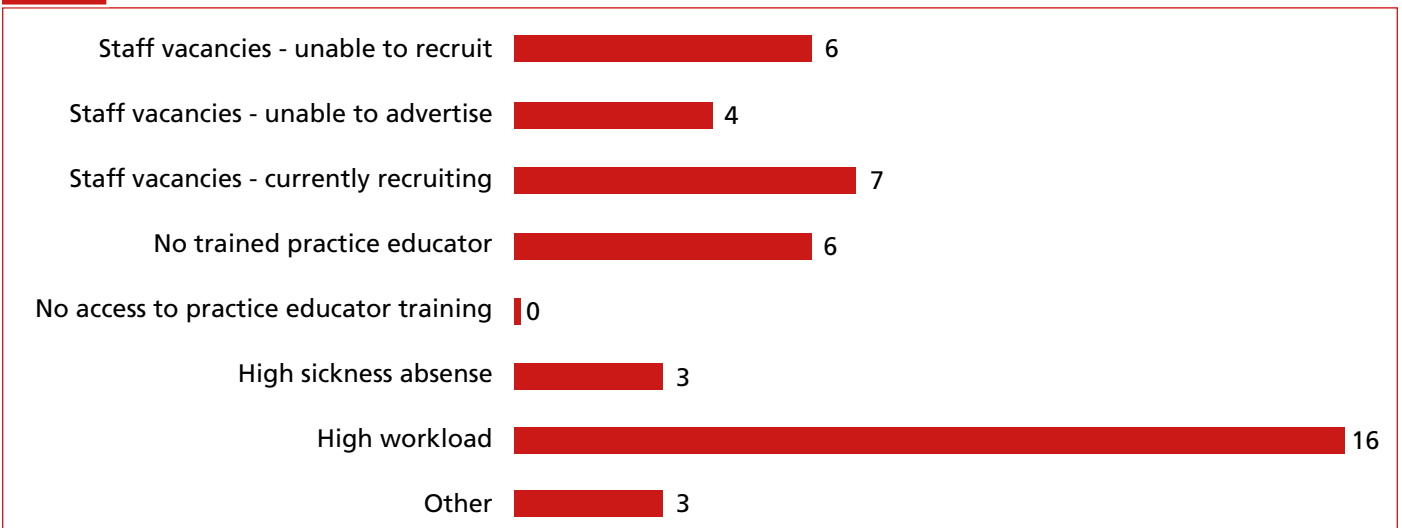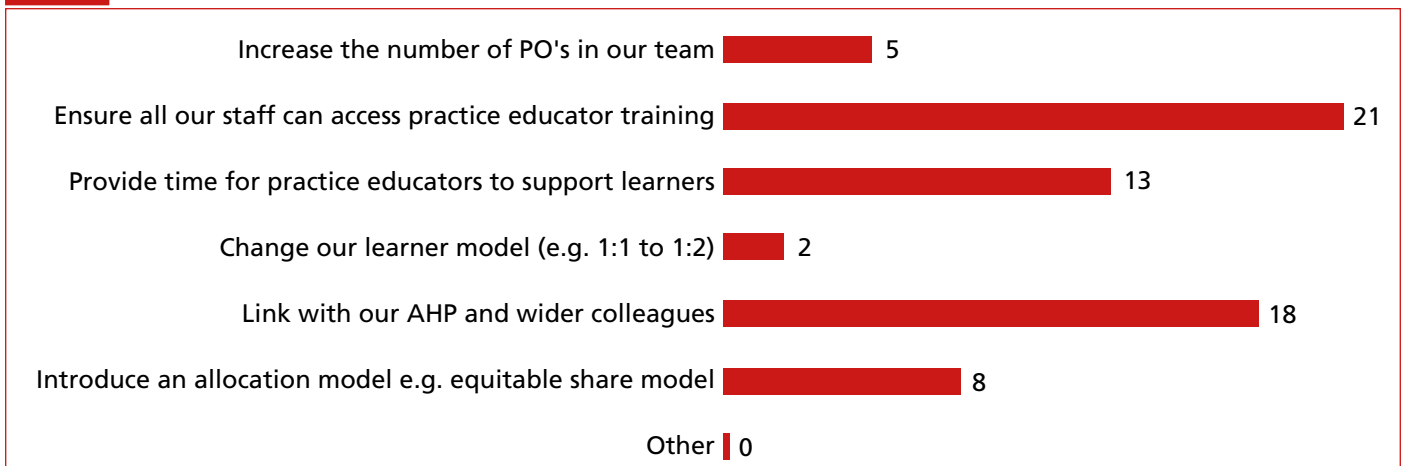

4.3.8   **Figure 5: Which model of practice-based learning do you offer?**
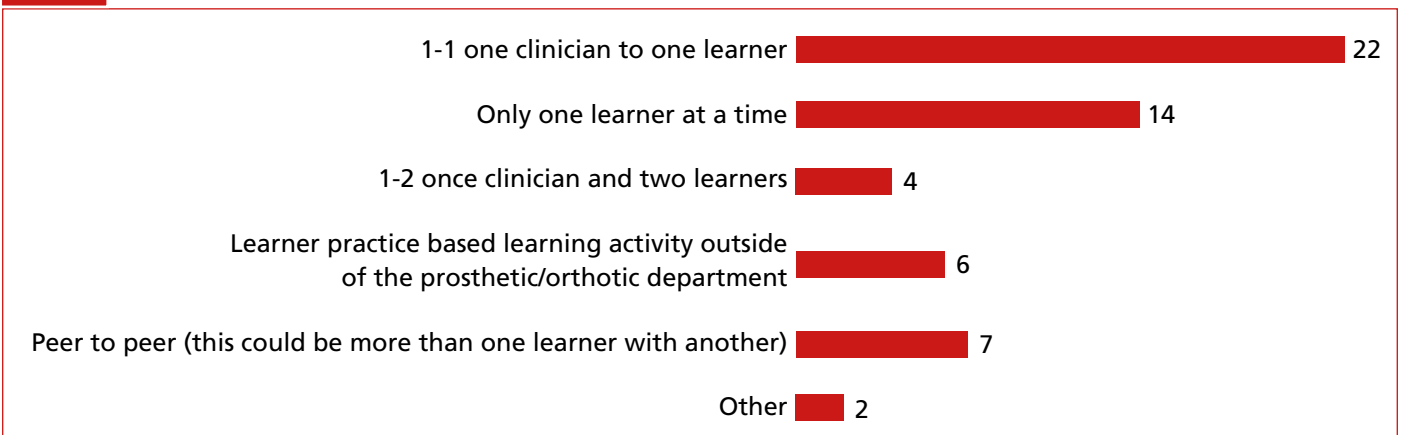
4.3.9 **Figure 6: What are your organisational plans to sustain or improve the ability of the service you are contracted to supply to support learners in practice-based learning settings?**

Response	Count
Increase the number of PO's in our team	5
Ensure all our staff can access practice educator training	21
Provide time for practice educators to support learners	13
Change our learner model (e.g. 1:1 to 1:2)	2
Link with our AHP and wider colleagues	18
Introduce an allocation model e.g. equitable share model	8
Other	0

4.4 **Working with P&O education providers to develop principles for standardising PBL assessment across the UK**

Online and hybrid deep dive workshops were held. The following summaries reflect the analysis of the data captured on Padlet. This feedback contributed to the creation of the draft principles which were developed over four rounds of stakeholder iterative development. Each question was posted as a bulletin, and stakeholder groups were asked to respond. In some cases, the responses were collected synchronously during planned stakeholder meetings, while other groups responded asynchronously. Everyone contributed to the same Padlet.

