

Notes of a meeting of the UK Medical Education Database Advisory Board

Friday 18 December, 10.00 – 11:50
Zoom Virtual Meeting Room

Attendees

Professor Steve Thornton
Professor Jon Dowell
Dr Katie Petty-Saphon
Professor Helen Stokes-Lampard
Dr Anna Olsson-Brown
Dr Latifa Patel
Graeme Larkin
Mark Shannon
Professor Bill Irish
Ania Kosicka
Sean Pywell
Jonathan Howes
Professor Adam Hill
Dr Ian Steele
Richard O'Kelly
Rachel Greatrix
Professor Chris McManus
Daniel Smith
Jessica Lichtenstein
Martin Hart
Sean Corrigan
Andrew Ledgard
Tom Oppé
Hannah Baird
Christian Woodward
Peter Tang
Fahmida Yasmin

Chair
Research Subgroup Chair
MSC
AoMRC
AoMRC Trainees
BMA
BMA MSC
BMAT
COPMed
DHSC
GAMSAT
HEE
NES
NIMDTA
UCAS
UCAT
UCL
GMC
GMC
GMC
GMC
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GMC
GMC
GMC
GMC
MSC
MSC

Presenter

Dr Lewis Paton

University of York

Apologies

Alastair Henderson
Dr Simon Fleming
Dr Helena McKeown
Dr Chris Smith
Dr Gurdas Singh
Nadja Koller
Alan Robson
Alistair MacLeod
Neville Chiavaroli
Professor Colin Melville
David Darton
Kate Gregory
Tom Bandenburg
Professor Elizabeth Hughes
Dr Helen Baker
Adam Van Coevorden
Rachel Wilkes
Sander Kristel
Dr Mike Masding

AoMRC
AoMRC Trainees
BMA
BMA MSC
BMA MSC
GAMSAT
DHSC
GAMSAT
GAMSAT
GMC
GMC
GMC
GMC
HEE
HEIW
HESA
HESA
UCAS
UKFPO

1 Welcome and introductions Chair

1. The Chair welcomed members to the UKMED Advisory Board and introduced the new members to the group. Professor Helen Stokes-Lampard has taken over from Dr Carrie MacEwen as the AoMRC representative. Sander Kristel, who has sent his apologies for today's meeting, has taken over from Dr David Best from UCAS. Professor Keith Gardiner has stepped down from his role at NIMDTA and Dr Ian Steele has joined the Advisory Board.

2 Approval of minutes from 29 June 2020 and matters arising Chair

2. The minutes of the meeting on 29 June 2020 were reviewed and approved as an accurate record. Actions from the previous meeting were reported to have been completed.

3 UKMED data load cycle and calendar

3. Daniel Smith presented to the group the completed data loads for 2020. He gave a brief introduction to the data available in UKMED.
4. At the moment, UKMED is working on getting the new UCAS data (2019 entry). Daniel thanked UCAS for being able to provide data to UKMED under the extraordinary circumstances the sector faced during the Summer of 2020.
5. The UKMED team is in discussion with UCAS to obtain the 2020 entry dataset. This will cover the medical school applicants who applied during the pandemic. The new data requested include:
 - a. Centre assessed grades;
 - b. Calculated grades; and
 - c. Final grades.
6. UCAS clarified they do not hold the centre assessed grades where they were the worse grades (i.e., worse than the ones obtained from applying the algorithm to the centre assessed grade. That data is held by the awarding bodies. The final grade is the best grade from either the centre assessed grade of the algorithm grade, where is higher than the algorithm grade it is will be the original centre assessed grade.
7. UKMED will be asking test providers whether their datasets for 2020 include descriptors to identify how tests were delivered. The pandemic meant tests had to be delivered in a different way in 2020 with some tests delivered on-line with remote proctoring and not at a test centre
8. The HESA contract is up for renewal. The current contract covers up to the 2019/20 entrants and this is due to be loaded into UKMED in April 2021. The new contract will cover the existing dataset and the assessment data collection from 2020/21.
9. Daniel highlighted that the HESA dataset can be used for additional purposes such providing data to MSC Assessment to support MLA reporting.
10. In addition to other uses the data scope has not been finalised, possible additions include data on Medical Associate Professions (MAPs) and data on which students were admitted using contextual admissions.

