

nMRCGP P: Statistics 2008

First Annual Report showing data from the AKT and CSA Assessments throughout the year

INTRODUCTION

This Report relates to the first full year of the formal nMRCGP assessments, 2008. It presents the statistics which summarise the outcomes of all the deliveries of the formal nMRCGP examinations during that year – the Applied Knowledge Test (AKT) and the Clinical Skills Assessment (CSA). They extend the basic data already reported to the Postgraduate Medical Education and Training Board (PMETB).

The Report first presents a brief summary of both of these assessment components and their current standard-setting procedures, to orientate any reader who may be unfamiliar with these. Full background information on the nMRCGP, AKT and CSA (and also the formative Workplace-based Assessment component) may be found on the College's website.

There then follows a set of tables, first for the AKT and then for the CSA. Each is prefaced by a summary of the principal background information on candidates, listed by training Deanery.

Please note that this report is descriptive and neither interpretative nor discursive. Data – and, where appropriate, statistical significances – are presented without comment.

Readers may be interested to see the demographics of candidates' backgrounds, and then the breakdown of exam performance according to these variables. Results are also presented by training Deaneries—though a word of caution is appropriate here as to interpretation of these and other results. There are clear differences between certain sub-groups in their performance on both the examinations reported, for example by gender and country of primary medical training. Such variables may well interact with others, such as training Deanery (eg the prevalence of women trainees varies across Deaneries, as does that of non-UK medical graduates). The relevant results should thus be interpreted appropriately. The RCGP Assessment Committee also notes, and is broadly reassured by, the largely parallel nature of the sub-group differences as between the AKT and the CSA.

In general, the Committee is pleased with the development of these two formal assessments. The AKT—essentially an evolution of an existing assessment procedure, the MCQ/MCP in the 'old' MRCGP examination—demonstrates extremely secure psychometric characteristics. The CSA, an entirely new assessment, will take time to bed down, but for a new assessment of this length it shows encouraging psychometrics; work is continuing under PMETB's advice towards refining the setting of its standard, and the CSA Core Group is working towards increasing its technical reliability, and also towards enhancing the fairness of its daily deliveries by improved equating of the requirements of each day's 'palette' of cases.

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September 2009

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1: Summary of the Assessments and their Standard-Setting Procedures

The nMRCGP and its Function

The nMRCGP comprises three sets of assessment procedures – a so-called ‘tripos’ – whose combined summative function is to assure the Deaneries, the College and PMETB of the competence of exiting trainee General Practitioners (GPs) across a broad and carefully-defined three year training curriculum. Satisfactory completion of the three assessment components of the nMRCGP renders a trainee (GP Specialist Registrar) eligible to apply both for a Certificate of Completion of Training (CCT) from PMETB (and thus to proceed with her or his career) and for Membership of the Royal College (which will *inter alia* support the doctor’s continuing professional development and re-accreditation).

The nMRCGP’s three assessment components are the following:

- a. **Applied Knowledge Test** (*multi-choice computer-presented ‘paper’, available in test centres throughout the UK*)
- b. **Clinical Skills Assessment** (*a formal test of clinical and consulting skills, taken in a single assessment centre*)
- c. **Workplace-based Assessments** (*delivered throughout the three-year training programme by Clinical Supervisors and others*)

No compensation is permitted between the CSA and the AKT—each must be separately passed.

It should be noted that the curriculum, the training and the assessments are based on practice in the UK National Health Service. Entry to the formal assessments is only permissible to doctors undergoing GP training in the UK health care system. Accordingly, no external candidates take these. (The College has other arrangements to support GPs practising in other countries and who seek affiliation with it or Membership of it – especially ‘MRCGP [International]’, see the website.)

Please note that the workplace-based assessments, being essentially formative, with candidate performance and development in them being reviewed towards a determination of progression annually by the Deaneries and not the College, are not covered by this report.

The Applied Knowledge Test (AKT)

The multi-choice **Applied Knowledge Test** is a 3-hr 200-item computer-delivered and marked assessment which may be taken in any of the three years of training (Year 1 = ST1; Year 2 = ST2; Year 3 = ST3). Offered three times a year, the AKT is delivered by computer in professional testing centres around the UK run by Pearson VUE.

The test’s 200 items are in three formats: single best answer (including images and graphics), extended matching questions and completion of algorithms. Test specification is used to ensure adequate sampling across the curriculum. 80% of the items are on clinical medicine and research/evidence-based practice and legal/ethical/ administration issues are each represented by 10% of the questions. Irrespective of the question format, candidates are awarded one mark for each item answered correctly. Marks are neither deducted for incorrect answers nor for failure to answer.

The standard for the AKT is set for each delivery of the test using a modification of the Angoff procedure, where a group of judges estimates the performance of a notional ‘just good enough to pass’ candidate on each test item. The standard takes account of the ‘guessing factor’ always present in multi-choice tests. In order to ensure that standards are set at appropriate and realistic levels, a patient representative and representatives of outside bodies with a stake in the outcome of the examination are invited to act either as judges or observers, as appropriate, in the standard-setting process.

A ‘just passing’ score is accordingly determined for the test as a whole, and a statistical review may cause the removal of one or two poorly-performing test items. The measurement error of the resultant test is then calculated, and a passing standard (‘pass-mark’) set at one SEM (Standard Error of Measurement) above the ‘just passing score’. The reliability of the AKT is estimated by calculating Cronbach’s *co-efficient alpha*.

