Equating MRCP(UK) written examinations

Equating was introduced for the MRCP(UK) Part 1 Examination in 2008 and for the Part 2 Written Examination in 2010. This brought significant changes in the way candidates' results were processed and reported. Statistical equating using One-Parameter Item-Response Theory (1-IRT, also known as Rasch modelling), was introduced to enable the accurate comparison of candidates' results across examination diets, irrespective of variation in the difficulty of the mix of items in a particular diet. Since no two examinations contain the same questions, it is inevitable that some papers may be slightly harder (or easier) than others, and equating is a statistical process that addresses this. Although the pass mark is fixed across diets the corresponding percentage correct required to reach this level could differ slightly based on each examination's difficulty.

Instead of a percentage overall score, candidates are given an 'overall scaled score', which is on a transformed logistic scale. The score is higher in candidates who answer more questions correctly, but the relationship is not linear, and cannot be translated in any direct way into a percentage correct score. The score can take any value; it is usually positive but occasionally can be negative, although for the majority of candidates is in the range 200 to 800. The pass standard is reviewed every three years and the current equated pass marks can be found at https://www.mrcpuk.org/mrcpuk-examinations/results/exam-pass-marks.

The MRCP(UK) Part 1 and Part 2 Written Examination results letters include the following:

- An overall examination result of **Pass** or **Fail**
- A candidate's **Overall Scaled Score** based on their performance
- The **Pass Score** – the minimum scaled score needed to pass the examination.

The actual number of questions a candidate has answered correctly is not provided. However, as we are committed to providing feedback on performance in examinations, and to help unsuccessful candidates prepare for future examinations, details of performance will be provided for all specialties included in the published blueprint, expressed as a percentage. This information is provided to assist candidates in identifying areas of relative strength and weakness; however, passing or failing the examination is based ONLY on the scaled score.

A peer-reviewed research paper on the use of statistical equating, published by MRCP(UK), is freely available to download at https://bmcmededuc.biomedcentral.com/articles/10.1186/1472-6920-14-204.