Notes of a meeting of the
UK Medical Education Database Development Group

Thursday 3 November 2016, 10.30 – 13.00
Boardroom, Woburn House, 20 Tavistock Square, London WC1H 9HD

Attendees

Professor Steve Thornton	Chair
Harrison Carter	BMA MSC
Professor Jon Dowell	Research Subgroup Chair
Siobhan Fitzpatrick	MSC
Keith Gardiner (tel)	NIMDTA
Rachel Greatrix	UKCAT
Duncan Henderson	NES
Jonathan Howes (tel)	HEE
Edward Knight	MSC
Andrew Ledgard	GMC
Dr JP Lomas	AoMRC Trainees
Marita MacMahon Ball	GAMSAT
Professor Chris McManus	UCL
Pete McNair	GMC
Thomas Oppé	GMC
Dr Katie Petty-Saphon	MSC
Mark Shannon	BMAT
Daniel Smith	GMC
Peter Tang	MSC
Kim Walker	UKFPO
Kirsty White	GMC

In attendance for item 6

Helen Barron	Work Psychology Group
Helena Edwards	Work Psychology Group
Professor Fiona Patterson	Work Psychology Group
Sally Thomas	University of Bristol

Apologies

Paul Buckley	GMC
Professor Jane Dacre	AoMRC
David Darton	GMC
Professor Bill Reid	COPMeD
Alan Robson	DH
Veronica Vele	GAMSAT

1. Welcome and introductions

The Chair welcomed members to the meeting. Introductions were made with a particular welcome extended to Peter Tang attending his first meeting as the MSC analyst supporting the UKMED project. Apologies were noted.

2. Approval of minutes from 15 June 2016   Enc 1

The minutes were agreed to be an accurate record. Actions from the previous meeting were reviewed:

Action from Jun 2016	Status	Owner
Data dictionary to be updated.	Closed – presentation provided in item 9	Daniel Smith
Medical Schools Council to advise on priorities for new datasets to be included	Closed – presentation provided in item 11	MSC
Research sub-group to propose model(s) of membership for the Research sub-group as part of evaluation of Phase One	Closed	Research sub-group
To take a paper to the AoMRC Assessment Committee, outlining the benefits of linking their data with PLAB and prior attainment	Closed	Daniel Smith
Professor Jon Dowell to circulate draft editorial for comment and approval from Development Group	Comments invited by email	Professor Jon Dowell

3. Phase 1 update summary

Kirsty White gave an update to members on the progress of Phase 1. As of June 2016:
- Three Tranche 1 research projects are nearing completion with the findings being presented at this meeting
- Four Tranche 2 research projects are underway, with interim findings considered by the Research sub-group in October
- A number of safe haven usage challenges have been identified, including increasing the number of concurrent users from 10 to 12.

The next steps for Phase 1 Tranche 1 projects were outlined:
- Data sets are to be archived for future access
- Final files and syntaxes used for analyses are to be clearly labelled and recorded on the safe haven file register
- Additional future access to archived files for researchers to be agreed. For example, queries may arise as part of the journal publication process.

Reports from the Tranche 2 projects will be presented at the Development Group on 27 March 2017.

4. Legal Advice on international research access through safe haven   Enc 2

Thomas Oppé briefed the group on the legal advice the GMC received regarding access to the UKMED database by international researchers. Access to the safe haven by international researchers would not violate the eighth principle of the Data Protection Act (DPA) where personal data cannot be transferred outside of the European Economic Area (EEA) because there is no transfer of personal data.

The information has been de-identified and the data extract does not contain any personal data. When UKMED data contributors have access to the data extracts, it may be considered a transfer of personal data because there is a theoretical potential for re-identification, though unlikely. Under these circumstances, the features of the safe haven and the data sharing agreements that are in place between the involved parties are intended to provide protection from re-identification (in addition to the de-identification processes).