Candidates are subsequently provided with their results, and their scores on the test as a whole and on its three sub-sections.

It should be noted that, as the pass-mark varies slightly between diets, because of small changes in the overall difficulty of the paper, the only variable which may be simply and validly compared across diets is the ‘result’ (pass/fail).

The Clinical Skills Assessment (CSA)

The **Clinical Skills Assessment** is an OSCE-style assessment using simulated patients which may be taken only in the final year of training (Year 3 = ST3). 13 cases long (12 + 1 pilot case), it is delivered in a purpose-built College assessment centre (in Croydon, S London). Three circuits can run simultaneously on the three floors of the centre.

A case is depicted by a role player, and candidate performance assessed by an examiner who accompanies the roleplayer for the day. Each case lasts 10 minutes. Candidates have their own 'consulting room', and the role players and assessors move around the circuit. Of the 13 cases, 12 are assessed and the other is used to pilot new cases.

Cases, written by dedicated writers who are practising GPs, present typical clinical scenarios that a UK GP will encounter. Each case is mapped on to the curriculum with intended learning outcomes, and a blueprint is used to guide case selection—a complex procedure as the cases necessarily change each day for reasons of security and fairness, yet each day's 'palette' must meet the blueprint's specifications.

Each case is marked on three domains and with an overall global judgement. The domains are: Data Gathering, Examination and Clinical Skills; Clinical Management Skills; Interpersonal Skills. Each domain score and global judgement is marked as: *Clear Pass* – *Marginal Pass* – *Marginal Fail* – *Clear Fail*. (Also, to assist in standard-setting developments but not yet used towards test outcomes, the assessors are also asked to give a confidence score on their global judgement.) The domain scores inform the assessor judgement for the global score but are not used in any further summative manner.

The critical pass/fail determination on the CSA as a whole is as a result of how many cases are passed (out of 12), whether 'marginally' or 'clearly' being immaterial. Thus the effective judgement for each case is the *global score* as a *pass or fail* (whether clear or marginal is operationally irrelevant). The domain scores are used for quality assurance of the assessors and cases.

The overall standard of the assessment is set by means of ensuring both that the cases are at an appropriate level of difficulty and that the examiners are adjudging passing performance on any case at the same, agreed level – appropriate for independent and safe practice as a GP in the NHS. A variety of support mechanisms are in place: calibration exercises at the beginning of each day of the CSA; initial and ongoing training of examiners; and an annual two-day examiners workshop.

The passmark—number of cases to be passed out of 12, known as 'n2P'—is set by an Adjudication Committee comprised of various stakeholders, following each diet of the assessment: throughout 2008, it was *eight*. Hofstee-style data-collection from examiners provides the committee with collective perceptions about candidate standards.

The reliability of the CSA is estimated by calculating Cronbach's *co-efficient alpha* using the *global scores* (0-3) for each case. Because of daily case and examiner differences, *alpha* must be estimated only *per diem*, thus on a maximum of 78 candidates. And because of varying candidate numbers and daily variations in the range of candidate ability, the statistic varies, too.

For the purposes of this report, CSA outcomes used include 'result' (pass/fail at n2P = 8) and 'cases passed' (out of 12).

2: Notes on the Tables and Statistics

General Notes

Tables are accompanied by thumbnail charts, to assist those who prefer visual rather than numerical summaries of data. Space prevents the charts being of adequate size to read (for example) the axis scales: the relevant table should be inspected for this information. The colour convention adopted for the charts is as follows:

Bars etc representing **passing** candidates: blue

Bars etc representing **failing** candidates: red

Charts which do not distinguish between passing and failing candidates: grey

Note regarding the Interpretation of the AKT statistics

Except in Table b), the statistics aggregate all candidate attempts in 2008 at the AKT. Some candidates appear twice (7.1 %), others three times (1.1 %). Data have been presented in this way (for all candidates, rather than first time takers, only) for consistency, as this is the form requested by PMETB in respect of another, parallel report.

Observant readers may notice that figures in this report do not always concur precisely with those given in various reports of AKT examinations in 2008 on the College website. The latter show totals and pass rates for *all* AKT candidates, including GP 'returners' and those completing the 'old' MRCGP and summative assessment. The figures in this report refer only to examination candidates eligible for nMRCGP.

Particular tables could be presented for first timers only, but have not been, so as to keep this document reasonably brief.

Note regarding the interpretation of the CSA statistics

Pending completion of a comprehensive relational database, two simple (though large) databases have been constructed for the 2008 examination period: one is candidate-based, including all information about a candidate-attempt at the examination, and is designed to provide generic reporting functionality towards requirements such as this report; the other is candidate-consultation based, and intended to provide QA and developmental information regarding the cases and the examiners—it thus includes additionally information on pilot cases and 'out of frame' candidates. With one exception, all the data in this report is sourced from the first database; the second one was used for CSA Table L.

Except in Table c), the statistics aggregate all 2,435 attempts by 2,030 nMRCGP candidates in 2008 at the CSA. Some candidates appear twice (12.8 % of all attempts), others three times (3.4 %) and a few (11) four times (0.5 %). Data have been presented in this way (for all candidates, rather than first time takers, only) for the same reason as for the AKT.

