

# Notes of a meeting of the UK Medical Education Database Advisory Board Monday 29 June, 12.00 – 14:00 Zoom Virtual Meeting Room

### Attendees

Attendees		
Professor Steve Thornton		Chair
Professor Jon Dowell	Resea	rch Subgroup Chair
Dr Katie Petty-Saphon		MSC
Dr Simon Fleming		AoMRC Trainees
Dr Helena McKeown		BMA
Dr Chris Smith		BMA MSC
Graeme Larkin		BMA MSC
Mark Shannon		BMAT
Professor Bill Irish		COPMed
Neville Chiavaroli		GAMSAT
Professor Elizabeth Hughes		HEE
Dr Helen Baker		HEIW
Professor Adam Hill		NES
Professor Keith Gardiner		NIMDTA
Richard O'Kelly		UCAS
Rachel Greatrix		UCAT
Professor Chris McManus		UCL
Dr Mike Masding		UKFPO
Andrew Ledgard		GMC
Daniel Smith		GMC
Jessica Lichtenstein		GMC
Martin Hart		GMC
Sean Corrigan		GMC
Tom Bandenburg		GMC
Tom Oppé		GMC
Peter Tang		MSC
Fahmida Yasmin		MSC
Apologies		
Professor Caroline MacEwen		AoMRC
Alastair Henderson		AoMRC
Dr Gurdas Singh		BMA MSC
Nadja Koller		GAMSAT
Alan Robson		DH
Alistair MacLeod		GAMSAT
Professor Colin Melville		GMC
David Darton		GMC
Kate Gregory		GMC
Jonathan Howes		HEE
Adam Van Coevorden		HESA
Rachel Wilkes		HESA
Dr David Best		UCAS



### 1 Welcome and introductions Chair

 The Chair welcomed members to the UKMED Advisory Board and introduced the new members to the group. Professor Adam Hill has taken over from Dr Duncan Henderson as the NES representative. Professor Helen Stokes-Lampard will be taking over from Professor Carrie MacEwen as the AoMRC representative at the next meeting.

#### 2 Approval of minutes from 20 November 2019 and matters arising Chair

- 2. The minutes of the meeting on 20 November 2019 were reviewed and approved as an accurate record. Actions from the previous meeting were reported to have either been completed or were in progress.
- 3. Professor Jon Dowell reported that Professor Jayne Parry had joined the Research Subgroup as the UCAT representative, taking over from Professor Sandra Nicholson.
- 4. The Research Subgroup has put onto place a 3 monthly review window to help expediate timelines for UKMED projects that have completed their final reports. It was noted that the Advisory Board does not meet every 3 months. To avoid overburdening the Advisory Board with final reports via email, it was agreed that the Advisory Board Chair provisionally approve the final reports and then present to the reports at the next Advisory Board meeting.

**ACTION:** Peter Tang to update guidance on the 3 monthly review process.

### 3 UKMED data load cycle and calendar

- Daniel Smith presented to the group the completed data loads for 2020. The live UKMED data now contains HESA data from 2002 to 2017, UCAS data from 2007 to 2018, and postgraduate data from 2012 to 2019. The May 2020 data dictionary contains the list of data fields now live in UKMED
- 6. HESA 2018/19 data have been received and will be added to the database. The 2019 UCAS data will be coming soon, Daniel Smith has made a request for the new dataset.
- 7. The test providers (BMAT, GAMSAT, UCAT) will be asked to supply additional metadata that will be useful to researchers and reports. Information on when and if medical schools use the test provider scores for admissions will be important to provide context to the data and research findings.
- 8. The data sharing agreement for e-Portfolio data has been signed. The UKMED team is working with HEE to get the data ready for October 2020. This includes data from the Turas and Horus systems and data will be collected when systems are closed and there are no further amendments. Daniel Smith thanked Kata Varnai from HEE for her support on the project.

