# Collection of Medical Royal College and Faculty exam outcomes in 2018/19 – Briefing note 1

## Introduction

The GMC undertakes an annual project to report on the exam outcomes which could contribute to the award of a CCT or CESR to doctors at the end of the training or allows progression to the next stage of training. This also includes exams that are required to progress through foundation training.

This note covers:

- The reporting period that this briefing note covers includes the outcomes from exams taken between **1st August 2018** and **31st July 2019**.

- Royal colleges, faculties and any other organisation administering an exam that is required for a CCT will be referred to as 'colleges' throughout this note.

## Content table

# Exam data collection 2018/19 project timelines

| Deadline date | Who | Action |
|---|---|---|
| 23 August 2019 | Colleges | Confirm names and contact details of individuals who will be sharing data with the GMC, as well as those who will be reviewing the data in the stakeholder review.<br><br>Our Information Governance policies require access to GMC Connect to be withdrawn for those who do not confirm they require access in 2019.<br><br>Nominated contacts will receive all the relevant communications. |
| 6 September 2019 | Colleges | Colleges to submit the list of returned exams *(CR_EXAM) file* and exam checklist to the GMC.<br>  ▪ See the exam data checklist in [Appendix A](#) for what to check<br>  ▪ Answer questions regarding new data fields<br>  ▪ Confirm if there are any exams which will not have data submitted in 2019 |
| 13 September 2019 | Colleges | Deadline for submitting candidate demographic data via GMC Connect. |
| 11 October 2019 | GMC | Return output files ([Appendix B](#)) to colleges identifying which candidates are or have been on the UK medical register and for whom colleges should provide exam results by the end of October. |
| End of October 2019 | Colleges | Deadline for submission of exam outcomes for all candidates who are or have been registered with the GMC. |
| November 2019 | GMC | Initial checks of exam data include:<br><br>  ▪ A check against the *list of returned exams file* to ensure that each exam listed has results<br><br>  ▪ Number of exam results expected based on previous year's returns and candidate demographic |

| Deadline date | Who | Action |
|---|---|---|
| | | data submission<br><br>▪ Missing data from the data sharing agreement or gaps in the data<br><br>Feedback will be given to colleges if any issues are identified |
| Early December 2019 | Colleges | Colleges to respond to any queries from the initial checks within two weeks of GMC feedback |
| Q1 2020 | GMC | Stakeholder review of data and opportunity to view specialty exam reports built from the data. Further detail on this will be available in the next briefing note. |
| Q1 2020 | GMC | Exam 2018/19 data included in UKMED database. Access for research projects is via an application to UKMED. |

# Exam data collection: what data should be returned?

Colleges provide the GMC with exam outcomes for all doctors who are now or who were ever on the UK medical register and who sat an exam which could contribute towards their CCT or CESR within the reporting period **1st August 2018 to 31st July 2019**.

**Data sharing agreements**

Data sharing agreements (DSAs) were produced and signed by both the colleges and the GMC to agree and list the data fields which will be shared by the two parties for the candidate demographic data and exam outcomes for each exam. You should have a copy of the DSA, if you do not please email educationdata@gmc-uk.org and we will share the most up to date version with you. Below is an example of data fields listed for each exam in the DSAs:

| Fields Shared with the GMC for exam name |
|---|
| Candidate ID |
| GMC reference no |
| Candidate first name |
| Candidate surname |
| Date of birth |
| Exam date |
| Attempt |
| Score |
| Pass mark |
| Pass/fail |

Please check the DSA to make sure that it reflects the exams and the data fields you are able to share with us. Please let us know if the DSA needs to be amended.

If your systems have been updated and it is now possible for you to provide total scores or sections scores, we would be very interested in amending your DSA.

**Candidate demographic data return**

To check whether the candidates who sat the exams are or were ever on the UK medical register, colleges are first asked to share demographic data about the candidates with the GMC. You can submit files in Excel or SPSS format. All files should be submitted using the secure portal in GMC Connect. Unfortunately, we cannot accept Word or PDF files.

Candidate demographic data files can be submitted to the GMC as soon as exam diets are finished and you have a complete data set available.