What benefit would come of having a P&O PBL single assessment?

- **Consistency and Efficiency:** Using the same process across all centres under each HEI would streamline operations, save time, and spread the workload among practice educators.
- **Integration and Simplification:** Combining processes from multiple HEIs into one system would reduce complexity and make it easier for educators to support learners.
- **Standardisation:** Consistent assessment methods across HEIs would create a level playing field, making it easier for educators to support learners and for new educators to enter the role.

- **Placement Management:** Consistency in paperwork and standards would benefit practice educators, reduce confusion, and potentially increase the number of practice placements available.
- **Quality and Authenticity:** Ensuring that assessments are authentic to the skills and attributes of prosthetics and orthotics, maintaining high standards without dilution.

If you knew that a PBL single assessment approach would work for P&O - describe what good would look like

- **Clinical Focus:** Emphasise clinical-based learning, with other pillars as postgraduate learning to support graduates.
- **User-Friendly Platform:** Ensure the platform is fluid, easy to navigate, and accessible from any device. It should have clear sections for all learning pillars and allow visibility of other placement reports for each learner.
- **Support and Feedback:** Include a practice educator advice/support section and a feedback portal for continuous improvement. Enable multiple users to access and comment on reports.
- **Standardisation:** Match processes and standardise teaching across learning centres and Trusts. Implement a single-point assessment to evaluate progress against set standards.

- **Learner Engagement:** Involve learners in the process and discuss whether assessments should be qualitative or quantitative. Agree on standard placement input and output, with a high minimum requirement and options for learners to exceed.
- **Authenticity and Quality:** Ensure assessments are authentic to the skills and attributes of prosthetics and orthotics, maintaining high standards without dilution.
- **Comprehensive Exposure:** Provide a robust PBL assessment that certifies competence for independent practice. Include exposure to peripheral competencies and prepare learners for the end-point assessment post placement.

Where do you see the biggest challenges lie in achieving a PBL single assessment process?
- **Placement Capacity:** If the process is too onerous, it may affect the ability of placements to accommodate learners.
- **HEI Collaboration:** Collaboration among HEIs is crucial, but there are concerns about proprietary ownership agendas and resentment between stakeholders. Agreement across stakeholders is needed.
- **Report Updates:** Concerns about how quickly reports become outdated, the frequency of updates, and whether learners are being "chased" to complete work.
- **Data Storage:** Questions about cloud-based storage, hosting, ownership, GDPR compliance, and whether the learning portal will follow learners into preceptorship and CPD.
- **Training Compliance:** All providers need to invest time in training to ensure compliance.
- **Reducing Competition:** Reducing competition among HEIs to foster collaboration.
- **Stakeholder Agreement:** Agreement from all stakeholders on what is required for the profession.
- **GDPR Concerns:** Potential GDPR issues with online storage.
- **Competency Agreement:** Agreement on competencies between practice educators and HEIs, and concerns about generic outcomes not being clinically specific.

- **Placement Models:** Drive to increase placement capacity through different models, which might not work for prosthetics and orthotics.
- **Standard Agreement:** Agreement on what the standard should be.
- **Competency Achievement:** Whether apprentices or MSc learners can achieve the same competencies during placements as BSc learners, considering placement length and main discipline.

What has happened previously that prevented the adoption of a single assessment process?
- **Disjointed Collaboration:** There is a lack of HEIs working together and a lack of collaborative engagement.
- **Standard Agreement:** There is a lack of agreement on standards set across HEIs. There should be a consensus to produce high-standard clinicians fit for practice.
- **Separate Modules:** Prosthetics and Orthotics modules are separate and need to be documented individually. Each HEI has its own documents and either chooses or is required to use them.

If we take a fresh look at this topic - what could we do differently?
- **Technology and Engagement:** Engagement should be easier with the use of technology.
- **Support Network for Practice Educators:** Traditional university support has been lacking. There is a need for financial backing for Practice Educator time and learner support.
- **Agreed Buy-In:** All centres need to agree on the project timeline and completion. The project should be advertised and promoted in all forums.
- **Preceptorship Support:** Consider how the project supports and leads into preceptorship. It should reduce the impact of interpretation and improve existing paperwork for all HEIs to drive quality in the profession.
- **Recognition and Supervision:** Increased recognition via the PE framework is needed. There should be PE supervision across all services to develop clinicians and learners and drive up standards across the workforce.
- **Financial Parity:** Remove any inclusion of financial implications of PBL to create parity.

- **Survey for Feedback:** Use a survey to gather anonymous opinions from PEs on the paperwork they have used. Documents should be under constant review, building on existing iterations rather than starting from nothing.
- **Accessibility:** Avoid outputs being BAPO centric. Ensure that outputs and supplementary resources are accessible to all, considering that only 25-30% of the registered workforce are BAPO members.

From a P&O manager/ leader perspective, why does this matter?
- **Retention and Recruitment:** The project promotes career development opportunities, improves retention, and enhances recruitment.
- **Graduate Output:** Better output of graduates with improved retention and consistent basic knowledge. It would be beneficial to link this to HCPC registration for overseas graduates.

- **Team Confidence:** All teams need to be on board and confident in the system. It should make the process easier, reduce time input, foster a sense of teamwork, and make the educator's job less onerous.
- **Cross-Trust Working:** Include cross-Trust working to improve experience.
- **Ease of Use:** The system should be easy to use, reduce demand on practice educators, and minimise confusion around interpretation. It should produce quality candidates for the workforce.
- **Degree Certification:** Degree certification should achieve a set level, increase recruitment, improve retention, and align with pillars to fulfil leadership and research elements.