### 4 Status of active projects

9. Professor Jon Dowell thanked Daniel Smith and Peter Tang for gathering data on the UKMED projects for reporting back to the group. A total of 41 projects have been



approved out of 59 applications made to UKMED (69 applications received in total, 10 were resubmissions) giving an approval rate of around 70%. 39 out of the 41 projects progressed, with only 2 projects put on hold. Of the 39 projects that progressed, 9 projects have completed with published outcomes either in journals or on the UKMED website, 3 are seeking publication in a journal, and 8 are under review by the Research Subgroup. This leaves 19 active projects that are still open. Figures do not include the current round of applications.

- 10. This was seen as a positive marker of activities within UKMED. Professor Jon Dowell noted that the UK was ahead of other countries with the establishment of UKMED, citing a recent paper published by the New York Medical School undertaking similar research, but being restricted to an individual medical school.
- 11. Daniel Smith explained that some projects have been affected by Covid-19 as some researchers are also clinicians and have had to return to clinical work during the pandemic.
- 12. Two projects were highlighted to the Advisory Board for advice. UKMEDP110, a project investigating the performance of Multiple Mini Interviews (MMI) require local MMI data from Keele, the researcher's own institution. The university's local information governance wants to use their own Data Sharing Agreement instead of the GMC's. The GMC highlighted that it would not be consistent if each data provider signed a different agreement, and it is not possible for the GMC to resource negotiating different agreements with every medical school.
- 13. The group discussed the use of a single template Data Sharing Agreement. While the Data Protection Act (DPA) and the General Data Protection Regulation (GDPR) are universal and apply equally to all universities, the details within the Data Sharing Agreement are dependent on local policies on data use.
- 14. UKMEDP073, a proposal examining which factors predict recruitment to obstetrics and gynaecology, has encountered issues with obtaining obstetrics and gynaecology curriculum data from undergraduate leads. MSC has explored ways to automate the collation of curriculum data within medical schools as this information is frequently requested by individual specialties. Imperial's Sophia system was explored, but due to limitations in the software and cost, it is currently not possible to full automate this and the alternative methods are resource intensive.
- 15. The group discussed how information could be collated, including using a student led data collection method. The Research Subgroup could explore how the information could be collated.

**ACTION:** Research Subgroup to explore how curriculum data could be mapped and collated for research purposes.

### 5 Research applications from Research subgroup 19 June 2020

16. Professor Jon Dowell presented the group with an update from the Research Subgroup meeting. A total of 10 applications was submitted in the Spring 2020 application window. He highlighted UKMEDP112 was approved through an emergency release process to enable the research to contribute to the discourse around changes to the admissions for 2020 due to the Covid-19 pandemic. Processor Chris McManus thanked UKMED for setting up a process to fast track the



release of the project.

- 17. UKMEDP117 was an application investigating the socio-economic variation in surgical training. It was noted that the research questions in this project have been explored in other projects. The Research Subgroup recommended to invite the applicants to resubmit their applications and to explore research questions that have not yet been answered. It was noted that the application was made by surgical trainees and may benefit from receiving support from supervisors with more statistical experience.
- 18. UKMEDP122 was rejected as this was related to a prior project, UKMEDP031. The project stalled when the applicants were unable to supply local prescribing assessment data to UKMED. The UKMED team are working with the applicants to restart UKMEDP031, subject to being able to load the data from South Thames Foundation School regional prescribing assessment.

### 6 Clinical outcome data - update

- 19. 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.
- 20. NHS Digital has refused to the release of the data, IGARD, the decision-making committee at NHS Digital has decided not to recommend the project.
- 21. The GMC asked the Advisory Board on advice for how to progress.
- 22. The group discussed the potential negative implications for releasing clinical outcome data for research. It was noted that the Royal College of Surgeons publish more detailed individual level data without negative impact.
- 23. The group agreed that the GMC should ask NHS Digital to reconsider their approach.

