

Intercollegiate Committee for Basic Surgical Examinations (ICBSE)

Standard Setting in the MRCS Part B (OSCE)

An MRCS Part B candidate will attend the exam and be assessed across 17 different stations in a specific 'circuit' at an exam venue. For standard setting purposes, this circuit is identical across all exam centres in the UK and Ireland running on a particular day. Additionally, a specific circuit *may* be repeated on a subsequent day within the same exam diet.

Each individual station in the MRCS OSCE is assessed in two ways:

- Using a structured mark sheet a mark is awarded for each domain using generic descriptors to identify and guide examiners in allocation of the marks. There is a standardised distribution of marks across the broad content areas.
- In addition, an overall judgement is made on the candidate's performance at the station as a whole (Pass, Borderline or Fail).

Thus for each station the candidates will have a mark out of 20 and an overall judgement of their performance. The marks and global ratings are then employed in order to construct the overall pass mark for each station using a recognised approach known as borderline regression methodology. Further information relating to Borderline Regression can be found on Page 11 of the Guidance for Standard Setting document published by the Academy of Medical Royal Colleges - https://www.aomrc.org.uk/wp-content/uploads/2016/05/Standard_setting_framework_postgrad_exams_1015.pdf.

The standard setting process involves calculating the total mark for each individual scenario over all UK diets going back to February 2013. If the total number of occasions that the scenario was used was greater than 500, only the most recent 500 results were considered in the calculation. Only scenarios that had not been significantly altered during this period were included in the calculation. The pass mark for each circuit is therefore generated by compiling the pass marks of the individual scenarios in each circuit. Pass marks are therefore generated for both 'knowledge' and 'skills' scenarios and the Standard Error of Measurement (SEM) is added.

There is not an overall pass mark for the OSCE as a whole. Candidates must pass each of the two sections of the OSCE – Knowledge and Skills – in a single sitting. Failing one of these sections does not mean that a candidate can 'bank' the section passed and only resit the failed section.

There is 0.84 SEM added to the calculated pass marks for both Knowledge and Skills in order to maintain the standard of the exam. It may be noted that, because both Knowledge and Skills have to be passed at the same sitting, the SEM added for the OSCE as a whole may be considered to be in excess of the 1.0 value widely accepted as the desirable minimum.

A different pass mark is generated (using the current borderline regression methodology) for each circuit, rather than for the examination as a whole. This means that, though the pass mark will be similar for different circuits, it is unlikely to be identical. This will reflect the variation in the relative difficulties of the scenarios that make up any given circuit. The consequences of doing so have been modelled and found to yield a very similar overall pass rate.

APPENDIX – Specific changes to the standard setting process for the format of the MRCS Part B (OSCE) used during the Covid-19 pandemic

It was necessary to make the following changes to the standard setting process for the MRCS Part B (OSCE) during the Covid-19 pandemic due to the changes made to the exam to ensure that it could be delivered safely and in line with social distancing restrictions. These changes applied to the October 2020, November 2020, May 2021 and July 2021 MRCS Part B examinations.

- Due to the reduction of the number of stations in the circuit, from 17 to 13, the amount of data available was insufficient to generate a sufficiently reliable pass mark for both Knowledge and Skills. As such, a single pass mark was generated for each circuit as a whole for all diets of the MRCS Part B (OSCE) that used the revised Covid-19 format of the exam.
- The experience of the first exam in October 2020 of the revised format of the examination was that the addition of 0.84 SEM to a single pass mark did not maintain the previous standard that was achieved by applying it to two separate pass marks within the same exam. As such, it was agreed that the multiple to be used should be 1.64 SEM for all diets of the MRCS Part B (OSCE) that used the revised Covid-19 format of the exam.