The present report excludes one re-sitting candidate included in the earlier report, subsequently detected as technically 'out of frame': this apparently arose out of candidate (and database) confusion in the transition period.

Particular tables could again be presented for first timers only, but have not been in an attempt towards some brevity.

Data Inconsistencies: Caution

Minor data inconsistencies result from a variety of causes, inevitably in an undertaking of this complexity which combines 'examination' data with background 'personnel' information from a number of computing databases. For example:

- Most of the candidates' background data is self-reported on registration for each assessment. It is thus subject to error, though obvious ones are corrected when seen
- For the same reason, data are occasionally missing
- Candidates' circumstances change – for example, they may move from one training region to another, within the year
- Updates to the databases, internally in the College and from the individual Deaneries, are inevitably intermittent

However, the College would appreciate learning of any serious apparent errors or omissions in the data reported. It would also be pleased to receive suggestions as to additional or alternative data which might be helpful to Deaneries and the training establishment. Contact the compiler at rew5@cam.ac.uk

3: AKT Statistics

Summary of Demographic Information on AKT Candidates

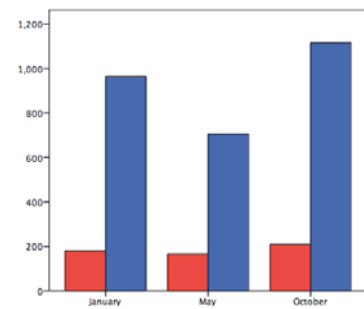
Note that 3068 candidates made a total of 3340 attempts at the AKT during 2008. This table shows the background demographic characteristics of the 3068, by training Deanery. Other tables report on the 3340 attempts.

| Training Deanery | Candidate Gender | | Candidate Ethnicity (classified) | | | | | UK or non-UK Graduate | | | Total |
|--------------------------------|-----------------------|-----------------------|----------------------------------|-----------------------|---------------------|---------------------|--------------------|-----------------------|----------------------|-------------------|------------------------|
| | Female | Male | White | Asian | Black | Other Ethnicity | Unknown | UK Graduate | Non-UK Graduate | Unknown | |
| (Unknown) | 11 73.3% | 4 26.7% | 2 13.3% | 1 6.7% | 0 .0% | 1 6.7% | 11 73.3% | 1 6.7% | 0 .0% | 14 93.3% | 15 100.0% |
| Armed Forces (Defence) | 21 40.4% | 31 59.6% | 39 75.0% | 10 19.2% | 1 1.9% | 2 3.8% | 0 .0% | 43 82.7% | 9 17.3% | 0 .0% | 52 100.0% |
| East Midlands | 93 62.8% | 55 37.2% | 66 44.6% | 56 37.8% | 15 10.1% | 10 6.8% | 1 .7% | 99 66.9% | 49 33.1% | 0 .0% | 148 100.0% |
| East of England | 122 53.7% | 105 46.3% | 78 34.4% | 113 49.8% | 20 8.8% | 13 5.7% | 3 1.3% | 127 55.9% | 100 44.1% | 0 .0% | 227 100.0% |
| East Scotland | 19 59.4% | 13 40.6% | 27 84.4% | 5 15.6% | 0 .0% | 0 .0% | 0 .0% | 27 84.4% | 5 15.6% | 0 .0% | 32 100.0% |
| Kent, Surrey, Sussex | 157 56.9% | 119 43.1% | 120 43.5% | 102 37.0% | 17 6.2% | 33 12.0% | 4 1.4% | 184 66.7% | 90 32.6% | 2 .7% | 276 100.0% |
| London | 213 62.8% | 126 37.2% | 133 39.2% | 161 47.5% | 24 7.1% | 19 5.6% | 2 .6% | 254 74.9% | 83 24.5% | 2 .6% | 339 100.0% |
| Mersey | 71 53.8% | 61 46.2% | 75 56.8% | 45 34.1% | 1 .8% | 9 6.8% | 2 1.5% | 91 68.9% | 40 30.3% | 1 .8% | 132 100.0% |
| North Scotland | 35 50.7% | 34 49.3% | 42 60.9% | 18 26.1% | 2 2.9% | 5 7.2% | 2 2.9% | 44 63.8% | 25 36.2% | 0 .0% | 69 100.0% |
| North Western | 138 56.6% | 106 43.4% | 119 48.8% | 97 39.8% | 9 3.7% | 16 6.6% | 3 1.2% | 167 68.4% | 77 31.6% | 0 .0% | 244 100.0% |
| Northern | 71 52.6% | 64 47.4% | 64 47.4% | 60 44.4% | 5 3.7% | 5 3.7% | 1 .7% | 64 47.4% | 71 52.6% | 0 .0% | 135 100.0% |
| Northern Ireland | 60 70.6% | 25 29.4% | 84 98.8% | 1 1.2% | 0 .0% | 0 .0% | 0 .0% | 78 91.8% | 7 8.2% | 0 .0% | 85 100.0% |
| Oxford | 77 64.7% | 42 35.3% | 66 55.5% | 43 36.1% | 3 2.5% | 7 5.9% | 0 .0% | 93 78.2% | 26 21.8% | 0 .0% | 119 100.0% |
| Severn | 81 68.1% | 38 31.9% | 96 80.7% | 15 12.6% | 1 .8% | 7 5.9% | 0 .0% | 92 77.3% | 27 22.7% | 0 .0% | 119 100.0% |
| South East Scotland | 51 51.5% | 48 48.5% | 62 62.6% | 27 27.3% | 5 5.1% | 5 5.1% | 0 .0% | 63 63.6% | 36 36.4% | 0 .0% | 99 100.0% |
| South West Peninsula | 26 50.0% | 26 50.0% | 41 78.8% | 7 13.5% | 1 1.9% | 3 5.8% | 0 .0% | 45 86.5% | 7 13.5% | 0 .0% | 52 100.0% |
| South Yorkshire & South Humber | 45 57.7% | 33 42.3% | 34 43.6% | 41 52.6% | 1 1.3% | 1 1.3% | 1 1.3% | 49 62.8% | 29 37.2% | 0 .0% | 78 100.0% |
| Wales | 103 55.1% | 84 44.9% | 98 52.4% | 81 43.3% | 3 1.6% | 4 2.1% | 1 .5% | 113 60.4% | 74 39.6% | 0 .0% | 187 100.0% |
| Wessex | 83 59.3% | 57 40.7% | 106 75.7% | 26 18.6% | 0 .0% | 7 5.0% | 1 .7% | 112 80.0% | 28 20.0% | 0 .0% | 140 100.0% |
| West Midlands | 123 56.2% | 96 43.8% | 71 32.4% | 119 54.3% | 7 3.2% | 14 6.4% | 8 3.7% | 132 60.3% | 87 39.7% | 0 .0% | 219 100.0% |
| West Scotland | 104 49.8% | 105 50.2% | 132 63.2% | 59 28.2% | 9 4.3% | 9 4.3% | 0 .0% | 145 69.4% | 64 30.6% | 0 .0% | 209 100.0% |
| Yorkshire | 58 63.0% | 34 37.0% | 42 45.7% | 39 42.4% | 5 5.4% | 3 3.3% | 3 3.3% | 63 68.5% | 29 31.5% | 0 .0% | 92 100.0% |
| Total | 1762 57.4% | 1306 42.6% | 1597 52.1% | 1126 36.7% | 129 4.2% | 173 5.6% | 43 1.4% | 2086 68.0% | 963 31.4% | 19 .6% | 3068 100.0% |