The group was advised that alternative arrangements may need to be considered in May 2018 when the DPA is replaced by the General Data Protection Regulation (GDPR). A number of points about the GDPR were noted:
- It is more restrictive than the DPA regarding international transfers of personal data
- Prevents self-assessment as a method of evaluating adequacy of compliance
- If the UK remains an EU member, then the GDPR will be implemented. It is unclear whether the data protection legislation will be re-drafted in the event of the UK leaving the EEA
- The GMC as the data controller will continue to monitor developments and advise UKMED when necessary.

5. Report from the Research sub-group
  a. Minutes of meeting 5th October 2016   Enc 3

The minutes of the meeting from the Research sub-group on the 5th October 2016 were accepted and Professor Jon Dowell gave a summary of the key learning points.

The membership and configuration of the Research sub-group were discussed. The Development group was happy with the current arrangements. It was agreed that the current size allows the group to remain focused. It was suggested that it was not necessary to include all data contributors at all Research sub-group meetings, only when data from the data contributor is being discussed for use in research.

ACTION: UKMED needs to develop a guideline on publication, for example, it might be reasonable for researchers to be allowed to seek acceptance for a journal publication within one year of agreed end of project before it defaults to being published on the UKMED website. However, this needed to be considered in the context of the research findings which are likely to relate to recruitment and assessment cycles with constrained opportunities for changes. It may be that findings need to be acted on by education providers before publication. The Research sub-group to consider whether there are any similar situations in other fields that lessons can be learnt from.

There was a discussion about the potential to produce reports to improve understanding of training pathways, which may also support workforce planning. The Research sub-group discussed the idea of 'trusted organisations' that may be allowed to access datasets to generate reports and other analysis. The Development group felt that it would be risky to bypass the standard UKMED application process as it could allow individual organisations to conduct research without fully understanding all the data. It was also noted that the safe haven has a limit on the number of concurrent users.

However, the Research sub-group felt that the review of potential training pathway reports would be beyond the scope of the sub-group and information on reports should be shared directly with the Development group.

ACTION: MSC and GMC to explore with HEE, NES and others what training pathway analysis would be helpful.

The relationship between the GMC and HESA will continue. The group felt HESA should be invited to join the Development Group and the Research sub-group with attendance on an as required basis.

b. Tranche 1 research report – Predicting Fitness to Practise issues from admission profiles in UK medical school entrants   Enc 4

The group looked at the findings from the study and agreed there were some interesting results from the Tranche 1 research.

Daniel Smith noted that the self-reported fitness to practise (FtP) information provided to the GMC at the point of provisional registration is a self-declaration and the reliability could be explored by comparing the information held by the medical schools. The MSC and GMC are exploring the option of including row by row student fitness to practise data for final year medical students from the medical schools. Members of the Development Group were advised that even when row by row data are recorded, there may be variability between how medical schools record and process FtP cases.

The group discussed the value of including information on students who did not gain provisional registration with the GMC to evaluating education programmes and improving understanding of training pathways.
The group recognised that UKMED needed to collect data on 'excluded' students, those that do not go on to the LRMP, otherwise UKMED would be at risk of losing a significant amount of data and risk being unrepresentative of the population. *Post meeting note – the GMC has reviewed the information governance notice for the Excluded Students' database and concluded that changes would need to be made before the data could be received by the GMC.*

c. Tranche 1 research report – What has been the impact of accelerated graduate-entry medicine courses in terms of educational and sociodemographic profile, success at medical school, completion of Foundation training, and specialty entry?   Enc 5

The group agreed that there are some important learning points to be taken from the report.

The Educational Performance Measure (EPM) deciles are not calculated in the same way between each medical school. Professor Chris McManus also noted that the EPM deciles include both graduates and non-graduates in the rankings which meant that there were some limitations with using the data to answer some research questions.

There was a discussion around the circulation of reports prior to publication. The reports should be confidential and not shared widely until the results are published in a journal article or on the UKMED website. However, it was acknowledged that Development group members whose data were used in the report would need to discuss with colleagues the use of the data and the impact of the findings to inform discussion at Development Group meetings, limited circulation for this purpose should be permitted.

ACTION: Research sub-group to explore the options on sharing reports more widely with data contributors before publication.