To ensure we can accurately match the candidate data with the UK medical register it is important to include at least:

- Candidate first name
- Candidate last name
- Candidate date of birth
- GMC reference number (if available)
- College ID (a unique ID provided by the college to each candidate if available)

The most accurate way to submit the candidate demographic data is to extract the exam data then remove the exam results from the file. These data can then be sent to us to match against the UK medical register.

We encourage colleges to submit unique IDs used for candidates as this allows us to do an additional data validation check to ensure that each unique college reference number only matches to one GMC number. Please refer to the DSA for a list of demographic data fields your college has agreed to provide.

Within four weeks of submitting the candidate demographic data, the GMC will return an output file to you which will identify candidates who are or were on the UK medical register and for whom their exam results should be shared with the GMC. You will find more information about the data which is returned in the output file in Appendix B. There is also a brief explanation of the matching process that the GMC uses to identify those on the UK medical register in Appendix C.

Please note: It is important to complete the candidate data check before you submit your exam data so that the GMC does not hold exam results for people who are not or have never been on the UK medical register. In order to ensure that the demographic data for people who are not and have never been on the UK medical register are not held by the

GMC, candidate data are removed from GMC Connect and deleted from local folders. The unmatched cases are deleted from the tables in the Oracle database.

**Exam outcomes data return**

The final return of data to the GMC includes the exam outcomes for all candidates who are or were ever on the UK medical register, i.e. the matched cases as indicated in the output file, for any exams sat during the reporting period which could contribute towards the CCT or CESR. This may include exams which do not directly contribute towards the CCT, but if passed, exempt the doctor from passing an exam which is required for their CCT.

If you are unsure whether an exam contributes towards the CCT or CESR you will find assessment information in the curricula documents on the GMC website.

A list of all exams that are currently shared with the GMC as part of the exam data collection can be found in the list of returned exams file which is attached to the email along with this briefing note. You will find more information about what is included in the list of returned exam file in Appendix D.

For each exam, the DSA lists all the data fields that your college agreed to return to the GMC. The DSA was tailored for some colleges that were unable to provide the level of detail originally requested, such as examination scores. The GMC is keen to collect the following data fields for each exam in order to increase the utility of the data for UKMED research projects:

- Scores (section and/or total scores)
- Pass mark/score
- Attempts

If you don't currently return these data fields please email us and we can discuss adding these data to the return and updating the DSA.

Once the exam outcomes are returned the GMC will use the information that you have provided in the DSA, the list of returned exams file *(CR_EXAM)* and any information you have returned from the exam data checklist, to check the data and ensure data quality. You can find out more about what those checks include in Appendix E.

# Exam data collection: step by step guide to returning the data

Below are the guidelines for returning the candidate demographic data and the exam outcomes data. Please email us if you have any queries about the process.

1   Email the GMC confirming the college contacts who will be returning the candidate demographic data and the exam outcomes data by the **23rd August 2019**. The GMC

will check that these contacts have access to GMC Connect – the secure portal through which all data are to be returned.

2    Use the exam data checklist to go through the DSA and list of returned exams file and amend as appropriate. If you need a copy of the DSA or you have not received the list of returned exams file *(CR_EXAM)* please email the GMC.

3    Return the list of returned exams file and respond to the questions in the exam checklist via email to the GMC by **6th September 2019**.

4    Log in to GMC Connect. In the Royal college/faculty – education stakeholder group you will have access to a document folder for your college called, 'Exam data collection 2019 – College name' where you will be able to upload the candidate demographic data. Return the candidate demographic data by **13th September 2019**.

5    You will receive an email from the GMC when an output file is ready for you to download from your college document folder in GMC Connect.

6    Use the output file to prepare the exam outcomes data return for the candidates who are/were on the UK medical register.

7    Upload the exam outcomes data return to your college document folder in GMC Connect.

8    Should the GMC raise any issues with you following the initial checks of the exam outcomes data, please feedback to the GMC within two weeks of the query being raised.

## Exam data: what are the data used for?

### Progression reports: Specialty Exam

The data provided are used to produce the specialty exam report, which forms part of the progression reports. The purpose of these reports is to help medical schools and postgraduate training bodies to better understand the journey of doctors through training. The specialty exam report highlights the variation in pass rates for different cohorts of doctors through various visuals developed in Tableau. The report is split into postgraduate and undergraduate visuals the latest of which can be viewed by visiting the links below:

- Postgraduate (incl. demographics)

- Undergraduate

Following completion of the data collection, this report is refreshed ready for publication. Each year we aim to improve the report through developments to the data and visuals. If

you have any suggestions on improvements or different visualisations you would like to see, please get in touch using the contact details below.