a) AKT Result by AKT DIET

df = 2, $X^2 = 4.7$, NS

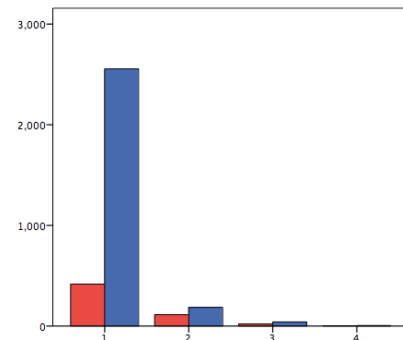
| | | AKT Result | | Total |
|----------|---------|--------------|---------------|----------------|
| | | Fail | Pass | |
| AKT Diet | January | 181 15.8% | 964 84.2% | 1145 100.0% |
| | May | 165 18.9% | 706 81.1% | 871 100.0% |
| | October | 208 15.7% | 1116 84.3% | 1324 100.0% |
| Total | | 554 16.6% | 2786 83.4% | 3340 100.0% |



b) AKT Result by ATTEMPT at the AKT

df = 3, $X^2 = 127.1$, $p < .0001$

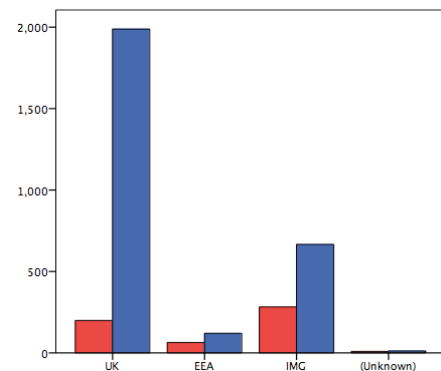
| | | AKT Result | | Total |
|--------------------|---|--------------|---------------|----------------|
| | | Fail | Pass | |
| Attempt at the AKT | 1 | 417 14.0% | 2554 86.0% | 2971 100.0% |
| | 2 | 113 37.8% | 186 62.2% | 299 100.0% |
| | 3 | 21 33.9% | 41 66.1% | 62 100.0% |
| | 4 | 3 37.5% | 5 62.5% | 8 100.0% |
| Total | | 554 16.6% | 2786 83.4% | 3340 100.0% |



c) AKT Result by SOURCE OF PRIMARY MEDICAL QUALIFICATION (PMQ)

df = 3, $X^2 = 261.8$, $p < .0001$

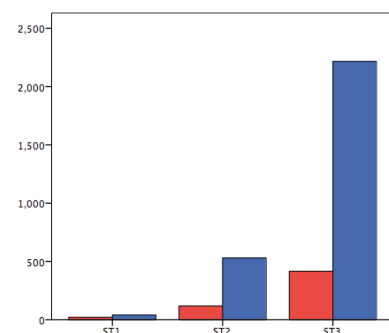
| | | AKT Result | | Total |
|---|-----------|--------------|---------------|----------------|
| | | Fail | Pass | |
| Source of Primary Medical Qualification | UK | 199 9.1% | 1988 90.9% | 2187 100.0% |
| | EEA | 64 34.8% | 120 65.2% | 184 100.0% |
| | IMG | 282 29.7% | 666 70.3% | 948 100.0% |
| | (Unknown) | 9 42.9% | 12 57.1% | 21 100.0% |
| Total | | 554 16.6% | 2786 83.4% | 3340 100.0% |