4.5 Following the initial Deep Dive and Padlet contributions, a smaller group was assembled (n=21), known as the 'work out loud' group, to continue with a further four rounds of iterative development. Once completed, the developed principles were circulated to the BAPO Educator Network, the BAPO TEN subgroup and the work-out-loud group for rating (n=81). The following section details the developed principles and a summary of the rating process.

PRINCIPLE 1

A standardised assessment for prosthetics and orthotics (P&O) practice-based learning (PBL) will be underpinned and supported by the HCPC Standards of Proficiency (SOPs), existing BAPO documentation and other relevant national publications.

Supporting documentation may include, but not be limited to:
- The collaboratively produced BAPO Practice-based learning framework for pre-registration prosthetic and orthotic learners[17]
- The BAPO curriculum guidance document for pre-registration education of prosthetists and orthotists (due to be updated and republished in Spring 2025 and will reference practice-based learning and pre preceptorship)
- P&O specific publications.[18]
- The HCPC (2023) Standards of Proficiency for prosthetists and orthotists[19]
- The Council of Deans for Health[20] AHP Educator Career Framework,
- The NHS England Education Quality Framework (2024)[21]
- The NES The AHP Practice Education Development Framework[22]
- The AHP principles of practice-based learning[23]

PRINCIPLE 2

The development of a standardised assessment for P&O PBL will adopt a four nations approach, referencing and, where appropriate, adoption of content from other AHP professional bodies and national NHS resources and will align with HCPC regulatory guidance.

Collaboration and consultation will be sought from across the four nations. The outputs developed will support practice-based learning across diverse geographical settings.

17 https://www.bapo.com/wp-content/uploads/2024/02/BAPO-National-PO-Practice-Based-Learning-Framework_compressed.pdf
18 Eddison, N., Healy, A., Leone, E. et al. The UK prosthetic and orthotic workforce: Current status and implications for the future. Hum Resour Health 22, 3 (2024). https://doi.org/10.1186/s12960-023-00882-w
19 https://www.hcpc-uk.org/standards/standards-of-proficiency/prosthetists-orthotists/
20 https://www.councilofdeans.org.uk/wp-content/uploads/2023/04/Allied-Health-Professions-Educator-Framework.pdf
21 https://www.hee.nhs.uk/our-work/quality/education-quality-strategy-framework
22 https://newsletters.nes.digital/the-ahp-practice-education-development-frameworkthe-ahp-practice-education-development-framework/
23 https://www.bapo.com/wp-content/uploads/2023/10/Re-launch-October-2023-compressed.pdf

PRINCIPLE 3

The development of a standardised assessment for prosthetics and orthotics PBL will be co-produced with all UK P&O HEI providers. These providers will work in tandem with practice educators from both the NHS and contracted services to support learners from UK HEIs.

A wide range of stakeholder engagement will be undertaken to inform the development of a standardised assessment for practice-based learning. Engagement will include but not be limited to:
- National Orthotic Managers Group (NOMAG)
- Prosthetic Managers Group (PMG)
- Scottish Clinical Orthotic Leads (ScOL)
- Scottish PBL virtual community
- British Health Care Trade Association (BHTA)
- BAPO Training and Education Network (TEN)
- Other appropriate BAPO committees and networks such as the Education Committee and the newly established Practice Educator Network.
- Practice and academic based educators
- Prosthetic and orthotic learners
- New graduates
- Apprenticeship Networks
- BAPO Equality, Diversity, and Inclusion Group (EDI group)

PRINCIPLE 4

A P&O Practice-based learning standardised assessment and associated documentation will support the diversity of P&O learners engaged in practice-based learning activities. Supporting documentation will align with HCPC regulatory guidance[24].

In developing a P&O Practice-based learning standardised assessment, the documentation and resources will support the diversity of learners engaged in practice-based learning activities[25].

Practice-based learning activities must be flexible and adaptable to support the diversity of learners' needs who are engaged in practice-based learning activities.

When considering diversity, factors such as protected characteristics and intersectionality, and how these can affect a person's experiences and learning, must be reflected upon. For example, when embarking on a clinical placement, a learner with one or more protected characteristics may face some unique barriers that other learners do not experience.

If a learner discloses a disability and/or health condition, the practice placement must make reasonable adjustments, in line with the Equality Act (2010), to ensure that the Disabled learner is not disadvantaged in accessing learning and assessment.

PRINCIPLE 5

A P&O Practice-based learning standardised assessment will be sufficiently flexible to accommodate different configurations of pre-registration education programmes.

There are a small number of education providers for prosthetics and orthotics in the UK, however, all the pre-registration courses vary in length and type. They include pre-registration apprenticeships, pre-registration MSc, and pre-registration undergraduate 3- and 4-year degree programmes.

A standardised assessment for practice-based learning will therefore need to be robust enough to meet threshold standards (e.g., HCPC Standards of Education and Training (SET 5), and the Standards of Proficiency), but flexible enough to meet individual HEI assessment regulations.

24   https://www.hcpc-uk.org/globalassets/resources/guidance/health-disability-and-becoming-a-health-and-care-professional.pdf?v=638607392360000000
25   https://www.bapo.com/resources/support-resources/

PRINCIPLE 6

Practice-based learning for prosthetic and orthotic learners will use a collaboratively agreed, standardised assessment process. This will encompass continuous formative and summative assessments, along with documented feedback, provided at regular intervals within a PBL environment.

Engaging stakeholders throughout the process is crucial for determining the best assessment method for P&O practice-based learning. A standardised summative assessment must be adaptable to align with the university's preferred grading criteria. However, it will be the responsibility of the HEI to modify the standardised assessment to meet institutional requirements, rather than expecting practice educators to adopt a different assessment approach.

For instance, if the standardised assessment is pass/fail and the HEI requires a numerical mark, the HEI will develop its own mechanism, such as a marking rubric, to award the mark.

PRINCIPLE 7

The assessed content of practice-based learning for prosthetic and orthotic learners will take place across varied settings, encompassing all four pillars of practice.

When training to become a prosthetist or orthotist, learners benefit from engaging in clinical activity across the four pillars of practice. A standardised assessment will support learning across the four pillars of practice: clinical practice, leadership, facilitation of learning, and evidence, research, and development. Activity must be aligned with, and underpinned by, regulatory standards, such as the HCPC Standards or proficiency[26], nationally adopted guidance such as the AHP principles of practice-based learning[27], as well the BAPO practice-based learning framework for pre-registration prosthetic and orthotic learners[28].

4.6 Principles rating

A Microsoft form was designed to capture the evaluation rating of the principles. A simple star rating was used to gauge agreement, where 1 star indicated the least agreement, and 5 stars indicated the most agreement.