### 7 Doctors mental health project (DMH): Secondary data analysis of mental health care records of doctors in Wales via SAIL databank

- 24. Andrew Ledgard updated the GMC's position on participating in the SAIL project to analyse doctors with mental health issues in Wales. The GMC sought advice from their legal department on the lawful basis for participating in the project. The lawyers said the GMC may be at risk of acting *ultra vires* in participating in the project. In light of the pandemic when doctors are under more pressure, there may be legal and legitimate reason to participate in the public interest.
- 25. The Advisory Board was asked for advice on whether to proceed.
- 26. Dr Helena McKeown had conducted surveys to investigate students' and doctors' wellbeing during the pandemic that suggested mental health had deteriorated. Dr Chris Smith added that there was controversy over the methodology of using SAIL and the potential to re-identify doctors as Wales is a small area. Students and doctors know how their data is currently used in UKMED, however linking to health



records is a big departure from the original purpose for processing the data. The impact of Covid-19 should not change the fundamental concerns about the privacy and security of doctors' health records. The BMA and BMA MSC recognised the importance of the research but cannot support the project in its current form.

- 27. Daniel Smith explained that a third party would perform the matching between SAIL and UKMED to return an anonymised list for research. This is in line with standard anonymisation techniques used in data management but acknowledged that may still be controversial to the data subjects that it would involve.
- 28. The Advisory Board has advised the GMC to discontinue the project as the legal position under the Medical Act for participating was weak. There are also concerns around the security and information governance from the doctors' representatives regarding the linking of their medical education data to their health records.

ACTION: The GMC to reply to SAIL researchers with the Advisory Board decision.

### 8 Process for emergency release of research/ governance for access to UKMED data to support sector wide analysis and reviews

- 29. Daniel Smith reported that the governance process for supporting sector wide analyses using UKMED data had been drafted. The data shared is not for research that will be published in a journal or for workforce planning. This opens a route to enable the use of UKMED data to support national reviews, in this case the modelling of foundation programme allocations and the impact on different demographics.
- 30. This is only available to organisations or groups that have a legitimate remit to perform these reviews. The Data Sharing Agreement for HEE's Foundation Programme Review has been signed.
- 31. A governance process has been drafted to enable the emergency release of UKMED projects. UKMEDP112 was granted an emergency release by the UKMED Chairs after the application was reviewed the Research Subgroup and Advisory Board via email. The emergency release is only available to UKMED researchers who already have access to UKMED for active and existing projects approved but required an additional application to use the data to answer a different research question. Professor Chris McManus already had access to UKMED data for other projects, but these projects did not explicitly allow him to answer questions about the impact of Covid-19. He applied under UKMEDP112 to investigate the predictive validity of calculated and predicted grades for undergraduate and postgraduate outcomes.
- 32. Daniel Smith noted that new data could be added to the existing data extracts that researchers have to answer the research question. However, he explained that this would require the diverting of GMC resources to fulfil the request and may take up to two weeks to complete.
- 33. The Advisory Board was supportive of the measures put in place and to use the data in the most appropriate way but recognised that Covid-19 was unusual and a rare event.



#### 9 Safe Haven – contract renewal

- 34. The contract for the Safe Haven is coming up for renewal and under procurement rules, the GMC is required to put the bid up for tender. The Safe Haven contract will end on 17 November 2021 and the GMC will start the tendering process in early 2021.
- 35. The GMC is happy with the Dundee Health Informatic Centre servers, the current providers of the Safe Haven. They have been very accommodating with making the Safe Haven more efficient.
- 36. Daniel Smith asked the Advisory Board whether there were any requirements for the Safe Haven.