d) AKT Result by YEAR in the TRAINING PROGRAMME

df = 2, $X^2 = 14.6$, $p < .001$

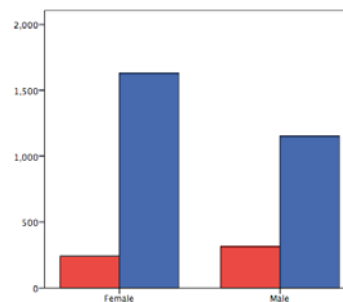
| | | AKT Result | | Total |
|-------|--|--------------|---------------|----------------|
| | | Fail | Pass | |
| ST1 | | 20 33.3% | 40 66.7% | 60 100.0% |
| ST2 | | 118 18.2% | 530 81.8% | 648 100.0% |
| ST3 | | 416 15.8% | 2216 84.2% | 2632 100.0% |
| Total | | 554 16.6% | 2786 83.4% | 3340 100.0% |



e) AKT Result by CANDIDATE GENDER

df = 1, $X^2 = 42.7$, $p < .0001$

| | | AKT Result | | Total |
|------------------|--------|--------------|---------------|----------------|
| | | Fail | Pass | |
| Candidate Gender | Female | 241 12.9% | 1632 87.1% | 1873 100.0% |
| | Male | 313 21.3% | 1154 78.7% | 1467 100.0% |
| Total | | 554 16.6% | 2786 83.4% | 3340 100.0% |

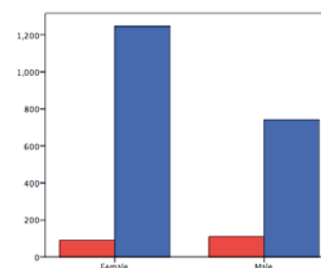


f) AKT Result by CANDIDATE GENDER *within* SOURCE OF PMQ

1 UK GRADUATES

df = 1, $X^2 = 23.2$, $p < .0001$

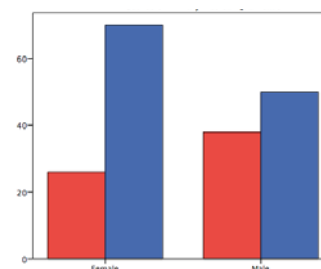
| | | AKT Result | | Total |
|------------------|--------|--------------|---------------|----------------|
| | | Fail | Pass | |
| Candidate Gender | Female | 90 6.7% | 1246 93.3% | 1336 100.0% |
| | Male | 109 12.8% | 742 87.2% | 851 100.0% |
| Total | | 199 9.1% | 1988 90.9% | 2187 100.0% |



2 EEA GRADUATES

df = 1, $X^2 = 5.2$, $p < .05$

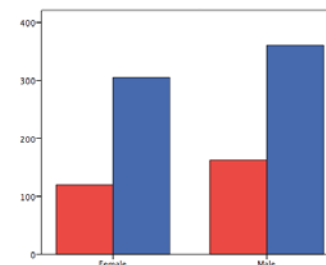
| | | AKT Result | | Total |
|------------------|--------|-------------|--------------|---------------|
| | | Fail | Pass | |
| Candidate Gender | Female | 26 27.1% | 70 72.9% | 96 100.0% |
| | Male | 38 43.2% | 50 56.8% | 88 100.0% |
| Total | | 64 34.8% | 120 65.2% | 184 100.0% |



3 INTERNATIONAL GRADUATES (IMG)

df = 1, $X^2 = 0.8$, NS

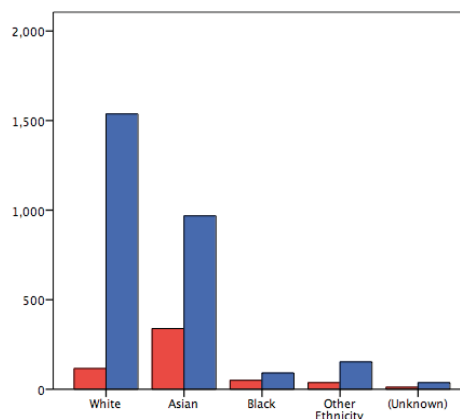
| | | AKT Result | | Total |
|------------------|--------|--------------|--------------|---------------|
| | | Fail | Pass | |
| Candidate Gender | Female | 120 28.2% | 305 71.8% | 425 100.0% |
| | Male | 162 31.0% | 361 69.0% | 523 100.0% |
| Total | | 282 29.7% | 666 70.3% | 948 100.0% |



g) AKT Result by CLASSIFIED CANDIDATE ETHNICITY (self-reported)

df = 4, $X^2 = 231.7$, $p < .0001$

| | | AKT Result | | Total |
|----------------------------------|-----------------|--------------|---------------|----------------|
| | | Fail | Pass | |
| Candidate Ethnicity (classified) | White | 116 7.0% | 1537 93.0% | 1653 100.0% |
| | Asian | 339 25.9% | 968 74.1% | 1307 100.0% |
| | Black | 50 35.5% | 91 64.5% | 141 100.0% |
| | Other Ethnicity | 37 19.5% | 153 80.5% | 190 100.0% |
| | (Unknown) | 12 24.5% | 37 75.5% | 49 100.0% |
| Total | | 554 16.6% | 2786 83.4% | 3340 100.0% |