4.6.1   Table 15: Principle rating

Principle	1	2	3	4	5	6	7
Average Rating (n=23)	4.73	4.61	4.70	**4.65**	4.43	4.45	4.61

4.7 Workforce capacity and demand

Using the data provided in 4.1 – 4.11, and the information received from the four UK P&O education providers, the following section details the current PBL demand, and the workforce capacity needed to deliver it. This example is based on a total number of 90 learners across three programmes and five learners needing 20 weeks of non-dominant discipline for the apprenticeship route.

4.7.1   Table 16: P&O demand for PBL activity for 1 cohort of learners across four programmes

	Over course duration across 3 programmes	Total WTE
Prosthetic	1500 hrs x 110 learners	84.61
Orthotic	1500 hrs x 110 learners	84.61
	Apprenticeships	
Apprenticeship	750 hrs x 5 learners (notional 5 learners for non-dominant discipline)	1.92
Total	Both disciplines all programmes, over course duration for 1 cohort of learners	171.15

26   https://www.hcpc-uk.org/standards/standards-of-proficiency/prosthetists-orthotists/

27   https://www.bapo.com/wp-content/uploads/2023/10/Re-launch-October-2023-compressed.pdf

28   https://www.bapo.com/wp-content/uploads/2024/02/BAPO-National-PO-Practice-Based-Learning-Framework_compressed.pdf

4.7.2 **Table 17: Workforce capacity by number of WTE employed in each discipline across in-house and contracted services**

Capacity based on in-house and contracted services (WTE) by discipline		
	Total WTE (n=55)	% of PBL demand
Prosthetics	208.51	40
Orthotists	376.68	22
Dual practice	54.8	-
Total	639.99	27

4.7.3 **Table 18: Learners currently being supported by in-house and contracted services**

Learners currently being supported (WTE)	Total WTE (n=55)
Orthotic support	39.83
Prosthetic support	23.68
Learners supported (total number across P&O)	63.59

5 Discussion

5.1 This section discusses the project findings and their contribution to understanding the PBL challenges in prosthetics and orthotics. It also provides an opportunity to explore potential solutions for improving the landscape. There has never been a national capacity assessment or a 'blueprint' to conduct one in P&O. However, this project has provided a unique opportunity to establish a baseline understanding of P&O PBL capacity and offer the profession its first assessment of PBL capacity.

There are three areas to consider:
- PBL capacity
- PBL demand
- Solutions to better coordinate the prosthetic and orthotic PBL landscape across the UK.

5.2 PBL Capacity

5.3 Expanding practice-based learning is a national priority across all AHPs. For prosthetics and orthotics, this urgency cannot be overstated. Growth within the sector is vital for professional sustainability. The available data is clear that there needs to be significant growth in registrant numbers to meet service demand. Challenges around PBL capacity in allied health are not new. The NHS long term workforce plan[29] recognises that to meet the future workforce needs of the NHS, there needs to be significant growth in capacity both in terms of the number of practice-based learning opportunities but also, and arguably more importantly, a significant growth in the educator workforce capacity. This topic is expanded further in the educator workforce strategy where strategic priority 1 states that the educator workforce must be a key consideration in integrated workforce and service planning[30].

5.4 Notwithstanding the urgency, practice-based learning capacity is complex. The concept of capacity is often misunderstood. In its simplest form, capacity refers to the available resources at any given time. In principle, the potential for practice learning capacity exists in all P&O services. However, there are multiple factors to consider when making a capacity assessment[31].

5.5 The first factor to consider is the suitability of the opportunity. For PBL learning to be effectively utilised by both the learner and provider, it must satisfy key indicators. For instance, for the learner and education provider, the experience must meet certain minimum standards, such as meeting learning outcomes or meeting regulatory requirements.[32] For the PBL provider organisation, there needs to be a meaningful purpose for providing the experience.

Meaningful purpose from an organisational perspective may include factors such as:
- providing a potential pipeline to future staff recruitment
- providing career development opportunities for staff who wish to develop as educators.

5.6 In addition, there are wider professional responsibilities to help long-term sustainability – such as those highlighted in the AHP principles of practice-based learning[33] adopted by ten professional bodies including BAPO. For example, principle 2 states that PBL takes place across all areas, pillars, and levels of practice. This principle encourages more placements, with different models across more areas of practice. Principle 4 relates to flexibility in models of supervision and delivery. It highlights sharing the load of supervision and introducing a variety of delivery models, citing peer learning as being one of the most established models.

29   https://www.england.nhs.uk/long-read/nhs-long-term-workforce-plan-2/#2-train-growing-the-workforce

30   https://www.england.nhs.uk/long-read/educator-workforce-strategy/#priority-7-embedding-evolving-and-innovative-models-of-education

31   https://www.britishjournalofnursing.com/content/comment/addressing-the-practice-learning-and-placement-capacity-conundrum

32   https://www.hcpc-uk.org/standards/standards-relevant-to-education-and-training/

33   https://www.unison.org.uk/content/uploads/2023/11/AHP-Principles-of-Practice-based-Learning_Digital_Oct23_Final.pdf

5.7 The second factor to consider is the size of the service, including the workforce, physical space, how many hours a day a service runs and on which days of the week. It is also important to consider the nuances of the workforce. For example, this project has looked at whole-time equivalent staffing in determining workforce capacity. However, if the nature of the service is highly specialised for example, this may not satisfy the first factor described in 5.5 around suitability of the opportunity.

5.8 Defining capacity by the size of the workforce alone is limiting, and hence this project has comprehensively examined capacity considering many additional factors, including but not limited to, estate facilities, availability of practice educators, training for practice educators, self-identified barriers to providing PBL activity and models of delivery and supervision, including the assessment of PBL.

5.9 The third factor to consider is the capability of the educator workforce. Growing PBL capacity is contingent on there being a suitably trained educator workforce to support growth. Evolving capacity must include evolving educator capacity within the workforce. The educator workforce strategy[34] sets out actions that are intended to pave the way to sufficient capacity, quality, and capability of educators. Seven priority areas are identified as follows:
- **Priority 1:** the educator workforce must be a key consideration in integrated workforce and service planning
- **Priority 2:** establishing and protecting educator time and resources to support the implementation of Integrated Care Board workforce plans
- **Priority 3:** introducing career frameworks for educators of all professions
- **Priority 4:** supporting the development and well-being of educators
- **Priority 5:** supporting improvement through defined standards and principles

- **Priority 6:** promoting the NHS aspirations to improve equality, diversity, and inclusion
- **Priority 7:** embedding evolving and innovative models of education

5.10 The strategy is clear that delivering the future workforce is dependent on having a sustainable and high-quality educator workforce to support education and training, both in practice and in academic settings.

5.11 The final factor is the model of practice-based learning. Within this concept, there are multiple points to consider. The model of PBL is key to increasing capacity. PBL models have 3 elements that can vary. These relate to the type of activity, the method of delivery, and supervision.

