

HEALTH ECONOMIC ANALYSIS - PATHOLOGY TRAINING ON THE NHS LEARNING HUB

Farhan Ahmed¹, Esther Youd², Luke Thrower³ Joanne Martin⁴

1. Newham University Hospital, Department of Medicine, Barts Health NHS Trust, London, England
2. University of Glasgow, Department of Forensic Medicine, Glasgow, Scotland, UK
3. The Royal College of Pathologists, England, UK
4. Blizard Institute, Faculty of Medicine & Dentistry, Queen Mary University of London, London, England

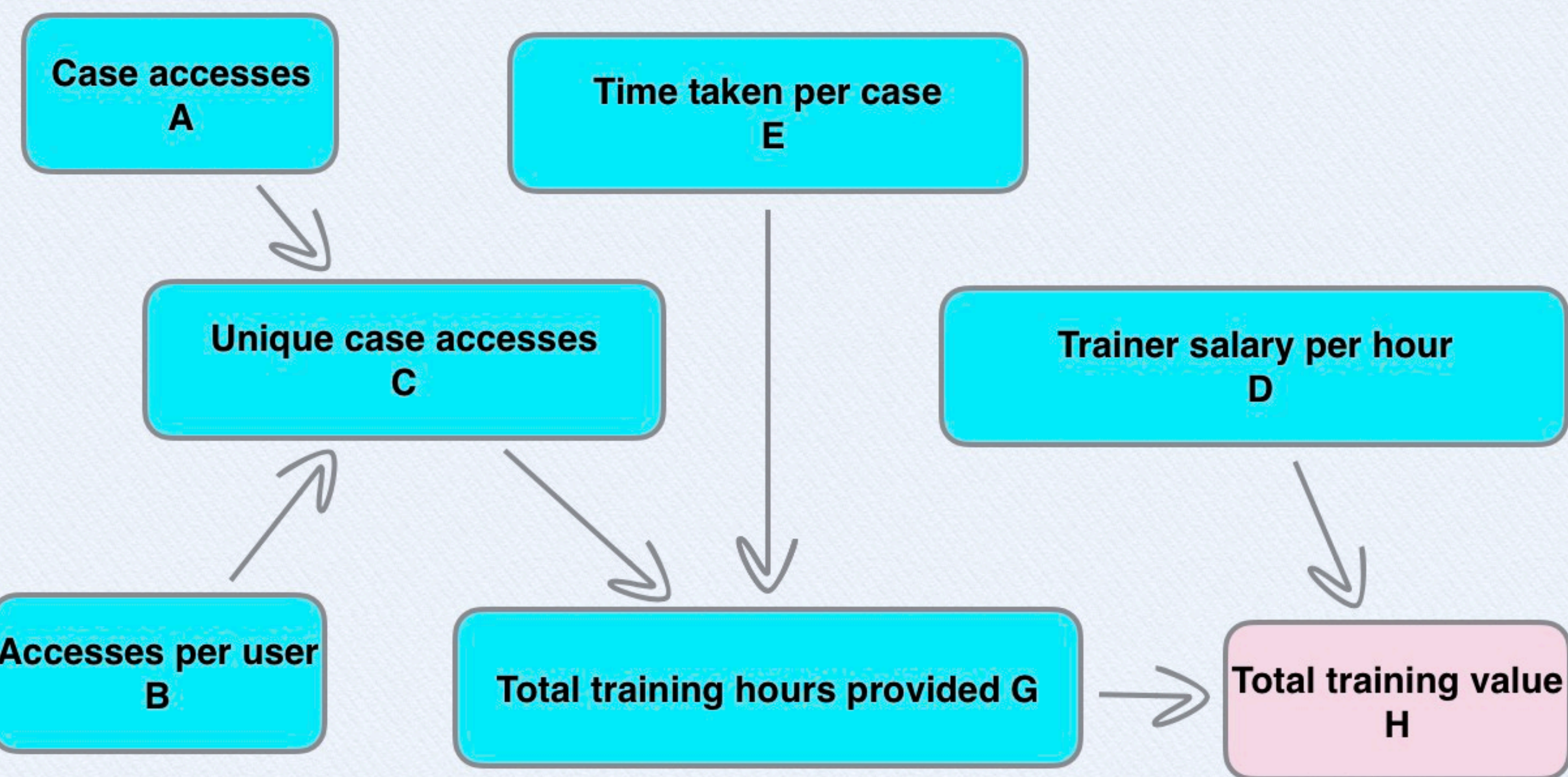


INTRODUCTION



Financial and workforce constraints have the potential to impact on the volume and quality of training offered to pathology trainees across all disciplines. The **Pathology Portal** on the NHS Learning Hub has been designed to be a **cost-effective, accessible platform for learning for all specialties in pathology**. The platform launched August 2022 has 6,759 learning resources available as of 30th June 2025, of which 6003 are case modules.

METHODOLOGY



$$H = (C \times E_{\text{hrs}}) \times D = \left(\frac{A}{B}\right) \times \left(\frac{E}{60}\right) \times D$$

We have designed **a financial model based on real life data from usage of the Portal and published data on workforce costs**. We have subsequently performed an **economic analysis of the impact on training costs of the case resources** on the Portal using this model.

We used measured case accesses (A) and removed repeat views by dividing by the average accesses per user (B) to estimate unique case-studies ($C = A \div B$). Each case was valued as 15 minutes of consultant teaching ($E = 0.25$ hr). At an assumed consultant rate of £100/hr (D), each case equals £25 of trainer time ($F = D \times E$). Total training hours and cost were then calculated as $G = C \times E$ and $H = G \times D$.

RESULTS

The Portal delivered 228,516 unique case-studies – equivalent to **57,129 consultant-hours** or **£5,712,890 of training time** (assuming £100/hr and 15 min per case).

Item	Description of item	Quantity
A	Case accesses	319,922
B	Accesses per user per case	1.4
C	Unique case accesses (A/B)	228,516
D	Consultant salary per hour (£)	100
E	Training time per case (minutes)	15
F	Training cost per case (DxE) (£)	25
G	Training hours provided (C/E)	57,129
H	Cost of training provided (£) (GxD)	5,712,890

CONCLUSION & DISCUSSION

This modelling clearly demonstrates the **multimillion pound cost and trainer time avoidance associated with learning on the Pathology Portal, in addition to the flexibility and equity of access provided**. This is based on existing data, however additional value is provided from the non-case related modules (756) and the scaling capability of the platform, since, with the exception of targeted content creation, there are no step costs for more learners accessing the content, and no step costs for additional content upload. Non quantifiable benefits include accessibility, since the platform has been built to comply with digital accessibility guidance, and has been audited for this compliance. Equity and flexibility of access to multiprofessional groups, and undergraduates is also a key feature, since specialist material content is available to all users at all times, irrespective of shift pattern or location.