11. The GMC will need to work up a business case to include the MAPs data as they will eventually be responsible for the regulation of this workforce.
12. Contract negotiations will need to conclude by July 2021 to meet UKMED deadlines. The aim is to include all the required information in the contract during its lifetime rather than renegotiate and add new items annually.
13. It was noted that it may be difficult to record contextual data. This information is not currently standardised across schools or recorded reliably.
14. Professor Jon Dowell proposed that the UKMED team to bring back a paper for the next Advisory Board meeting to discuss the inclusion of the additional items in the HESA contract.

ACTION: Daniel Smith to contact test providers and find out whether additional information is captured on how tests were delivered during the pandemic.

ACTION: Daniel Smith to prepare a paper for discussion at the next meeting on HESA contract.

4 Status of active projects

15. Peter Tang provided a high-level update on the status of UKMED projects. Around two-thirds of the applications received are approved by the Advisory Board. Rejected applications are usually invited to resubmit, and just under half of those do end up resubmitting.
16. The majority of approved projects do stay active and make progress. A small proportion stall for various reasons. He highlighted UKMEDP104, where the researchers made an effort to write up a report explaining the reason for the project closure. He noted the paper was included in the papers for this meeting under enclosure 2e.
17. Around a third of the active projects have progressed to making a publication in journals. A fifth are currently either under review by UKMED or are seeking publication in journals. He noted that the team are now monitoring 22 projects that are currently in progress.
18. Professor Chris McManus highlighted interesting findings in the papers circulated to Advisory Board for the UKMEDP043 project. He noted that recently the UKFPO has now stated that the educational achievements component of the EPM will be dropped from foundation recruitment. The UKMEDP043 found that the educational achievements component was predictive of the MRCS exams. This shows the findings of UKMED is important for policy decisions and should be highlighted to UKFPO.
19. Projects that are not proceeding will be marked as closed in a status, on the website, together with a reason for closure.

5 Research applications from Research subgroup 7 December 2020

20. Professor Jon Dowell presented the group with an update from the Research Subgroup meeting. A total of 6 applications was submitted in the current application window. Three projects were approved and 3 were asked to resubmit.

21. He reported that the Research Subgroup proposed a new system for more experienced UKMED users to buddy up with the more novice UKMED users. Volunteers who have successfully used UKMED can pair up with the new users to offer guidance and advice on their UKMED projects.
22. The Research Subgroup also proposed a new training package to be administered virtually to new UKMED researchers. It was highlighted that most of the rejected projects had similar issues regarding the appropriateness of the methods and analysis proposed in the applications. Some of these issues could be avoided with some basic training on UKMED datasets.

ACTION: The UKMED team to work on calling for volunteers to take forward the buddy system.

ACTION: Daniel Smith and the UKMED team to work on providing an online training course for applicants to UKMED.

6 Clinical outcome data - update

23. Tom Oppé gave an update on securing data from NHS Digital for a proof of concept study on clinical outcomes. The project, led by Dr Paul Tiffin and Dr Lewis Patton from York University, investigates whether surgeons follow up to date guidelines on stenting procedures. The intention of the proof of concept study is to link medical education data to data on clinical practice, one of the aims of UKMED, using Hospital Episode Statistics data from NHS Digital.
24. IGARD, the decision-making committee at NHS Digital has asked UKMED to provide some further details on the governance of the project. UKMED will address the IGARD queries on data retention and the display of privacy notices with additional FAQs on the UKMED website.
25. Daniel Smith noted that the York researchers are happy to expand their stakeholder representation on the project, for example by including the British Association of Physicians of Indian Origin (BAPIO).
26. The UKMED has a clear governance structure with the appropriate representatives from the medical students and doctors on the UKMED Advisory Board. The GMC, MSC and the BMA will work together to review the project to provide a response to the queries raised by IGARD.

ACTION: Daniel Smith to provide Latifa Patel (BMA) with details of the clinical outcomes project. Project to be reviewed by the GMC, BMA and MSC. GMC to expand UKMED FAQs to cover IGARD queries.

7 Profile reports including report with test provider scores (previously UKMEDP086) – update

27. Daniel Smith presented an update to the project to include test provider scores in the medical school student profile reports. The project has now been presented to the Medical School's Council Selection Alliance (MSCSA) reference group.
28. The data in the report will be refreshed with 2019 data and then circulated to medical schools' admissions leads under password for final feedback.