5.12 During the COVID pandemic, new approaches to PBL were needed quickly to ensure that learners in healthcare disciplines could complete the mandatory PBL hours while still providing learners with a quality learning experience. New ways of delivering PBL activity started to emerge, such as simulation, immersive technologies, telehealth etc.

5.13 Technology had a large part to play in the transition. Simulated and blended learning models have become an integral part of PBL since COVID. NHS England has invested in developing resources following the publication of a national strategic vision of simulation in health and care.[35]

5.14 Guidance on using simulation to support PBL can be found on the HCPC web pages[36]. Responding to the announcement in 2021 that education providers can access funding for PBL activity delivered via simulation, the HCPC has responded by stating that simulation activity must be compliant with regulatory standards, primarily the Standards for Education and Training (SETs) and Standards of Proficiency (SOPs)[37].

34   https://www.england.nhs.uk/long-read/educator-workforce-strategy/#priority-7-embedding-evolving-and-innovative-models-of-education

35   https://www.hee.nhs.uk/sites/default/files/documents/National%20Strategic%20Vision%20of%20Sim%20in%20Health%20and%20Care.pdf

36   https://www.hcpc-uk.org/education-providers/updates/2021/using-simulation-to-support-practice-based-learning/

37   https://www.hcpc-uk.org/standards/

Key points include but are not limited to:

- The learning and teaching methods used must be appropriate to the effective delivery of learning outcomes.
- The assessment strategy and design must ensure that those who successfully complete a programme meet the standards of proficiency for the relevant part of the register.
- Assessment throughout the programme must ensure that learners demonstrate they are able to meet the expectations of professional behaviour, including the standards of conduct, performance, and ethics.
- Assessments must also provide an objective, fair, and reliable measure of learners' progression and achievement.

5.15   Alongside these innovative advances, the way in which learners and apprentices learn has evolved. Evidence suggests that moving away from a traditional one-to-one model of learning and supervision can maximise learning potential. For example, peer-to-peer and near-peer supervision, where learners support each other in PBL settings with 2-3 learners together with one practice educator providing supervision, are popular alternatives. The CLiP model[38] is the most used model supporting peer, near-peer and coaching models of learning. There is a growing body of evidence supporting this method of learning[39,40]. With an increasing number of apprenticeships in health care – the opportunity for blended peer learning has never been greater.

5.16   **P&O capacity assessment**

5.17   The information collected for this project has comprehensively assessed capacity across multiple criteria, as described above. Starting with workforce capacity, the data submitted

> *"Even if the learner growth (demand) were to double, it would still represent a proportionately low volume of the WTE P&O workforce, in terms of WTE support required."*

> *"Despite these potential limitations, the data tells us that workforce capacity is not at the heart of the PBL challenges reported by education providers."*

via the survey and FOI collection demonstrate enough capacity in the workforce, in terms of WTE, to comfortably accommodate PBL activity. In addition, the data has likely underestimated the full WTE capacity due to the low return rate, which can be considered a limitation. Specifically, the data presented in this report represents a 50% return rate from the companies' survey and a 76% return rate for the FOI. Data collected from HEIs about the demand for PBL was converted to WTE for ease of comparison. Despite these potential limitations, the data tells us that workforce capacity is not at the heart of the PBL challenges reported by education providers.

5.18   The number of learners currently supported in the system based on the data set described in this report represents 27% of the WTE workforce figure. When separated into disciplines prosthetic learner support represents 33% of the total WTE workforce for prosthetics, while orthotics represents 10%.

5.19   Despite the limitations of the data collection sample, as outlined above, the volume of learner support required (demand) is a fixed figure by the number of hours required, changing only when there is a growth in the number of learners. While the data may be underrepresenting the true size of the P&O workforce, this clearly shows that workforce capacity is not the issue. There must be other factors that are negatively impacting PBL growth in this area. Even if the learner growth (demand) were to double, it would still represent a proportionately low volume of the WTE P&O workforce, in terms of WTE support required.

> *"...prosthetic learner support represents 33% of the total WTE workforce for prosthetics, while orthotics represents 10%."*

38   https://www.plymouth.ac.uk/student-life/your-studies/academic-services/poppi/placement-providers/clip

39   Williamson GR, Plowright H, Kane A, Bunce J, Clarke D, Jamison C. Collaborative learning in practice: A systematic review and narrative synthesis of the research evidence in nurse education. Nurse Educ Pract. 2020 Jan 20;43:102706. doi: 10.1016/j.nepr.2020.102706 Epub ahead of print. PMID: 32001428.

40   Markowski M, Bower H, Essex R, Yearley C. Peer learning and collaborative placement models in health care: a systematic review and qualitative synthesis of the literature. J Clin Nurs. 2021 Jun;30(11-12):1519-1541. doi: 10.1111/jocn.15661. Epub 2021 Feb 9. PMID: 33461240.

5.20 When examining the capability of the workforce to deliver PBL, the picture is varied. The FOI and survey data asked respondents to identify any barriers to providing PBL opportunities. The second highest response from the company survey was that there were no trained educators to support learners. This report cannot ascertain with certainty why this is. However, a key lever to increase PBL activity would be growing the educator workforce.

5.21 There are a plethora of support and training materials available for NHS and contracted services to access, offering educator support and training. BAPO's social media campaign to raise awareness and promote these resources is a welcome initiative to encourage the P&O workforce to promote careers in education. The publication of the AHP educator career framework has been a long-awaited addition dedicated to growing the educator workforce.

5.22 BAPO has also created educator support web pages and developed and launched a practice Educator Network (n-61). These resources are open access and available for the NHS and contracted services to use. There are also two free-to-view webinars promoting the AHP educator career framework and the Educator Network. The latter also provides insights into pre-preceptorship and supporting the diversity of learners. The NHS hub also has further resources, and both the NHS and contracted sector can access these through an Athens account and/or e-learning for healthcare (elfh).

5.23 Regarding the size of the service, it may be the case that some services are small however it is difficult to know how significant this factor is. Some of the services that responded to both the FOI and the survey indicated from the headcount figures that the service was small, although when provided with an opportunity to express if this was a barrier to supporting learners, there was only one comment related

> **"*BAPO has also created educator support web pages and developed and launched a practice Educator Network*"**

to limited physical space to accommodate learners. From the responses received it seems unlikely that the size of the service is affecting the ability to support learners.

5.24 Similarly, when it comes to exploring the nature of the service provision, there was only one comment indicating that the specialist nature of the service makes it difficult to accommodate learners, and therefore this is unlikely to be a significant factor.