**ACTION:** Advisory Board members to notify Daniel Smith about any specific requirements for Safe Haven.

#### 10. COVID19 – documentation of calculated grades/specific ARCP outcomes

- 37. Due to the Covid-19 pandemic, some UKMED datasets will change slightly. Daniel Smith stated the importance of documentation for posterity, so that researchers understand how processes changed during 2020 and possibly 2021. This will affect applications in 2020 for level 3 qualifications and 2022 for level 2 qualifications
- 38. The ARCP outcomes will now include a new code to indicate trainee progression that has been impacted by the Covid-19 pandemic. The impact on postgraduate training will be reported on when the 2020 ARCP data return is completed.
- 39. The UCAS qualifications data will have an additional data column to flag qualifications where the grade was calculated, 2020 entry will use calculated grades instead of actual grades.
- 40. The GMC is documenting how Covid-19 has impacted the Medical Royal College exams and what happens with trainee progression with regards to passing exams.
- 41. Daniel Smith invited the Advisory Board to notify him of any other changes happening in the sector as a result of the Covid-19 pandemic.
- 42. Richard O'Kelly clarified that the calculated grades have the same value as grades achieved by exam as far as the admissions process is concerned. UCAS should be able to determine this from the data they have available.
- 43. Dr Helena McKeown highlighted that the BMA MSC have done a lot of work on the impact of Covid-19. She highlighted concerns with GCSEs, as some schools promote resits based on the predicted grades, and this could become a problem for widening access in medicine. Admissions using GCSE grades need some special consideration as some individuals from widening participation backgrounds may not be able to retake their exams to prove that they would have performed better than their predicted grades.

**ACTION:** Advisory Board members to notify Daniel Smith about any changes in the sector that could have an impact on UKMED data or UKMED related research.



### 11. Profile reports including report with test provider scores (previously UKMEDP086)

- 44. Daniel Smith presented to the Advisory Board a version of the applicant profile report with the test provider scores included. The original project, UKMEDP086, has been taken outside of UKMED to include in the general reports produced for the MSC Selection Alliance.
- 45. The information will be updated annually to present descriptive statistics on the test provider scores by medical school. He noted the information could be put in the pubic reports to reduce the number of FOI requests made to individual medical schools for data.
- 46. The demo of the report is currently only available under password. The report has been made available to the test providers and the MSC Selection Alliance Board for review.
- 47. The group discussed the issue with ranking medical schools using data available in the public domain and coming to conclusions without the necessary context. While the group agreed that providing the context could mitigate erroneous conclusions from the data, there was still a risk that league table could drive applicant behaviour in a way that could introduce unintended consequences.
- 48. Professor Chris McManus highlighted that league tables already exist in many forms, with some being very inaccurate. This could be a way to provide accurate information to applicants. It was noted that the information applicants have access to was not a level playing field as some, but not all, could FOI the information. Professor Liz Hughes agreed that not providing a level playing field for access to information could disadvantage widening participation students. It would be useful to point students to correct data rather than let them rely on inaccurate sources. The findings from the UKMACS survey found applicants were concerned about receiving or finding the right information for applying to medicine.
- 49. The Advisory Board was reminded that every year medical schools provide information to the MSC to produce a guide to medical school entry requirements for the MSC website. This does not currently include information on the test scores.
- 50. A paper should be produced for the Medical Schools Council so that medical schools are given a chance to comment.
- 51. Professor Jon Dowell proposed that work should continue with the MSC Selection Alliance to see how the data is made useful to applicants to medicine.

**ACTION:** Daniel Smith and Peter Tang to produce a paper for MSC Council – adding test provider scores to the profile reports.



#### 12. New Research process with extract in database

- 52. The research process has been updated. Daniel Smith reported that each extract for UKMED projects will be provided as a database in the Safe Haven. This will resolve some technical issues and make the flow of data more efficient. It is expected that this will reduce the resources required for putting data into the Safe haven as staff are increasingly working from home.
- 53. Researchers will be able to go into their database extract to manage and extract the data they need for analysis rather than work with one extremely large extract.
- 54. Daniel Smith thanked Peter Tang for testing the new process to ensure that the database can be extracted by the various software used by researchers (R, SPSS, and Stata software were tested).
- 55. The UKMED team will put sample SQL scripts and learning resources in the Safe Haven and on the UKMED website so that researchers can use the new method for connecting to the data.

