

Specification – Digital Pathology

1. Introduction.

The Cancer and Diagnostics team aims to develop a sustainable workforce for the delivery of NHS cancer services. Having the right staff, with the right skills in the right place, at the right time is key to this aim. HEE is committed to cancer workforce development nationally and supporting implementation of the NHS Long Term Plan. This includes supporting the AHP and wider workforce in managing people with cancer with regards to personalised care with a focus on prehabilitation and rehabilitation in people with cancer.

HEE's Technology Enhanced Learning (TEL) programme was established in 2019 with the vision that healthcare in the UK be underpinned by world-class education and training that is enhanced through innovation and the use of existing evidence-based and emergent technologies and techniques.

The Royal College of Pathologists, founded in 1962, is a professional membership organisation operating as a registered charity. The College is committed to promoting excellence in the coherent study, research and practice of pathology and to be responsible for maintaining the highest standards through training, assessments, examinations and professional development, to the benefit of the public.

2. Background

Health Education England Cancer & Diagnostics team, in partnership with the TEL team and the Royal College of Pathologists (RCPath), is developing an online training solution for pathologists. The development of this will be incorporated into the Learning Hub, which is the powerful new digital education platform being developed by HEE. The Learning Hub will provide easy access to a wide range of education and training resources for the UK health and care workforce.

Using technology to enhance learning, the solution aims to incorporate the ability to host and view whole slide imaging (WSI) over the world wide web (Virtual Microscopy) to enable pathology tissue samples to be annotated and viewed as part of learning sets, with additional video and text based materials, mapped to the relevant curricula of the Royal College of Pathologists, and, hosted and maintained within the system, and accessible via the Learning Hub or via the RCPath membership portal.

The Learning Hub, which is a learning management system, will develop functionality to provide a unique adaptive learning pathway with content which can be created and maintained by the RCPath.

Like most teaching and training, pathology requires the ability to host learning material in multiple file formats and be able to organise this in increasing orders of complexity to map to different stages of training with the need to collect learners and trainers' activity at the back end.

In addition, a lot of pathology training is image based and requires exposure to, and experience in, the full range of pathologies in a departmental workload where each trainee has a different pace/rate of learning.

The digital solution would enable hosting of high resolution digital images and materials that are otherwise not available in all training centres and to organise them in a unique graded and curriculum mapped method using an adaptive learning approach that obviates dependence on the physical availability of slides or images and supports formative experiences in learning and assessment. This would create a unique blended learning model that would lend itself to covering any learning gaps or variations in training material that exist across all geographies in England.

A phase of pre-development work (Discovery and Alpha) has been completed following Government Digital Service (GDS) principals. This involved user engagement and research to identify need, explore solutions and engage with relevant stakeholders to prioritise the functionality required for the digital solution. This preliminary work provides a clear and informed position to support progressing the project into the Beta phase.

3. Scope of Contract

A Learning Hub service team is in place within HEE to build the technical functionality required for the image interpretation solution. This contract will cover the sourcing, quality assuring and provision of appropriate content to upload onto the system.

4. Detailed Requirements

The objectives of the work programme for the period are:

To set up and run an editorial board with a chief editor and sub editors from across specialities to source, quality assure and approve content (aligned to the curriculum) for upload to the platform

To fund a clinical director to provide subject matter expertise to the project

To contribute to the development of new functionality on the platform

5. Service Levels and Key Performance Indicators (KPIs) and Contract Management and Review

Service Delivery

- To provide subject matter expertise to support the development of the solution
- To provide content for use on the platform
- To manage the governance of the project within the Royal College of Pathologists through a project board and reports to the learning team and board of trustees
- To identify and provide system users to test the functionality of the platform
- To promote and champion the use of the platform
- To provide monthly reports to HEE on budget spend
- To provide administrative support to the project

6. Contract Period

- From 1 March 2021 to 28th February 2022
- **A budget of £175,000 (ex VAT) has been set aside for this.**