5.25 When specifically asked about barriers that prevent supporting learners from completing PBL, the highest scoring response across both the contracted and the in-house services was related to staffing. The top response citing the most significant barrier to supporting learners was high workload. From the data, it is not possible to say if this applies to both disciplines (P&O). However, a high workload was reported across both in-house and contracted service provision. The next highest response was staff vacancies and recruitment challenges.

5.26 Both responses align with the findings of a landmark review into the prosthetic and orthotic workforce, where a high percentage of NHS and contractor companies reported vacancy and recruitment challenges.[41] Workload/caseload was cited as one of the top five reasons given when it came to considering leaving the profession.

5.27 Retention of staff within the sector is having a significant impact on the low growth figures for P&O. There is strong evidence from HCPC retention data that support independent research findings indicating a large proportion of the P&O workforce do not see themselves

> **"...*a key lever to increase PBL activity would be growing the educator workforce.*"**

41   Eddison, N., Healy, A., Leone, E. et al. The UK prosthetic and orthotic workforce: current status and implications for the future. Hum Resour Health 22, 3 (2024). https://doi.org/10.1186/s12960-023-00882-w

> *"Retention of staff within the sector is having a significant impact on the low growth figures for P&O".*

with a lasting career in P&O. Eddison et al (2024)[42] confirm that only 34% of the workforce 'definitely' planned to remain in the workforce for the next five years.

5.28 When it comes to the model of PBL, many responses (36 out of 52) for in-house NHS services indicated that they were either operating a one-to-one model or only having one learner at a time. A similar number (12 out of 25) indicated the same for contracted services.

5.29 This model of PBL is becoming more limited across the AHP landscape. One reason may be the need to be innovative around the use of capacity. However, a more important reason is the mounting evidence informing that in health care, other more collaborative models of learning are more appropriate and provide a better learner experience.[43, 44, 45]. As a regulated profession, registrants, whether individuals or institutions are required to ensure that learners are well supported and that PBL activity supports the Standards of Proficiency (SOPs). Standard 11 requires that registrants engage in evidence-based practice. A practice educator's scope of practice would include evidence-based practice around educating others.

5.30 Technological advancements used in PBL are expected to grow. Both the NHS and the HCPC have issued guidance on this matter (refer to sections 2.1.6 and 5.14). Simulation is one method where technology is particularly impactful or has the potential to be. Currently, the PBL hours required by P&O education providers do not include any simulated practice.

However, a recent development, part of this NHS-funded project, has led to a national agreement among P&O education providers in the UK. This agreement allows for up to 10% of PBL activities to include simulated practice, which can be counted towards clinical hours. Education providers are working on expanding the details of this threshold and are expected to release more information in 2025. In England, it is crucial that the set threshold aligns with NHS tariff[46] eligibility and that all programme activities comply with regulatory requirements[47].

5.31 There is an opportunity through this work, for education providers to leverage technological advancements, for example, simulation, to deliver PBL. With the agreement of an upper threshold, the profession can feel reassured that simulation will not replace or dilute the core content typically delivered in practice-based learning environments. However, for some of the PBL challenges reported by education providers, such as rare sites, that only a small proportion of learners encounter during their training, simulation could effectively be utilised.

5.32 The Educator Workforce Strategy[48] highlights three areas where technology has the potential to transform PBL. These are summarised as follows:

- **Evolving Teaching Methods:** The strategy emphasises the rapid evolution of teaching and training methods, alongside changing curricula to meet contemporary educational needs.

> *"Currently, the PBL hours required by P&O education providers do not include any simulated practice."*

42   Eddison, N., Healy, A., Leone, E. et al. The UK prosthetic and orthotic workforce: current status and implications for the future. Hum Resour Health 22, 3 (2024). https://doi.org/10.1186/s12960-023-00882-w

43   Bennett, D., O'Flynn, S., & Kelly, M. (2015). Peer assisted learning in the clinical setting: An activity systems analysis. Advances in Health Sciences Education, 20(3), 595–610. https://doi.org/10.1007/s10459-014-9557-x

44   Barnett, T., Cross, M., Shahwan-Akl, L., & Jacob, E. (2010). The evaluation of a successful collaborative education model to expand student clinical placements. Nurse Education in Practice, 10(1), 17–21. https://doi.org/10.1016/j.nepr.2009.01.018

45   Ipine, L. M., Caldas, F. T., & Barrett, E. M. (2019). Evaluation of a 2 to 1 peer placement supervision model by physiotherapy students and their educators. Physiotherapy Theory and Practice, 35(8), 748–755. https://doi.org/10.1080/09593985.2018.1458168

46   https://www.gov.uk/government/publications/healthcare-education-and-training-tariff-2024-to-2025

47   https://www.hcpc-uk.org/education-providers/updates/2021/using-simulation-to-support-practice-based-learning/

48   https://www.england.nhs.uk/long-read/educator-workforce-strategy/

- **Digital Transformation:** Digital technologies are highlighted as transformative tools for supporting learning. However, the educator community must have access to these technologies and the capabilities to support learners effectively.
- **Alternative Approaches:** The strategy advocates for digital and blended learning models to enhance capacity, provide flexibility, and widen access and participation. This includes creating conditions for the successful adoption of evidence-based educational technologies and simulation at scale, ensuring they are equitable, efficient, and sustainable.

5.33 The Council of Deans for Health (CoDH) AHP Educator Career Framework (2023)[49] includes guidance around the use of technology and its role in sustainability. Three areas are discussed that are noteworthy for the P&O profession to consider when considering capacity growth for PBL.
- Digital and Sustainability Focus: The framework ensures that education provision is forward-facing, with a focus on innovation and environmental sustainability.
- Essential Digital Skills: AHP educators are encouraged to maintain and develop their digital skills, including managing information, sharing data, and using digital tools in care delivery.
- Innovation and Evaluation: Educators should welcome innovation and critically evaluate new developments in clinical or educational practice before wider adoption. This includes completing digital and sustainability training as per role/job descriptions and professional body guidance.

5.34 In line with HCPC requirements for educators, the framework also highlights the importance of continuous professional development (CPD) for educators. The framework is clear that up-to-date knowledge and skills are crucial for delivering and receiving education effectively. Evaluating the effectiveness, safety, and sustainability of new educational developments or innovations is also emphasised.

"Streamlining processes across all centres under each HEI would save time and distribute the workload among practice educators, enhancing consistency and efficiency."

5.35 **Exploring PBL Capacity - Education Providers**
From the Padlet data collected for standardising PBL assessments, one of the core barriers to having more learners including learners from different education providers is the volume of additional work created, when each HEI has its own assessment.

