Analysis of Preparatory Courses for the Practical Component of the PLAB Exam for International Medical Graduates in the UK

Anjali Rajendra Gondhalekar
Lakshaajeni Thevapalan
Mohammed Ahmed Rashid
UCL Medical School, University College London, London, UK

Background: Medical workforce shortages are a major threat to the future of the UK National Health Service (NHS) and countless other healthcare systems globally. Reliance on international medical graduates is likely to continue and may increase, although these doctors face many educational and professional challenges. The Professional and Linguistic Assessment Board (PLAB) test, delivered by the General Medical Council (GMC), is the “gateway” exam that doctors must pass through in order to practice in the UK. Despite the central importance of this exam, no official or accredited training courses are provided or approved by the GMC.

Methods: This study used online and social media searches to identify and categorise preparatory courses available for the practical (clinical) component of the PLAB assessment.

Results: A total of 13 courses were identified, delivered predominantly in the cities of Manchester and London, ranging from 1 to 28 days in duration and from £24.99 to £649.99 in cost. Most courses were organised by previous PLAB candidates and websites focussed on testimonials from previous participants rather than educational credentials or professional clinical experience of teachers running the courses. Courses were all provided by private education companies, and none were delivered by universities or National Health Service organisations.

Discussion: A variety of preparatory services and courses exist for the PLAB assessment, although the public information about them is variable and limited. Further research is required to examine the quality of these courses and the potential for alternative avenues of training for international medical graduates preparing to practice in the UK.

Keywords: licensing, assessment, migration, study

Background
Since 2002, the number of international medical graduates coming to the UK has risen dramatically, driven partly by the comparatively better salaries for doctors in the UK and increases in graduates qualifying from overseas medical schools. This migration of doctors is also seen to other higher-income countries. For example, International medical graduates (IMGs) make up around a quarter of the medical workforce in the US, Canada, and Australia. Although there are concerns that this migration of doctors could lead to a “medical brain drain” or shortage of medical professionals available to treat patients in the doctors’ native countries, ongoing medical workforce shortages in the UK mean that doctors will continue to be needed in the short- and medium-term future at the very least.

When IMGs emigrate to the UK to seek further training or employment, they face a number of challenges. In order to practice medicine in the UK, IMGs must
first pass the Professional and Linguistic Assessments Board (PLAB) examination. This consists of a written (PLAB 1) and practical (PLAB 2) element, which are run by the General Medical Council (GMC), the medical regulatory body for all UK doctors. The PLAB 1 examination consists of a 180 item single best answer written examination paper lasting three hours. Due to the nature of this assessment, candidates may sit this assessment at a selection of test centres internationally. The PLAB 2 examination consists of a multi-station objective structured clinical examination, which is hosted by the GMC at their examination centre in the UK. The PLAB 2 examination must be taken at this centre in person, and there are no alternative venues in the UK or abroad available to sit the examination. As a result, sitting the PLAB 2 examination can require a considerable time and monetary investment by candidates and the stakes are high for candidates.

A 2018 UK television documentary entitled “The Foreign Doctors Are Coming” tracked candidates as they prepared for, and sat, the PLAB 2 exam. This increased the awareness about this examination amongst the medical profession and the public alike, as well as highlighting the variability in training provision for these doctors. Moreover, the absence of published articles exploring the variability in training provision for these doctors. Moreover, the absence of published articles exploring the availability of PLAB 2 preparatory courses, and their quality, is striking.

The GMC stipulates that PLAB candidates do not need to attend any preparatory courses prior to sitting the examination and that it is based on medical knowledge that is relevant to practice medicine in the UK. The assessment is pitched at the level of assessing a candidate that is able to undertake the duties of senior house officer (SHO), a doctor who is in their second year of practice after qualification “on their first day in post”. Importantly, the GMC do not themselves provide any preparatory courses themselves, they also “do not endorse or monitor the quality of courses given by others”. Despite this, many candidates attend courses provided by various providers in the UK to help prepare them to sit the examination. There is limited research focusing on the effectiveness of attending courses on the success in the PLAB exam, although previous candidates have noted that undertaking mock exams can be beneficial.

Aims
Given the practical and clinical nature of PLAB 2, and its relevance to readiness for professional practice, this study seeks to explore the breadth of courses and support that is available for candidates to help them with their exam preparation. It also seeks to explore the claims that are made by these providers about the impact of their course upon candidate performance. It sought to answer the question: what are the costs, duration, location, and format of preparatory courses available to international medical graduates (IMGs) preparing to sit the PLAB 2 examination to practice medicine in the UK?

Focusing particularly on publicly available descriptions of courses and resources available to IMGs preparing for this assessment.