**UK Medical Education Database**

The UK Medical Education Database (UKMED) brings together different undergraduate and postgraduate data relating to UK medical education. It provides a platform for collating data on the performance of UK medical students and trainee doctors across their education and future career. UKMED aims to highlight the paths of doctors through school, university and their career and create a unique environment in which new research can be undertaken. Data extracts are made available to researchers via a formal application process which is described on the UKMED website.

All colleges have a signed Data Sharing Agreement with the GMC that permit the inclusion of their exam data in UKMED. At the Academy Assessment Committee in June 2017 each college was asked to nominate a contact to consider UKMED research projects using their data and indicate their preferred level of involvement in such projects. Colleges interested in applying for a UKMED Research extract should note that the next application window is from 17th September to the 7th October.

# Contact the GMC

If you have any queries in relation to the data collection process of the exam outcomes please contact the GMC by email at educationdata@gmc-uk.org.

Your contacts at the GMC regarding the exam data collection are:

Jennifer Redman-Tootell
Surveys Reporting Coordinator

Nikita Vincent
Survey Analyst

Alicia Burn
Data and Insight Analyst

All briefing notes from previous collections and this briefing note will be published on the GMC website.

# Appendix A – Exam Data Checklist

This checklist asks you questions which guide you through reviewing and updating the List of returned exams file and describing some of the data fields returned so that we can check the completeness of the data.

| |
|---|
| 1. **Were there any exams, not listed on the List of returned exams, which were sat during the reporting period and contribute towards a doctor's CCT?** <br> If yes, please add the details of the exam to the List of returned exams. |
| 2. **Are there any exams listed on the List of returned exams which are no longer being sat at the college/faculty?** <br> If yes, please make a note in an email to the GMC about which exam this is and any new exam which replaces it. Please provide the relevant dates: last date of old exam and first date of new exam |
| 3. **Are there any exams listed in the List of returned exams which were not sat during the reporting period?** <br> If yes, please let the GMC know which exams will not be returned. |
| 4. **Are there any changes to any of the details of the exams?** <br> If yes, please update the List of returned exams with the details of the changes or include in the email to the GMC. |
| 5. **If the data includes station scores, are these stations consistent with previous sittings?** Please can you make sure that these are labelled with the name of the station rather than the number of the station. |
| 6. **Are there any changes to the data that we need be aware of?** |

Please describe your data fields, if applicable, and email your responses to educationdata@gmc-uk.org

| 1. Exam date | **Is this the date the exam was sat or the date the results were published?** | Please delete an option: <br><br> Date the exam was sat <br><br> OR <br><br> Date the results were published |
|---|---|---|
| 2. Attempts | **Is the attempt number the number of attempts including the attempt recorded on that row of the spreadsheet or the number of** | Please delete an option: <br><br> Attempt is number of attempts |

| | | |
|---|---|---|
| | **attempts by the candidate up to the attempt recorded on that row of the spreadsheet?** i.e. if it was the candidate's second time sitting the exam would the attempt number be 2 or 1. | **including** that recorded<br><br>OR<br><br>Attempt is number of attempts **up to** that recorded |
| 3. College ID | **Is the code given to a candidate unique to the candidate or to the exam result?** If the college ID is unique to a candidate, we will check the integrity of the data by checking that each college ID is only associated with one GMC number. If you have a College ID that is unique and don't currently include it in your data return, please do so this year. | Please delete an option:<br><br>College ID is unique<br><br>OR<br><br>College ID is not unique |

| |
|---|
| Describing your candidate data informs the checks we will do on your exam data |

1. **Will your candidate demographic data be provided by candidate or by attempt?**
   If your data is by exam attempt we will expect duplicate rows for the same candidates where they have sat different exams and/or had multiple sittings. If it is by candidate we will expect unique rows for each candidate regardless how many exams/ sittings they have had. **If you are providing candidate level data, please email** educationdata@gmc-uk.org **to tell us how many records you intend to return exam data for.**

2. **Are there any data fields you included in the candidate demographic data which should be added to your output file?**
   Please tell us which, if any of the fields you submit in your candidate demographic data help you to submit the exam data and should be added to the output file returned to you after the candidate matching, e.g. exam date, college ID, attempts etc.