> **d. Tranche 1 research report – Do the Educational Performance Measure decile score and SJT predict successful completion of the foundation programme?** **Enc 6**

The meeting considered the findings of the report, which would be of particular interest to the UKFPO in determining the appropriate weightings of the EPM and Situational Judgement Test (SJT) components of the Foundation Programme selection score. There were still some concerns around the interpretation of some of the findings.

ACTION: Daniel Smith to present the findings of the study to the UKFPO Rules Group

The group discussed whether researchers would be permitted to perform analyses that were not declared in the research proposal. It was debated that an approved research proposal was in effect a data agreement on what the data can and cannot be used for. However, it was also noted that some extra analyses can legitimately be required to explore and understand the data to ensure that the proposed analyses are appropriate.

ACTION: Research sub-group to advise on whether additional analyses that are not declared in the proposals can be carried out and whether it should be reported on.

> **6. Prior attainment, *Sally Thomas*** **Enc 7**

The Work Psychology Group (WPG) joined the meeting to present its report on developing a Value Add Methodology to explore prior attainment. The aim of the study, which was commissioned by the GMC was to evaluate the appropriateness of the methodology.

The report demonstrated that some of the variation in SJT scores by medical school could be accounted for by prior attainment however it would be desirable to develop outcome measures which could be mapped more closely to the prior attainment measures eg once the UKCAT is included the utility of the SJT at foundation will increase.

Currently, there are no outcome measures of academic attainment that are consistent across all medical schools. The Medical Licensing Exam may in the future provide one.

Chris McManus raised a number of questions about the methodology and other members identified further work that could usefully be done on the draft report, it was agreed that members would provide detailed feedback by email.

The group also noted that the presentation was very helpful and felt the report structure could more closely follow that of the presentation to clarify that the commission was to explore potential methodologies rather than generate findings comparing value-add, at this stage

ACTION: All members to email comments to Daniel to collate for WPG

This feedback will include restructure of the report to mirror the presentation to focus on the development of the methodology, rather than focusing on the findings.

> **7. The proposed model for business as usual** **Enc 8**

Kirsty White presented three options for moving UKMED into Phase 2:
- Option A – Close the project and end the pilot at the end of Phase 1
- Option B – Grow UKMED incrementally using the current model with slow development into business as usual
- Option C – Grow UKMED rapidly by scaling up the resources to support all acceptable requests and add data as available.

The group accepted that option B would be the most reasonable approach to moving UKMED into a business as usual model. Priority datasets would be identified and added incrementally. The Terms of Reference for the Development Group and Research sub-group will need to be updated to reflect on the move towards a business as usual model coming out of Phase 1.

The GMC provided an overview of the projected operational costs over the next three years for the GMC supporting UKMED. The group agreed that costs for each organisation should be calculated to demonstrate a shared financial contribution to the project. Cost recovery options were discussed. Jon Dowell shared the view that a focus on cost recovery would be detrimental to the support of the project and that there would also be a risk where charging to use the database would deter researchers from using UKMED. While Marita MacMahon Ball thought that where non-contributors wished to access data the cost of providing the extract should be passed on. Members agreed to consider examples from their networks and other sectors that could inform future discussions.