29. With the approval from the MSCSA the report will go live in the public domain.

8 Review of Membership – Research Subgroup

30. The membership of the Research Subgroup was due for a review and the Advisory Board was asked to review the Terms of Reference and provide feedback and recommendations.

31. Martin Hart queried whether the Advisory Board and Research Subgroup could benefit from the addition of other groups. For example, currently there are no NHS representatives on the groups, but the research and findings eventually have an effect on the workforce and the services it provides.

32. It was noted that there was currently no time limit for the Chair of the Research Subgroup. The UKMED team was asked to review the length of terms for members of the Research Subgroup.

ACTION: The UKMED team to review the Research Subgroup membership for 2021.

9 HESA assessment data and medical school extracts update

33. Daniel Smith provided an update on the workstream to collect assessment data from medical schools. The GMC have made progress in getting in touch with the medical school contacts who will be sharing the data in the future.

34. The GMC have asked schools to submit information about what type of assessments are in use in 2020/21 to prepare for the data collection towards the end of 2021. The GMC will also be asking medical schools to provide information about whether assessments had changed due to the pandemic. This will help provide some context to researchers who will be using this data to do research. In the spring term the GMC will be discussing with each school their ASSESSMENT table and de-identified exam board submissions.

35. Daniel Smith thanked the medical schools for participating in the project as it will help fill a large gap in the database. UKMED will now have outcomes for students who entered medical schools without A-Levels.

10. AOB - 2021 meeting dates

36. The 2021 meeting dates are scheduled for:

- a. 25 June 12.30 – 16.30 (Friday) – GMC London office and Zoom (TBC)
- b. 16 December 13.00 – 17.00 (Thursday) – GMC London office and Zoom (TBC).

37. The Advisory Board was asked to review the length of the Advisory Board meetings. It was necessary to reduce the meeting times for virtual meetings to keep the discussion focused and reduce fatigue.

38. Face-to-face meetings were thought to benefit from a longer meeting as this enabled important and useful discussions. However, this will be under review and balanced if future hybrid meetings (in-person and virtual) are offered.

39. It was noted that it would be useful to see presentations in advance when Advisory Board representatives send deputies or when there is a changeover. Daniel Smith highlighted to the Advisory Board that he and Peter Tang normally offer induction

meetings to new members to get them up to speed with UKMED discussions. He is happy to offer this to Advisory Board members who may need to deputise in future meetings.

ACTION: Daniel and Peter to offer induction when sending out meeting reminders.

Session 2

11 Presentation from researchers - UKMEDP051 - A comparison of the properties of BMAT, GAMSAT and UKCAT

40. Dr Lewis Paton presented the findings from the UKMEDP051 project. He focused on one aspect of the project investigating whether undergraduate selection scores predict postgraduate exam outcomes and clinical simulation performance. With the current data available, a reasonable proxy for clinical performance is to use clinical simulation exam performance. The MRCP(UK) exams were used for this project as this had the most cases for the cohort of interest.
41. Results were presented showing how BMAT and UCAT scores relate to performance on the MRCP(UK) Part 1, Part 2, and PACES. The presentation focused on the results for the population that took both BMAT and UCAT.
42. The BMAT components scores for aptitude and skills, scientific knowledge and applications, and the total score predicted the odds for passing the MRCP(UK) Part 1. The scientific knowledge and applications component was the strongest predictor with the largest effect size. The writing skills component was not predictive. Similar results were found for the predicting passing the MRCP(UK) Part 2 exam, while for PACES only the aptitude and skills component was predictive.
43. The UCAT component scores for abstract reasoning and decision analysis were not predictive of passing MRCP(UK) Part 1. The quantitative reasoning, verbal reasoning components, the total score and a weighted balanced total score were predictive of passing MRCP(UK) Part 1. For MRCP(UK) Part 2 and PACES, only the verbal reasoning score and the balanced score were significant predictors for passing the exams.
44. Both BMAT and UCAT scores possess incremental validity for MRCP(UK) exam performance. The aptitude and skills and the verbal reasoning appear to be most predictive of passing PACES.
45. The findings raise several questions:
 - a. Should medical school selectors place more weight on the most predictive components? It is acknowledged that selectors choose applicants for a range of reasons other than just passing exams.
 - b. The balanced UCAT score adds more value over raw UCAT score. Should medical schools see the balanced UCAT score as well as the commonly used raw scores?
 - c. Generalizability to other Royal College exam performance is unclear at this stage. The analysis could be repeated for the MRCPGP exams more data is available.
 - d. It is not clear how MRCP(UK) PACES performance relates to actual clinical practice.