# Appendix B – Table of fields included in the output file

| Excel column | Column name | Description of data included |
|---|---|---|
| A | EXAM_MATCH_ID | Added by the GMC this number is unique to each record |
| B | COLLEGE ID | This will be the id you use against the record, in some cases it is a person_id in other cases it is an attempt id.<br><br>If you supply us with a College ID which is unique to a candidate in the demographic data this will be in this column. We will use this to ensure that only one GMC reference number is provided against each unique college person ID |
| C | EXAM_NAME | If provided in the candidate demographic data the exam name will be included in this column |
| D | COLLEGE | Abbreviation of the college name |
| E | GMC_PROVIDED | GMC reference number as provided in the candidate demographic data by the college |
| F | GMC_ASSIGNED | The GMC reference number which is assigned to the candidate from the match test |
| G | COLLEGE_FIRST_NAME | First name of the candidate as provided in the candidate demographic data by the college |

| H | COLLEGE_LAST_NAME | Last name of the candidate as provided in the candidate demographic data by the college |
|---|---|---|
| I | COLLEGE_DOB | Date of birth of the candidate as provided in the candidate demographic data by the college |
| J | LRMP_FIRST_NAME | First name of the candidate as it appears on the List of Recognised Medical Practitioners (LRMP) |
| K | LRMP_LAST_NAME | Last name of the candidate as it appears on the LRMP |
| L | LRMP_DOB | Date of birth of the candidate as it appears on the LRMP |
| M | PRIMARY_PMQ_WORLD_REGION | The region in which the candidate took their primary medical qualification (PMQ) Possible values include EEA, IMG, UK |
| N | LRMP_MEDSCHOOL | The medical school from which the candidate was awarded their (PMQ) as it appears on the LRMP |
| O | LRMP_DATEOFPMQ | Date that the candidate was awarded their PMQ |
| P | GMC_VALID | Identifies whether a candidate is/was on the UK medical register. Possible values include:<br><br>  ▪ 1 = on or have been on the register<br>  ▪ 0 = not on the register |
| Q | MATCH_TEST | There are a number of match tests applied to the data to check against the UK medical register. This column will tell you which match test resulted in a valid GMC reference number for this record. Possible values currently |

| | | include: |
|---|---|---|
| | | 1 - GMC_Validation - matching both names and DOB<br>2 - GMC_Validation - matching last name and DOB<br>3 - GMC_Validation - matching previous last name and DOB<br>4 - GMC_Validation - matching lastname OR DOB<br>7 - Reverse find on both names and DOB (hard matched)<br>8 - Reverse find on last name and DOB (hard matched)<br>9 - Reverse find on both names switched and DOB (hard matched)<br>12 - Reverse find on both names transposed DOB DAY AND MONTH<br>13 - Reverse find on lastname and transposed DOB DAY AND MONTH<br>14 - Reverse find on previous last name and DOB (hard matched)<br>15 - Reverse find on both names distance >70 * and DOB (hard matched) |
| **R** | GMC_NUMBER_NOT_MATCH | Flag to indicate whether the GMC_PROVIDED = GMC_ASSIGNED.<br><br>1 = GMC number provided does not match number obtained via matching process<br><br>Blanks = GMC numbers match |
| **S** | SURVEY_YEAR | Year that the candidate completed the national training survey (NTS) |
| **T** | ORG_NAME | Deanery/LETB/Local office the candidate was training under when they took the NTS in March 2019 |
| **U** | PROGRAMME_SPECIALTY | The training programme specialty a candidate was on when they took the NTS |

| V | TRAINING_LEVEL | The level that the candidate was training at when they took the NTS |
|---|---|---|
| W | MANUAL_REVIEW | Outcome of a review done by the GMC on candidates which have 1 in GMC_valid but were matched on a test which could result in a false match (tests 9 and above are manually reviewed) |
| X | COMMENT | Any comments made about the records during manual review |
| Y | FINAL_CORRECT_GMC_NUMBER | The GMC reference number which is corrected and final |
| Z | Provide exam data? | Indicates if a candidate has a 1 in GMC_Valid, please provide the exam data. Possible values:<br><br>▪ Yes (provide exam data)<br>▪ No (Do not provide exam data) |

# Appendix C – Exam data collection: how are the candidate data matched to the medical register?

Using the demographic data that you provide we will match candidates to our list of registered medical practitioners, known as 'the medical register'.