Pete McNair presented an annual work plan for moving UKMED into Phase 2 based on the incremental growth model. Some of the key points of the annual plan include having two cycles per year, dedicated time from the GMC IS team to generate data extracts, and fixed schedules for new data loads. Phase 1 was a good learning experience for understanding how new data would be loaded and then extracted for research in safe haven.
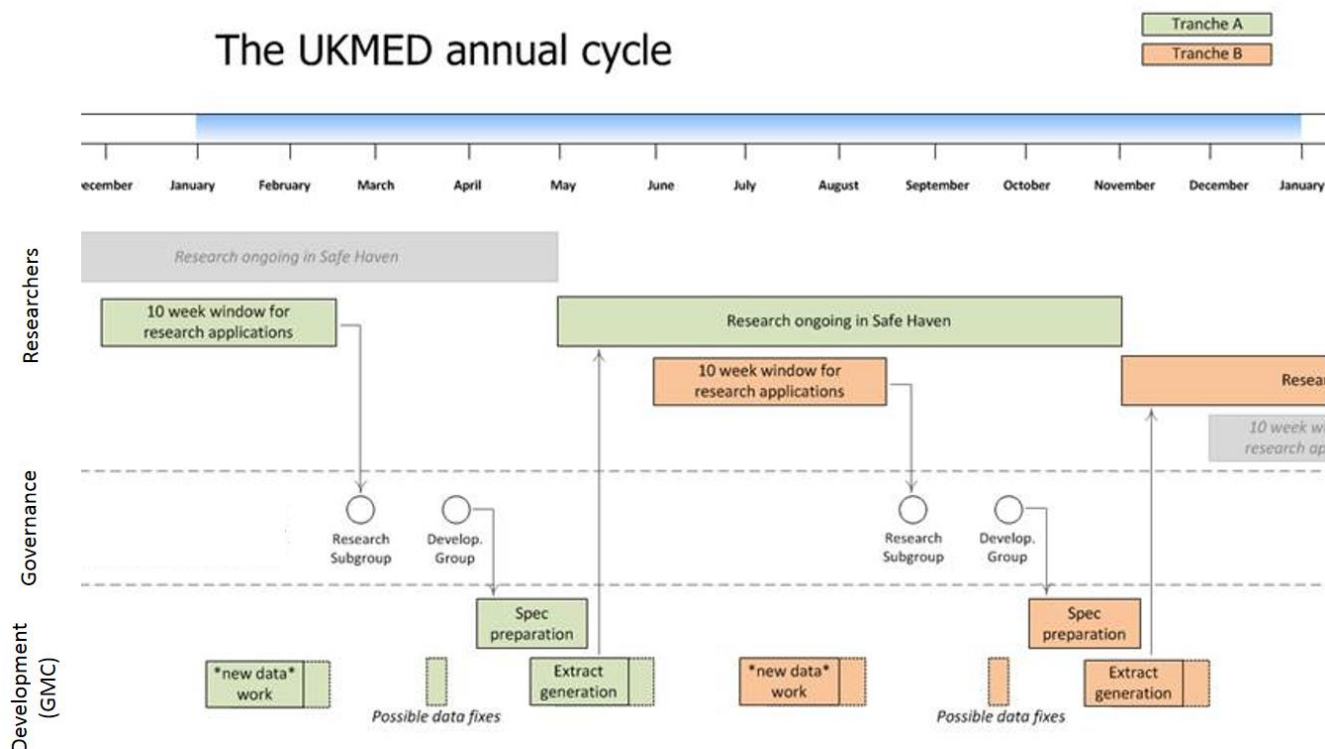
Some members of the group expressed concerns around having two tranches per year. Furthermore, there is not much space between cycles to mitigate any delays that could occur in a cycle. However, members felt that we should aim for two tranches to maximise the utility of the database and any risks or challenges in achieving this should continue to be reported back the Development Group.

There was a discussion about the risks associated with reliance on a single data analyst to date. The group was briefed that the GMC had built a new a data team in Manchester with

scope to support UKMED and with the recent MSC appointment of an analyst it would be possible to share knowledge and reduce risk in this area.

The group thought it would be a good idea to review the time researchers spent in the safe haven to explore whether it was necessary to expand the number of concurrent users. It was noted that currently there was no time-out function in the safe haven which means users could be logged on indefinitely. A workaround was proposed where data extracts could be made available to researchers who want to access the data outside their allocated research time.

The group provided feedback on the Terms of Reference to reflect UKMED moving into Phase 2. Members agreed that HESA should be invited and noted that the Terms of Reference would need to be updated. The GMC shared some concerns raised by future data contributors that the role of the group in relation to GMC's role as a data controller was unclear and it was therefore unclear whether the Group was a decision-maker that would share liability if the GMC did not use or store data appropriately. The terms of reference should clarify this relationship.

ACTION: The Development Group and Research sub-group Terms of Reference to be updated, circulated and finalised by December 2016 to enable reopening of the application process.