Methods
Online and social media searches were used to identify PLAB 2 examination preparatory courses and resources. Searches using the keyword “PLAB” on three platforms (Google, Twitter, and YouTube) were undertaken in December 2020 to identify links to websites offering courses and resources relevant to the PLAB 2 examination. Publicly available information from course webpages was recorded, including the price, duration, location, and format of the course, as well as any information about the course instructors and testimonials from previous course participants. Searches and data extraction were completed independently by two authors (AG and LT). Information was sought from the web pages of each of the platforms, and repeated courses were only recorded once. Courses were excluded from the study if they did not have an active website link or had not offered a course in the previous twelve months, on the basis that they were unlikely to be currently active at the time of the study. We focused specifically on courses that were provided within the UK given that the exam centre is UK-based; however, a note was made of course providers that also offered courses at other locations internationally.

An initial pilot was completed on 3 courses to finalise the data extraction criteria and template. Data were then collected over a twenty-four-hour period in December 2020 to ensure that all searches were contemporaneous. Data were then compared and corroborated by both researchers (AG and LT) and discrepancies reviewed for accuracy of information. Ethical approval was received for the project from the UCL research and ethics committee (UCL REC reference number 12725/004).
Results
A total of 13 courses were identified, and a summary of these is provided in Table 1. All the training courses are provided by private education and training providers, and none were run by UK universities or organisations within the UK National Health Service.

Course Locations
Whilst this study focused on courses provided in the UK, some providers (course references a, b and h) also offered courses abroad including in Dubai, UAE, Lagos, Nigeria, Egypt, India, Pakistan, Bangladesh and Myanmar, suggesting particular demand for courses in these locations. Courses were concentrated in three major UK cities: London; Birmingham; Manchester.

Course Fees and Other Learning Products
Course prices ranged from £24.99 to £649.99 (USD35 to USD900). Three different courses (a, d, and h) offered group booking discounts for five attendees or more. Some course websites (h and g) also advertised other study resources via their websites including audio files, flash cards, and access to video files of consultations.

Other Services Offered
Two course providers offered accommodation for delegates (a and h) and included pictures of accommodation available with a breakdown of costs. Some courses (b and h) also provided a recruitment form for candidates that had passed the PLAB to work on their course as tutors. One

| Course Reference | Sites Advertised on Google (G), YouTube (Y), Twitter (T) | (Online/Face to Face) | Course Duration (Days) | Course Location | Facilitator Background - Doctor (D), Educator (E), Previous Candidate (PC), Previous Examiner (PE)) | Price (£) | Tutor’s Number of Years of Experience (if Mentioned) |
|------------------|--------------------------------------------------------|-----------------------|------------------------|----------------|--------------------------------------------------------------------------------|----------|--------------------------------------------------|
| a                | G, Y                                                   | O and F and recorded  | 12                     | Manchester     | D and PC                                                                  | 600 (500 groups of 5) | 17                                             |
| b                | G, Y, T                                                | O and F               | 16                     | Manchester     | D and PC                                                                  | 649.99 (599.99 online) | 10                                             |
| c                | G, Y                                                   | O and F               | 15                     | London         | D                                                                          | 595       | 17                                              |
| d                | G, Y, T                                                | O and F               | 12                     | Manchester     | D                                                                          | 599 (499 groups of 5) | –                                               |
| e                | G                                                      | F                     | 5                      | Birmingham, Manchester and London | D                                                                          | 350 (75 for mock exam) | –                                               |
| f                | G, Y, T                                                | F                     | 2                      | London         | E                                                                          | 425       | 13                                              |
| g                | G, Y, T                                                | F                     | 1                      | Birmingham, Manchester and London | D and PE                                                                  | 350       | –                                               |
| h                | G, Y                                                   | O and F               | 12                     | Manchester     | D                                                                          | 599 (499 for groups of 5) | –                                               |
| i                | G                                                      | O                     | 28                     | Not stated      | D                                                                          | 24.99–79.99 | –                                               |
| j                | G, Y                                                   | F                     | 14 days                | Crewe          | D and PE                                                                  | 550 (mock exam 875) | –                                               |
| k                | G                                                      | F                     | 2 days                 | Manchester     | D                                                                          | 125       | –                                               |
| l                | G                                                      | F                     | 21 days                | London         | D                                                                          | 505       | –                                               |
course (b) additionally offered employment within the National Health Service (NHS) following registration:

We have contacts with NHS hospitals to provide them with jobs. So all our candidates will be placed in permanent jobs after getting the GMC registration. So once you have completed PLAB exams and got full GMC registration we I help you get a permanent NHS job within 2 months.

One course provider (i) offered visa and solicitor services for those wishing to apply for a tier 2 visa and also sold medical equipment on their website.

**Testimonials and Claims**

Whilst the majority of course providers did not provide specific data on attendee success rates and raw figures, one course provider (b) claimed “Our PLAB 2 pass rate for candidates attending courses … is 98% in first attempt”. The same provider also claimed “your first attempt pass is a guaranteed success”.