Where it has been provided, we will check if the GMC reference number is valid by matching candidates to the medical register using the GMC reference number and date of birth and last name to confirm if it is the correct number for the candidate.

For candidates with no GMC reference number or one we cannot validate as above, we will attempt to match them to the medical register using a combination of date of birth, first name and last name.

We will return the results of the matching exercise in an output file within four weeks of receiving your candidate demographic data. Please refer to Appendix B for a list and description of the data fields included in the output file.

# Appendix D – Table of fields included in the list of returned exams

If these are all correct please confirm; if not please amend in the file *[CR_EXAM.xlsx]* as required.  Please note this information is shared with UKMED researchers to aid their understanding of the data.

| Excel column | Column name | Description of data included | What to check |
|---|---|---|---|
| **A** | CollegeName | Abbreviation of the college name | Please check this is correct for your college |
| **B** | CollegeNameLabel | Full college name | Please check this is correct for your college |
| **C** | AbbreviatedExamName | Abbreviation of the exam name | Are there any exams missing? Please add a new row for any exam missing |
| **D** | ExamName | Full exam name | Are there any exams missing? Please add a new row for any exam missing |
| **E** | DataYear | The first year that data from this exam was provided to the GMC | Please check the year is correct for this exam |
| **F** | ExamCloseDate | If an exam is no longer running at the college this will be the last year the data was returned to the GMC for this exam | Please fill this in if an exam will not be returned and is no longer running |
| **G** | ExamType | The format of the exam e.g. Multiple choice or Single Best Answer etc. | Please check this is correct and update if changed |
| **H** | LevelTaken | The level of training that the exam is sat at | Please check this is correct and update if |

| | | | changed |
|---|---|---|---|
| **I** | Eligibility | Eligibility criteria for taking this exam | Please check this is correct and update if changed |
| **J** | RequiredForProgressionTo | The level of training that the exam provides progression to | Please check this is correct and update if changed |
| **K** | SourceURL | The web page which has the exam information on | Please check this is correct and update if changed |
| **L** | SectionScoreAvailable | If section scores are available please put a Y in this box or a N if there are no section scores for this exam | Please check this is correct and update if changed |
| **M** | TotalScoreAvailable | If a total score is available please put a Y in this box or a N if there are no section scores for this exam | Please check this is correct and update if changed |
| **N** | TypeOfTotalScore | Whether the total score is a percentage (Percent) or a raw score (Total score) | Please check this is correct and update if changed |
| **O** | PassMarkAvailable | If a pass mark is available please put a Y in this box or a N if this is not available | This has been derived from last year's data collection please check this is correct and update if changed |
| **P** | Notes | This is a section for you to add any notes about the exam or future of the exam | Please add a comment if required |

# Appendix E – Exam data collection: what are the data quality checks?

To help improve the data quality we will complete some checks when you return your candidate demographic data and exam data to us. If we think there are any issues with the data you submit we will email you and ask you to check the data or provide clarification. Checks will include:

- Number of records returned - this will be compared to last year's data return for any large discrepancies

- Matched candidates have exam outcomes – we will check that all candidates submitted in the demographic data and matched to a GMC number (i.e. GMC_VALID =1) have one of more records in the exam data and if there any candidates in the exam data not in the output file

- Missing exams – unless you let us know that data will not be supplied for an exam we will check that data is returned for every exam listed in *the list of returned exams* and the DSA

- Blanks within columns – we will check for any blank cells in columns where data are expected

- Duplicate records – we will check for exact duplicate results for exams i.e. a record for the same candidate that has an identical exam date, exam name and result.

- Missing data fields – we use the DSA to check if there are any data fields listed in the DSA which have not been returned

  Please note: Some data fields are more important to the UKMED and progression reports projects and these will be the only fields chased up with colleges unless we are made aware that they are not available:

| Candidate data |
| --- |
| Candidate first name |
| Candidate last name |
| Candidate date of birth |
| GMC reference number |

| Exam data |
| --- |
| Exam date |
| Attempts |
| Section/total scores |
| Pass marks |
| Pass/fail |