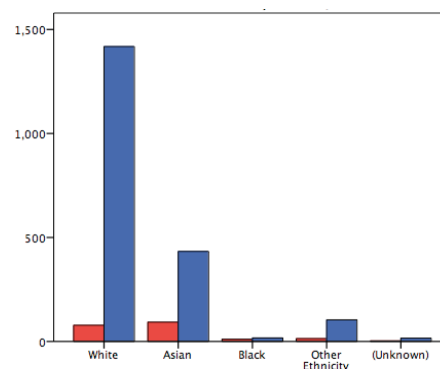


h) AKT Result by CLASSIFIED CANDIDATE ETHNICITY *within* SOURCE OF PMQ

1 UK GRADUATES

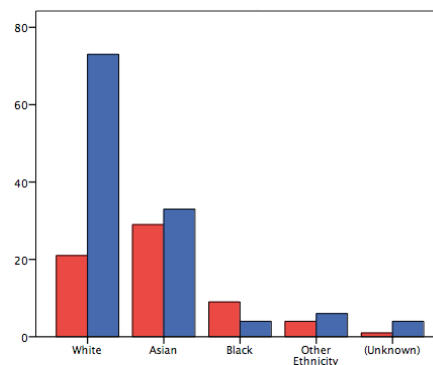
df = 4, $X^2 = 107.1$, $p < .0001$

| | | AKT Result | | Total |
|----------------------------------|-----------------|-------------|---------------|----------------|
| | | Fail | Pass | |
| Candidate Ethnicity (classified) | White | 78 5.2% | 1418 94.8% | 1496 100.0% |
| | Asian | 93 17.7% | 433 82.3% | 526 100.0% |
| | Black | 11 39.3% | 17 60.7% | 28 100.0% |
| | Other Ethnicity | 14 11.9% | 104 88.1% | 118 100.0% |
| | (Unknown) | 3 15.8% | 16 84.2% | 19 100.0% |
| Total | | 199 9.1% | 1988 90.9% | 2187 100.0% |



2 EEA GRADUATES (X^2 n/a)

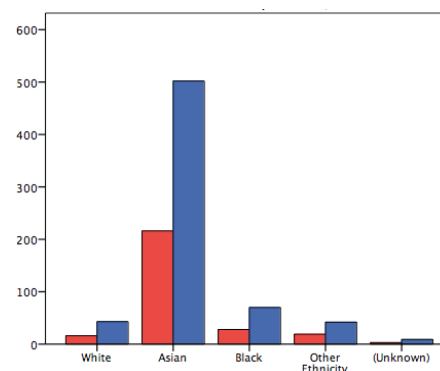
| | | AKT Result | | Total |
|----------------------------------|-----------------|-------------|--------------|---------------|
| | | Fail | Pass | |
| Candidate Ethnicity (classified) | White | 21 22.3% | 73 77.7% | 94 100.0% |
| | Asian | 29 46.8% | 33 53.2% | 62 100.0% |
| | Black | 9 69.2% | 4 30.8% | 13 100.0% |
| | Other Ethnicity | 4 40.0% | 6 60.0% | 10 100.0% |
| | (Unknown) | 1 20.0% | 4 80.0% | 5 100.0% |
| Total | | 64 34.8% | 120 65.2% | 184 100.0% |