All commercial courses that were identified provided testimonials from previous attendees. For example, course provider (d) quoted: “I have passed PLAB. I am very much grateful to all the tutors”. Course provider (e) quoted: “Course recommended 100% for all clinicians wishing to have an excellent practice in life”, and course provider (g) quoted: “My PLAB score increased significantly after your courses – I actually understood where I was going wrong and looking back I’m so glad I found your website!”.

**Discussion**

This study demonstrates the heterogeneity of available preparatory courses for the PLAB2 assessment, in terms of their public advertising, cost, tutor availability, claims about pass rates, and geographical location. Such variation may be explained by the fact that the GMC, who run the PLAB exam but do not provide educational courses for it, do not accredit or approve of courses from other providers. The publicly available information on these courses does not provide systematic information about outcomes, and further research is required to establish impacts of these courses on candidates’ performance.

Whilst there is limited public information about the impact of attending courses to prepare for the PLAB 2 assessment, studies have previously focused on the effects on candidate performance after attending paid courses offered in America, preparing candidates to sit the United States medical licensing examination. A literature review by McGaghie et al reviewed the impact of commercial test preparation courses in America on medical examination performance and concluded that the evidence in support of such courses was weak or nonexistent. Moreover, Werner and Bull found that students who chose to take 3–4-week commercial coaching courses to improve their performance on Step 1 of the USMLE do not achieve higher scores than students who study on their own. The paper went on to advise that candidates should “strongly consider whether or not a substantial investment in time and money” would be “justified in the light of such meager returns”. Similarly, Bonnaso et al found that commercial courses were not associated with improved scores. In the North American context, it has been noted that there exists a “multi-million-dollar industry in commercial exam-preparation assistance”, which is known to cash in on “student anxiety over high-stakes board exams”. Courses provided for the preparation of PLAB 2 as with other preparatory courses for formal UK exams are likely to appeal to anxious candidates fearful of losing money on high stakes examinations. An article by Target et al suggested that less confident candidates are more likely to attend a commercial preparatory course for the UK MRCGP exam for General Practitioners. In Malaysia, meanwhile, a preparatory course for IMGs has been shown to be effective in a quasi-experimental study, although the course is focussed on confidence and readiness for practice rather than for a high stakes examination.

There is currently a lack of research focusing on PLAB2 preparation courses that are offered for prospective PLAB2 candidates that are hoping to practice medicine in the UK. A small study found that PLAB2 candidates benefit from the support provided by previous candidates of the examination through social media platforms such as WhatsApp, but it is not clear whether privately run training courses can provide tangible benefits to prospective candidates’ scores. This raises the question about whether there is an appetite amongst candidates to be offered a formal preparatory course through the GMC who develop and deliver the PLAB 2 assessment and whether this would serve to bridge this heterogeneity in courses that are currently available. Whilst our research adds to a small body of work in this area to indicate the array of courses that are offered and advertised in the public domain, there are more work necessary to consider their effectiveness given then costs outlined courses and time commitment required by participants.
The strength of this study is that data were collected systematically and independently by two researchers. Although none of the research team have been PLAB candidates, two researchers are involved in PLAB exam design and delivery and therefore do have of insight into the exam and the type of material that is typically examined. Whilst we have compiled a comprehensive list of advertised courses, other courses may be available, which were not identified via our search method. Given that our data collection was undertaken during the COVID-19 pandemic, some courses may have altered their advertising or course availability, although the PLAB2 exam has been running continuously since it reopened in August 2020 following the first wave of the pandemic in the UK. A further limitation is the lack of analysis about the performance of courses in this study on candidates’ outcomes, although this is limited by the selective information about pass rates that courses provide.

This study raises a number of issues for policymakers. For example, the GMC may wish to revisit their decision to not provide or accredit courses based on the array of courses currently being offered in the public domain with significant heterogeneity of information available, format, and cost. Those involved in international doctor recruitment and medical workforce planning may also consider whether a more formal structure of training is desirable for doctors entering the NHS, which may involve approved higher education or healthcare training providers.

Whilst there are many potential avenues for research from this study, we feel that further work is required to explore these courses in an in-depth way using recognised instruments of measuring quality in order to ascertain their educational impact. This could include qualitative studies to explore the experiences of participants, teachers and examiners involved with the PLAB examination as well as quantitative studies to measure the impact of these courses on candidates’ scores.

**Conclusion**

A variety of privately run courses are available to candidates preparing to take the practical component of the PLAB examination, the UK licensing exam for IMGs. These course providers use various platforms to advertise their products and services, although information on their websites tends to focus on success rate claims and testimonials rather than information about teaching methods or teachers’ educational credentials. If the UK clinical education system is to support IMGs to fill the deficits in its healthcare workforce, the paucity of information available about courses that claim to prepare IMG doctors for this transition is striking. Further research is required to examine the validity of existing courses, and the potential impacts of the GMC decision to neither provide nor accredit training courses for the PLAB 2 exam.

**Disclosure**

The authors report no conflicts of interest in this work.

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