8. **Preparations for UKMED 2017 data load update on priorities discussed last meeting**
   a. **PSA**

The MSC is working with Daniel Smith to include the Prescribing Safety Assessment (PSA) data in UKMED. The matching work is currently underway.

   b. **College Exam data**

All college chief executives were asked to participate in UKMED by the AoMRC in July 2016. The data requested will include exam scores as well as pass/fail flags for exam candidates. Around two-thirds of the Royal Colleges have signed a data sharing agreement with the GMC to provide data for UKMED. Some raised concerns about governance of the database and who was legally liable for breaches of the database.

   c. **Other data**

Daniel Smith updated members that the FPAS data from 2015 and 2016 with non-UK cases had been received, with the matching work almost complete. A special thanks to UKFPO colleagues for their assistance in providing the data.

Health Education England 2016 recruitment data were received. Daniel Smith met with the Recruitment Operational Group in September 2016 to start work on collating documentation on interview scores. In 2016 there is a new table with more granular data on interviews.

GAMSAT and UKCAT data have completed the matching work and are now currently being tested. The new data sharing agreement for including data on bursary applied for and obtaining UKCAT SJT from 2013 has been drafted but not yet signed. Work is underway to explore the option of including progression data (TheoryMark and SkillsMark used in the UKCAT-12 study) from the medical schools. The MSC and GMC will be working together to seek permission to include the progression data.

9. **Data dictionary and coverage tool,** *Daniel Smith*

The data dictionary is being updated, with the numbers being removed. Users are advised to use the new coverage tool to check what data are available in UKMED. There will be additional text to cover new data entries for the UKCAT SJT, recruitment scores and the PSA.

ACTION: If interested in previewing the coverage tool, members of the Development Group to contact Daniel Smith.

10. Website update   Enc 9
Edward Knight gave an update on the website. The first round of penetration testing earlier in 2016 had identified a potential risk for malicious content to be uploaded onto the UKMED website through the upload of files. To eliminate this risk, the application form is now embedded within the website and the option to upload files has been removed. A downloadable version of the form is also provided. The second round of penetration testing is currently underway.

11. Current status of datasets under consideration for loading in 2017, *Daniel Smith*   Enc 10

a. BMAT
A draft data sharing agreement is currently with BMAT for legal review. The data are expected to be ready for the data load in July 2017. The BMAT privacy notice changed in 2014 to allow data sharing from that point onwards.

b. Multiple Mini Interview data
A survey will be sent out to medical schools to review privacy notices to ensure the data can be provided to UKMED and to find out what data are being held.

ACTION: MSC and GMC to work together to obtain MMI data from medical schools.

c. Foundation e-portfolio data
Work on securing the data is underway and taken to the e-portfolio project manager for consideration. It was noted that the Team Assessment of Behaviour data would be a valuable addition to the UKMED database.

d. Postgraduate training post history
The placement history data are available from 2011 onwards. This was noted to not be an issue because all UKMED cases entered postgraduate training after this date. NHS Education for Scotland is able to provide the data now. HEE can only provide this once the Intrepid consolidation exercise is complete. The GMC would pilot the process with the NES data first before approaching HEE.

Other workforce data identified for potential future inclusion in the UKMED data base are Electronic Staffing Records, Primary Care Information System, Scottish Workforce Information Standard System and the Northern Ireland Business Services Organisation. There was a suggestion to include the UKFPO destination survey which includes row by row data.

e. Update on plans for medical school module data
To validate the data supplied by HESA and learning from past experience, it was agreed that the MSC and GMC should work together to collect row by row module data from the medical schools. The data can be used as a way to reconcile the quality of the HESA data when HESA eventually start collecting this in the academic year 2019/20.

ACTION: MSC and GMC to work together on collecting module data from the medical schools.

f. Research proposal from Kath Woolf, UCL

The research proposal was presented to the group seeking support for the research. The proposal seeks to use UKMED to obtain follow-up data for the cohort in the study. The proposed study is a national longitudinal cohort study of applicants to UK medical schools in 2018 and linkage to UKMED is key. The Development Group identified that the cohort in the study would require UCAS data to reliably identify all applicants which is not currently in UKMED. In the interim, the work on collecting row by row module data from the medical schools could give greater coverage than some of the existing data in UKMED.