#### 13 HESA assessment data and medical school extracts update

- 56. Daniel Smith reported on the progress with collecting medical school assessment data through HESA. For the first spreadsheet pilot year, the dataset will be restricted to first year and final year assessments. This ensures there will be some data available for the UKMACS project (UK Medical Applicant Cohort Study).
- 57. The data collection has been scoped down to only include assessments that have scores. Assessments with binary pass/fail outcomes will not be included in the data load.
- 58. Skype meetings were held with five medical schools that provided some invaluable information on their local assessments, and the structure of their data. For the first year of the spreadsheet return, schools can either return their existing exam board spreadsheets or use the template that the GMC will provide. The data will be returned to HESA in Q4 of 2021 by all schools and available to UKMED researchers in Q1 2022.
- 59. There was some uncertainty over whether all medical schools will be returning data in the first year of HESA assessment data collection (2020/21). Daniel Smith clarified that the five schools volunteered to discuss the first year of spreadsheet collection and help refine the template and materials prior to publishing the collection notice on the HESA website for all schools. The GMC have employed an additional analyst to process the returns.
- 60. The Advisory Board was reminded that support for the data collection was given at the May 2019 meeting to ensure there are outcome data for the UKMACS project.
- 61. The assessments data will be collected once the records are closed. This means the data should reflect changes from exam resits and appeals.

**ACTION:** MSC to inform MSC Council about the HESA assessment data collection and is kept up to date with progress.



### 14 AOB – 2020 meeting dates

62. Friday 18 December 2020, 10.30–14.30 GMC, Regent's Place, 350 Euston Road, London, NW1 3JN Note, the next meeting may be held virtually via Zoom.

## Summary of actions from Monday 29 June 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
<i>(ii)</i>	Daniel Smith/Peter Tang to start drafting an updated paper describing UKMED.	In progress
(iii)	Peter Tang to update guidance on the 3 monthly review process.	
(iv)	Research Subgroup to explore how curriculum data could be mapped and collated for research purposes.	
(v)	The GMC to reply to SAIL researchers with the Advisory Board decision.	
(vi)	Advisory Board members to notify Daniel Smith about any specific requirements for Safe Haven.	
(vii)	Advisory Board members to notify Daniel Smith about any changes in the sector that could have an impact on UKMED data or UKMED related research.	
(viii)	Daniel Smith and Peter Tang to produce a paper for MSC Council – adding test provider scores to the profile reports.	
(ix)	MSC to inform MSC Council about the HESA assessment data collection and is kept up to date with progress.	



### Glossary

AoMRC	Academy of Medical Royal Colleges, www.aomrc.org.uk
ARCP	Annual Review of Competence Progression
BMA	British Medical Association, <u>www.bma.org.uk</u>
BMAT	BioMedical Admissions Test, <u>www.admissionstestingservice.org/for-test-</u>
	takers/bmat/about-bmat
COPMeD	Conference of Postgraduate Medical Deans (UK), <u>www.copmed.org.uk</u>
DH	Department of Health, <u>www.gov.uk/government/organisations/department-of-health</u>
DPA	Data Protection Act, <u>www.gov.uk/data-protection/the-data-protection-act</u>
EEA	European Economic Area
EPM	Educational Performance Measure
FPAS	Foundation Programme Application System
FtP	Fitness to Practise
GAMSAT	Graduate Medical School Admissions Test, <u>www.gamsat.acer.edu.au</u>
GDPR	General Data Protection Regulation,
	https://www.gov.uk/government/collections/data-protection-act-2018
GMC	General Medical Council, <u>www.gmc-uk.org</u>
HEE	Health Education England, <u>www.hee.nhs.uk</u>
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, <u>www.hesa.ac.uk</u>
HIC	Health Informatics Centre, <u>www.medicine.dundee.ac.uk/hic</u>
IS	Information Services (part of GMC)
LRMP	List of Registered Medical Practitioners
MSC	Medical Schools Council, <u>www.medschools.ac.uk</u>
NES	NHS Education for Scotland, <u>www.nes.scot.nhs.uk</u>
NIHR	National Institute for Health Research, <u>www.nihr.ac.uk</u>
NIMDTA	Northern Ireland Medical and Dental Training Agency, www.nimdta.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, <u>www.ucas.com</u>
UCL	University College London
UCAT	University Clinical Aptitude Test, <u>www.ucat.ac.uk</u>
UKFPO	UK Foundation Programme Office, <u>www.foundationprogramme.nhs.uk</u>
WPG	Work Psychology Group, <u>www.workpsychologygroup.com</u>