46. It is important to note that the findings are currently only relevant to outcomes assessed in the project.
47. The Advisory Board thanked Lewis for the presentation and congratulated his team for the interesting and impactful findings from the project.

Summary of actions from Friday 18 December 2020 UKMED Advisory Board meeting and carried forward from earlier meetings

Actions	Status
(i) Daniel Smith to document discrepancies and send to UCAS and HESA.	In progress
(ii) Daniel Smith/Peter Tang to start drafting an updated paper describing UKMED.	In progress
(iii) Research Subgroup to explore how curriculum data could be mapped and collated for research purposes.	In progress
(iv) Daniel Smith to contact test providers and find out whether additional information is captured on how tests were delivered during the pandemic.	
(v) Daniel Smith to prepare a paper for discussion at the next meeting on HESA contract.	
(vi) The UKMED team to work on calling for volunteers to take forward the buddy system.	
(vii) Daniel Smith and the UKMED team to work on providing an online training course for applicants to UKMED.	
(viii) Daniel Smith to provide Latifa Patel (BMA) with details of the clinical outcomes project. Project to be reviewed by the GMC, BMA and MSC. GMC to expand UKMED FAQs to cover IGARD queries.	
(ix) The UKMED team to review the Research Subgroup membership for 2021.	
(x) Daniel Smith and Peter Tang to offer induction when sending out meeting reminders.	

Glossary

AoMRC	Academy of Medical Royal Colleges, www.aomrc.org.uk
ARCP	Annual Review of Competence Progression
BAPIO	British Association of Physicians of Indian Origin
BMA	British Medical Association, www.bma.org.uk
BMAT	BioMedical Admissions Test, www.admissionstesting.com/for-test-takers/bmat/about-bmat
COPMeD	Conference of Postgraduate Medical Deans (UK), www.copmed.org.uk
DHSC	Department of Health and Social Care, www.gov.uk/government/organisations/department-of-health-and-social-care
DPA	Data Protection Act, www.gov.uk/data-protection/the-data-protection-act
EEA	European Economic Area
EPM	Educational Performance Measure
FPAS	Foundation Programme Application System
FtP	Fitness to Practise
GAMSAT	Graduate Medical School Admissions Test, www.gamsat.acer.edu.au
GDPR	General Data Protection Regulation, https://www.gov.uk/government/collections/data-protection-act-2018
GMC	General Medical Council, www.gmc-uk.org
HEE	Health Education England, www.hee.nhs.uk
HEIW	Health Education and Improvement Wales, www.heiw.nhs.wales
HES	Hospital Episode Statistics, www.digital.nhs.uk/data-and-information/data-tools-and-services/data-services/hospital-episode-statistics
HESA	Higher Education Statistics Agency, www.hesa.ac.uk
HIC	Health Informatics Centre, www.medicine.dundee.ac.uk/hic
IS	Information Services (part of GMC)
LRMP	List of Registered Medical Practitioners
MAPs	Medical Associate Professions
MSC	Medical Schools Council, www.medschools.ac.uk
NES	NHS Education for Scotland, www.nes.scot.nhs.uk
NIHR	National Institute for Health Research, www.nihr.ac.uk
NIMDTA	Northern Ireland Medical and Dental Training Agency, www.nimdtta.gov.uk
PID	Project Initiation Documentation
PIRE	Project Implementation Review and Evaluation
PSA	Prescribing Safety Assessment
SEC	Socio-Economic Classification
SJT	Situational Judgement Test
UCAS	Universities and Colleges Admissions Service, www.ucas.com
UCL	University College London
UCAT	University Clinical Aptitude Test, www.ucat.ac.uk
UKFPO	UK Foundation Programme Office, www.foundationprogramme.nhs.uk
WPG	Work Psychology Group, www.workpsychologygroup.com