The group felt that it would be a useful project, but the UKCAT data in UKMED would not identify all applicants. The group asked Kirsty White and Katie Petty-Saphon to explore with UCAS whether its data could be used to identify the population of applicants to medical school.

The group felt that the collection of the study data needs to be independent of registering for the UKCAT or any other assessments, but this would present response rate and linking challenges for which a robust methodology would be required.

ACTION: GMC to update Kath Woolf on the UKMED discussion.
ACTION: GMC/MSC to write to UCAS about contribution to UKMED.

12. UKMED Editorial publication   Enc 11

Professor Jon Dowell had led work to author an editorial giving an overview of the creation of UKMED, and outlining the benefits and scope of data coverage to encourage future data requests.

ACTION: Members to send comments directly to Professor Jon Dowell.

The group discussed who should be included as authors for UKMED related materials and future publications. The group agreed that it is better to be inclusive and that there had been significant contributions to the project from the Development Group and Research sub-group. Acknowledgements to these groups should be made where appropriate to recognise the hard work that has been put in.

ACTION: Research sub-group to discuss the guidelines for authorship on UKMED materials.

13. 2017 meeting dates

Both Development Group meetings in 2017 will take place at the GMC, London, around two weeks after the Research Sub Group meetings

- Monday 27 March 2017, 10.30 – 13.00
- Monday 25 September 2017, 10.30 – 13.00

Enc 1

Summary of actions from Thursday 3ʳ November 2016 UKMED Development Group meeting

Action from Nov 2016	Owner
Research sub-group to advise on developing a guideline on research publication. The Research sub-group should consider whether findings from research projects require action by education providers before publication.	Research sub-group
MSC and GMC to explore with HEE, NES and others what training pathway analysis would be helpful.	MSC/GMC
Research sub-group to explore the options on sharing reports more widely with data contributors before publication.	Research sub-group
Research sub-group to advise on whether additional analyses that are not declared in the proposals should be carried out and whether it should be reported on.	Research sub-group
All members to email comments to Daniel Smith to collate for WPG. This feedback will include restructure of the report to mirror the presentation to focus on the development of the methodology, rather than focusing on the findings.	GMC
The Development group and Research sub-group Terms of Reference to be updated, circulated and finalised by December 2016 to enable reopening of the application process.	MSC/GMC
If interested in previewing the coverage tool, members of the Development Group to contact Daniel Smith.	All
To obtain MMI data from medical schools	MSC/GMC
To collect module data from medical schools.	MSC/GMC
Update Kath Woolf on the UKMED discussion.	GMC
Write to UCAS about contribution to UKMED	GMC/MSC
Members of the Development Group to send comments on the UKMED Editorial directly to Professor Jon Dowell.	All
Research sub-group to discuss the guidelines for authorship on UKMED materials.	Research sub-group

Glossary

AoMRC	Academy of Medical Royal Colleges, *www.aomrc.org.uk*
ARCP	Annual Review of Competence Progression
BMA	British Medical Association, *www.bma.org.uk*
BMAT	BioMedical Admissions Test, *www.admissionstestingservice.org/for-test-takers/bmat/about-bmat*
COPMeD	Conference of Postgraduate Medical Deans (UK), *www.copmed.org.uk*
DH	Department of Health, *www.gov.uk/government/organisations/department-of-health*
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
GMC	General Medical Council, *www.gmc-uk.org*
HEE	Health Education England, *www.hee.nhs.uk*
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
MSC	Medical Schools Council, *www.medschools.ac.uk*
NES	NHS Education for Scotland, *www.nes.scot.nhs.uk*
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, *www.ucas.com*
UCL	University College London
UKCAT	UK Clinical Aptitude Test, *www.ukcat.ac.uk*
UKFPO	UK Foundation Programme Office, *www.foundationprogramme.nhs.uk*
WPG	Work Psychology Group, *www.workpsychologygroup.com*