3 INTERNATIONAL GRADUATES (IMG)

df = 4, $X^2 = 0.5$, NS

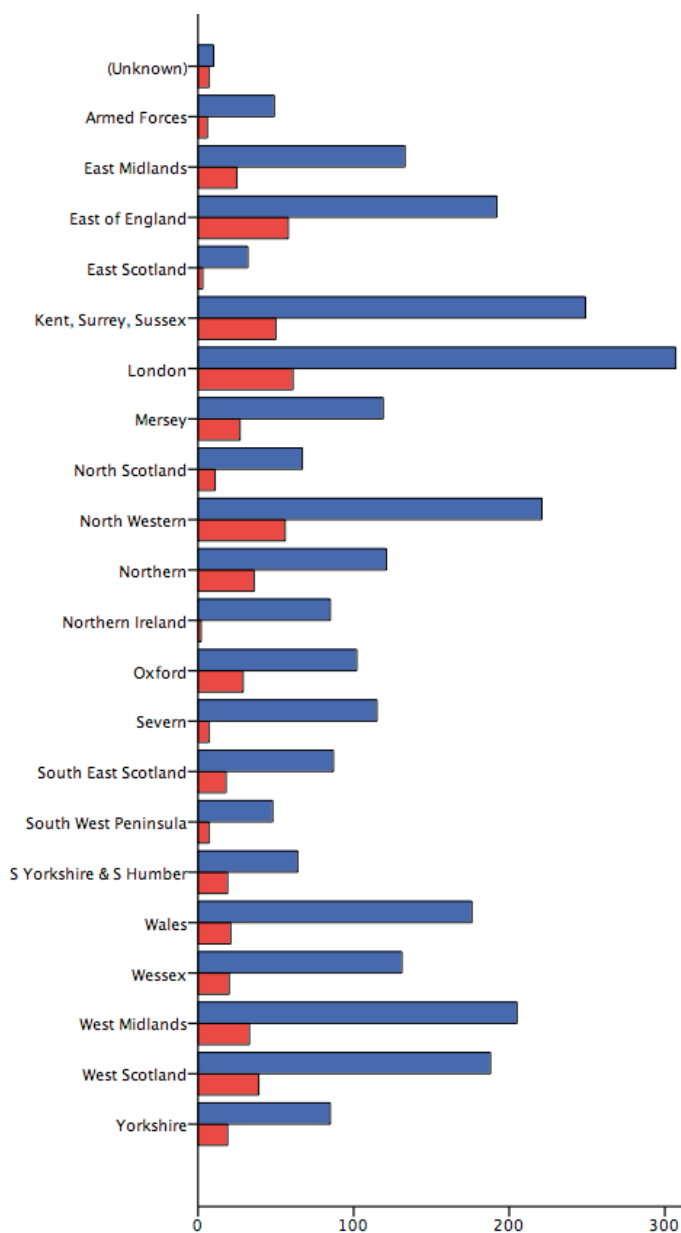
| | | AKT Result | | Total |
|----------------------------------|-----------------|--------------|--------------|---------------|
| | | Fail | Pass | |
| Candidate Ethnicity (classified) | White | 16 27.1% | 43 72.9% | 59 100.0% |
| | Asian | 216 30.1% | 502 69.9% | 718 100.0% |
| | Black | 28 28.6% | 70 71.4% | 98 100.0% |
| | Other Ethnicity | 19 31.1% | 42 68.9% | 61 100.0% |
| | (Unknown) | 3 25.0% | 9 75.0% | 12 100.0% |
| Total | | 282 29.7% | 666 70.3% | 948 100.0% |



i) AKT Result by TRAINING DEANERY

df = 21, $X^2 = 63.1$, $p < .0001$

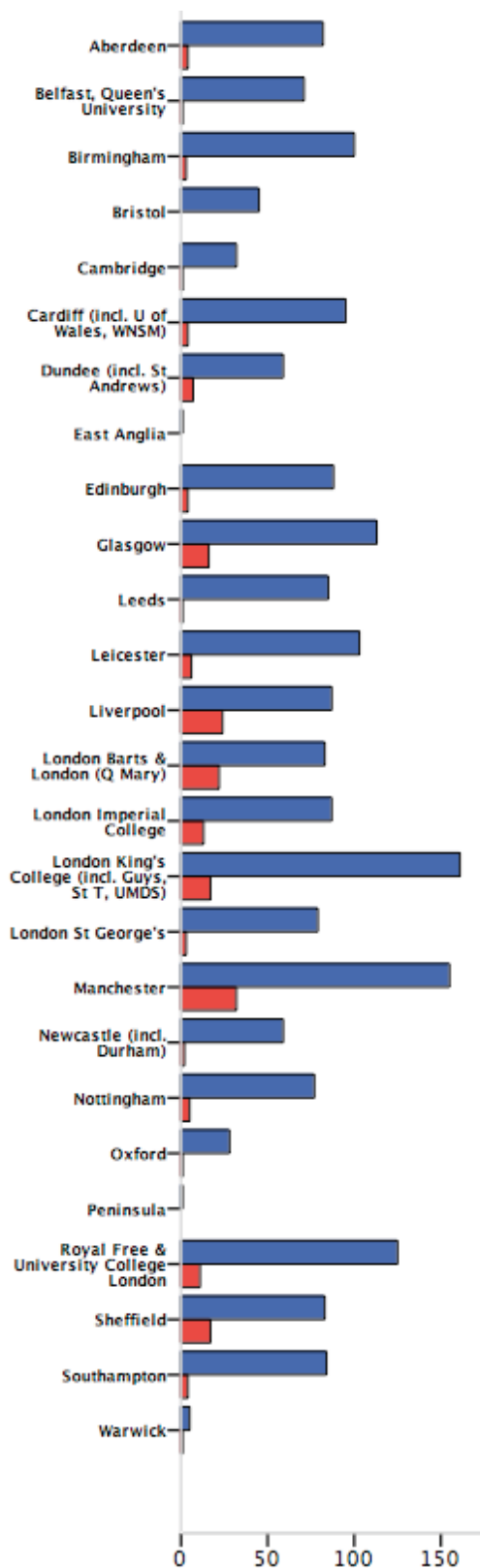
| | AKT Result | | Total |
|--------------------------------|------------|-------|--------|
| | Fail | Pass | |
| (Unknown) | 7 | 10 | 17 |
| | 41.2% | 58.8% | 100.0% |
| Armed Forces (Defence) | 6 | 49 | 55 |
| | 10.9% | 89.1% | 100.0% |
| East Midlands | 25 | 133 | 158 |
| | 15.8% | 84.2% | 100.0% |
| East of England | 58 | 192 | 250 |
| | 23.2% | 76.8% | 100.0% |
| East Scotland | 3 | 32 | 35 |
| | 8.6% | 91.4% | 100.0% |
| Kent, Surrey, Sussex | 50 | 249 | 299 |
| | 16.7% | 83.3% | 100.0% |
| London | 61 | 307 | 368 |
| | 16.6% | 83.4% | 100.0% |
| Mersey | 27 | 119 | 146 |
| | 18.5% | 81.5% | 100.0% |
| North Scotland | 11 | 67 | 78 |
| | 14.1% | 85.9% | 100.0% |
| North Western | 56 | 221 | 277 |
| | 20.2% | 79.8% | 100.0% |
| Northern | 36 | 121 | 157 |
| | 22.9% | 77.1% | 100.0% |
| Northern Ireland | 2 | 85 | 87 |
| | 2.3% | 97.7% | 100.0% |
| Oxford | 29 | 102 | 131 |
| | 22.1% | 77.9% | 100.0% |
| Severn | 7 | 115 | 122 |
| | 5.7% | 94.3% | 100.0% |
| South East Scotland | 18 | 87 | 105 |
| | 17.1% | 82.9% | 100.0% |
| South West Peninsula | 7 | 48 | 55 |
| | 12.7% | 87.3% | 100.0% |
| South Yorkshire & South Humber | 19 | 64 | 83 |
| | 22.9% | 77.1% | 100.0% |
| Wales | 21 | 176 | 197 |
| | 10.7% | 89.3% | 100.0% |
| Wessex | 20 | 131 | 151 |
| | 13.2% | 86.8% | 100.0% |
| West Midlands | 33 | 205 | 238 |
| | 13.9% | 86.1% | 100.0% |
| West Scotland | 39 | 188 | 227 |
| | 17.2% | 82.8% | 100.0% |
| Yorkshire | 19 | 85 | 104 |
| | 18.3% | 81.7% | 100.0% |
| Total | 554 | 2786 | 3340 |
| | 16.6% | 83.4% | 100.0% |