5.36 When asked what benefit would come from having a single assessment for PBL, the message was clear. Streamlining processes across all centres under each HEI would save time and distribute the workload among practice educators, enhancing consistency and efficiency. Merging processes from multiple HEIs into a single system would reduce complexity and facilitate better support for learners, promoting integration and simplification. Additionally, implementing consistent assessment methods across HEIs would create a level playing field. This may also encourage educator growth through standardisation and streamlining what is being asked of them.

5.37 Educators recognise the benefits of a standardised assessment approach to PBL activity. The developed principles lay the foundations to achieve this goal. Further assessment to ascertain the level of agreement with practice educators has shown there is strong agreement with each of the seven principles produced. With workload being one of the key barriers cited to supporting learners – it seems sensible to consider implementing the findings of this project.

5.38 If the process of assessing learners were streamlined for practice educators, it would encourage other staff to join the educator workforce, without the burden currently felt by practice educators. A note of caution is important as stakeholders have emphasised the need for a standardised assessment that is not overly complex. Some comments suggest that anything excessively complex could adversely affect building educator capacity.

49   https://www.councilofdeans.org.uk/ahp-framework/

> *"The HCPC SOPs expect new graduates to have engaged in activities covering the four pillars of practice."*

> *"There was a heavy focus on the clinical and technical pillar and a lack of reference to learning and development across the four pillars of practice."*

5.39   Recent national publications such as the AHP Strategy for England 2022-2027[50] and the NES NMAHP Development Framework[51] advocate diversifying practice education and practice-based learning to ensure the future AHP workforce has the right capabilities to deliver and lead the transformation needed to optimise health and social care delivery. At the heart of this effort is ensuring that the next generation of AHPs gains the necessary exposure during their education and training to meet the challenging landscape ahead.

5.40   Preparing the future workforce with the right skill mix to maximise their career options is vital. For example, in advancing practice, NHS staff must demonstrate proficiency across all four pillars of practice, namely clinical (and technical), research, leadership, and facilitating learning. Sowing the seeds of expectation at the pre-registration stage facilitates the early preparation of the future workforce. The HCPC SOPs expect new graduates to have engaged in activities covering the four pillars of practice.[52]

5.41   This project has confirmed that for P&O, there is a heavy emphasis on the clinical and technical pillar in practice-based learning activities. The focus on delivering content across research, leadership, and facilitating learning appears to be unrepresented. Including the four pillars

> *"Given the evident retention challenges for P&O and attrition linked to a lack of career opportunities, anything that protects and enhances the long-term sustainability of the workforce is paramount."*

of practice in planning PBL activities is crucial for long-term sustainability. Given the evident retention challenges for P&O[53,54] and attrition linked to a lack of career opportunities, anything that protects and enhances the long-term sustainability of the workforce is paramount.

5.42   There is good evidence that AHPs have successfully managed to introduce a different model of PBL that covers the four pillars of practice without losing or diluting the core identity of the profession. For example, operating department practitioners[55] (ODPs) have introduced a new PBL model covering the four pillars of practice. They now believe embedding a four-pillar approach to PBL activity is essential to developing a workforce capable of best practice and driving the profession forward.

5.43   Developing the P&O principles for standardising PBL assessment provided an opportunity to review both the activity and views on assessing PBL. At the initial Deep Dive events and Padlet contributions, stakeholders were asked to describe what good would look like if a standardised assessment could be created. The responses highlighted a lack of comprehensive engagement with key topics such as learning across the four pillars of practice. There was a heavy focus on the clinical and technical pillar and a lack of reference to learning and development across the four pillars of practice. This is despite the publication and adoption by BAPO to the national AHP principles of practice-based learning[56] which clearly state

50   https://www.england.nhs.uk/wp-content/uploads/2022/06/allied-health-professions-strategy-for-england-ahps-deliver.pdf

51   https://www.nmahpdevelopmentframework.nes.scot.nhs.uk/

52   https://www.hcpc-uk.org/standards/standards-of-proficiency/prosthetists-orthotists/

53   https://www.hcpc-uk.org/news-and-events/news/2023/the-hcpc-publishes-analysis-of-retention-rates-among-its-health-and-care-professionals/

54   Eddison N, Healy A, Leone E, Jackson C, Pluckrose B, Chockalingam N. The UK prosthetic and orthotic workforce: current status and implications for the future. Hum Resour Health. 2024 Jan 8;22(1):3. doi: 10.1186/s12960-023-00882-w. PMID: 38191415; PMCID: PMC10773099.

55   Cadman V, Batty H, Law J. Implementation of research, education and leadership placements into Operating Department Practitioner training: A 4-pillar practice-based learning approach. Journal of Perioperative Practice. 2024;0(0). doi:10.1177/17504589241276743

56   https://www.bapo.com/wp-content/uploads/2023/10/Re-launch-October-2023-compressed.pdf

that PBL activity should take place across all pillars. BAPO has also released a statement concerning the principles stating that: "Through these PBL principles, this framework will support educators and learners to deliver and experience broader learning experiences. These experiences will contribute to launching successful and rewarding healthcare careers in Prosthetics and Orthotics."

5.44 While specific reference to the AHP PBL principles was absent across most of the feedback, there were comments about ensuring PBL delivered clinicians who were 'fit for purpose', and that there should be consistency to "provide a robust PBL assessment that certifies competence for independent practice."

5.45 When managers and leaders were asked why a standardised assessment for PBL mattered from their perspective, comments were more diverse, the following two examples provide a snapshot: "Provide a set level, increase recruitment, improve retention, and align with pillars to fulfil leadership and research elements." "Better output of graduates with improved retention and consistent basic knowledge"

5.46 When asked what could be done differently to achieve standardisation of PBL assessment of

learners – some comments alluded to the wider determinants of sustainability, the preparation of learners for the workplace, and driving quality. The following two comments provide a snapshot: "Consider how the project supports and leads into preceptorship." "It should reduce the impact of interpretation and improve existing paperwork for all HEIs to drive quality in the profession"

5.47 Some of these comments are immediately reconcilable. BAPO has developed resources, which are available on its website as open-access materials[57]. These cover preceptorship and foundation support. There are also a series of digital reusable assets such as 'talking heads' and webinar content. There are also resources supporting pre-preceptorship for learners preparing to enter the workforce, and a dedicated learner hub and network.

5.48 Other comments such as needing the standardisation of PBL assessment to produce a 'better output of graduate' and having a robust PBL assessment that 'certifies competence for independent practice', highlight the importance of strengthening collaboration between academic and practice educators both in the contracted and in-house services. This collaboration would ensure that academic and practice-based learning maintains a common goal: to ensure that learners are supported across both academic and practice activity and that the activity is underpinned with the necessary evidence to ensure that learning is

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57   https://www.bapo.com/early-career-support/

optimised, meets the HCPC regulatory threshold standards (see section sections 2.14-2.16) and supports learners to transition into the workforce fit for practice, equipped with the necessary skills needed to thrive.

5.49   The sequencing of placement by the education providers reveals that the majority of PBL activity occurs in the final year of study for the three-year programme and across the third and fourth years of study across the four-year programme. The pre-registration MSc has a spread of PBL activity across both years of study. The two BSc programmes also have long block placements with some overlapping between the two institutions. Although this project identified the need to have more educators trained to receive learners, there is also a need to look at the demand placed on the system to accommodate learners.

5.50   This work provides an optimal window of opportunity for education providers to review the placement load on the system. There is a forum set up as part of this investigation – providing education providers the opportunity to collaborate to find compromises and solutions for the PBL challenges that each has

"...by working together there may be opportunities to re-negotiate when learners complete their PBL hours within each of the programmes."

said they are experiencing. For example, by working together there may be opportunities to re-negotiate whenlearners complete their PBL hours within each of the programmes.

If the demand on the system can be staggered, there may be innovative ways to reduce the use of the available capacity to provide a more even distribution of PBL activity across all programmes.

5.51   The data gathered for this project has led to the first comprehensive exploration of P&O PBL capacity ever. The findings of this project have led to an evidence-informed assessment and appreciation of the PBL challenges the profession is experiencing. Understanding capacity through different lenses has enabled the 'teasing out' of different areas. Small changes would see improvement in some of these areas, where others would benefit from more significant change.

6   Recommendations

6.1   The final section details a series of recommendations based on the findings of this report. The recommendations form the plan to improve coordination of P&O practice-based learning activities across the UK.

RECOMMENDATION 1
Seize the moment.
This work has provided the evidence needed to clearly identify key problem areas with PBL provision in the P&O profession. Now is the time to seize the moment and make a lasting impact, through facilitating necessary and much needed change, leading to the optimisation of P&O PBL provision. The close stakeholder engagement that has been necessary to achieve this success must be maintained. BAPO needs to convene a PBL summit to discuss the findings of this report and agree on a series of actions, taking forward these recommendations and a timeframe for implementation, with defined and agreed outcomes, whilst maintaining strategic oversight.

RECOMMENDATION 2
Implement an allocation system
The use of an allocation system will provide equitable utilisation of the available capacity. Previously, the capacity for P&O PBL was unknown, leading to significant management challenges and frustration. However, now, with a better understanding of capacity, the allocation of placements can be more effectively addressed. Examples of models currently in use include the Fair Share Model, InPlace, and the Placement Management Partnership. A method of allocation could be adopted by the HEIs, who would work collaboratively to execute the allocation nationally supported by the professional body.

RECOMMENDATION 3
Increase the educator workforce capability:
Increasing educator capacity is essential. The sector must invest in the training and development of educators to support the growing number of P&O learners. The findings from this project have highlighted that P&O workforce numbers do not account for the scarcity of PBL opportunities that education providers report experiencing. However, the number of educators with appropriate training to support learners is problematic. All the resources for training practice educators are available through HEIs and the NHS Hub. With an Athens account, contracted and in-house services can access NHS training resources.

RECOMMENDATION 4
Adopt an evidence-based PBL model of learning and supervision.
Education providers (both clinical and academic) should work together with contracted and in-house P&O services to implement a contemporary evidence-based PBL model e.g. CLiP[58], where both PBL capacity and learner experience can be optimised. This would require a move away from the traditional one learner and one educator model to a model that would include, for example, peer-to-peer support, 2:1 or 3:1 learner-to-supervision ratio with two or 3 learners and one educator, coaching models of supervision, and near peer supervision.

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58   https://www.plymouth.ac.uk/student-life/your-studies/academic-services/poppi/placement-providers/clip

RECOMMENDATION 5

Expand the number of learners supported in PBL settings

Workforce figures show that the PBL demand (WTE PBL hours) as a proportion of the WTE workforce size is small (27%). With the introduction of an allocation tool, this will inevitably require an increase in the number of hours offered to support learners. The P&O sector needs to prepare for upwardly revising the current offering, allowing more learners to be supported while optimising the available capacity.

RECOMMENDATION 6

Education providers to build sustainability into PBL demand forecast.

Work with the TEN subgroup to review the sequencing of PBL activity. For example, when learners are required to attend PBL blocks. This is especially important for long block placements. Contracted and in-house services need to come together with education providers to collectively agree on the sequencing of PBL activities. This would reduce stress on the system by minimising the overlap with learners requiring PBL allocation at any given time, creating a sustainable national demand 'blueprint'.

RECOMMENDATION 7

Standardise PBL Assessment: Implement a standardised PBL assessment to ensure consistent evaluation of PBL activities across all educational programmes.

From the Padlet feedback gathered during the Deep Dive engagement activities and further evidence gathered during the development of the principles to standardise PBL assessment, significant variations in stakeholder expectations of PBL outcomes became clear. Standardising the assessment process will align expectations and ensure that all educators adhere to the same standards.

RECOMMENDATION 8

Leverage Technology: Utilise technology to provide diverse and flexible PBL opportunities, including remote learning and simulation.

The PBL landscape is changing, and there is good evidence and practice examples from other AHPs to support the diversification of PBL activities while continuing to meet professional, statutory, and regulatory requirements. BAPO should consider working with the four HEI P&O education providers via the training and education subgroup to further extend the agreement on the upper threshold for the use of simulation in PBL. BAPO has already launched its own simulated escape room to support learners with mandatory training in preparation for entering the PBL setting for the first time. These resources could be expanded by working with both the Educator Network and the TEN subgroup to generate ideas for the development of further open-access resources to support PBL.

RECOMMENDATION 9

Work with the Educator Network

Work with the Educator Network to campaign for more practice educators to seek the necessary training. The Educator Network is growing (n=61 at the time of writing). The evidence confirms that growth is needed to sustain the profession. BAPO should consider running a campaign that could utilise the expertise of the Educator Network, to promote the role of practice educators.

7 Conclusion

Addressing PBL capacity challenges is crucial for the P&O profession's sustainability and growth. By implementing the recommendations and diversifying PBL delivery, the profession will benefit in several ways:

• Enhancing the learner PBL experience.
• Assurance that PBL capacity meets demand.
• Delivery of comprehensive PBL to prepare learners for P&O careers.
• Meet professional, statutory, and regulatory body expectations.
• Strengthen the sector's ability to handle increased learner numbers.
• Provide necessary PBL hours to meet demand.
• Develop a well-rounded, skilled, and adaptable future workforce.
• Enable HEI programmes to increase learner numbers enabling the P&O profession to expand to meet demand.