j) AKT Result by SOURCE OF PRIMARY MEDICAL QUALIFICATION, subdivided

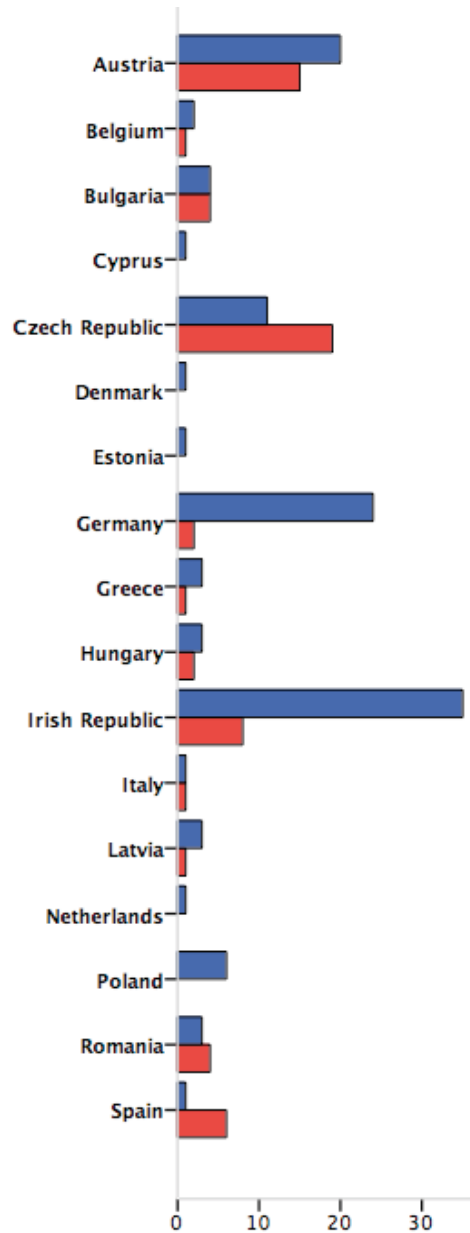
1 BY UK MEDICAL SCHOOL

| | AKT Result | | Total |
|--|---------------------|-----------------------|------------------------|
| | Fail | Pass | |
| Aberdeen | 4 4.7% | 82 95.3% | 86 100.0% |
| Belfast, Queen's University | 1 1.4% | 71 98.6% | 72 100.0% |
| Birmingham | 3 2.9% | 100 97.1% | 103 100.0% |
| Bristol | 0 .0% | 45 100.0% | 45 100.0% |
| Cambridge | 1 3.0% | 32 97.0% | 33 100.0% |
| Cardiff (incl. U of Wales, WNSM) | 4 4.0% | 95 96.0% | 99 100.0% |
| Dundee (incl. St Andrews) | 7 10.6% | 59 89.4% | 66 100.0% |
| East Anglia | 0 .0% | 1 100.0% | 1 100.0% |
| Edinburgh | 4 4.3% | 88 95.7% | 92 100.0% |
| Glasgow | 16 12.4% | 113 87.6% | 129 100.0% |
| Leeds | 1 1.2% | 85 98.8% | 86 100.0% |
| Leicester | 6 5.5% | 103 94.5% | 109 100.0% |
| Liverpool | 24 21.6% | 87 78.4% | 111 100.0% |
| London Barts & London (Q Mary) | 22 21.0% | 83 79.0% | 105 100.0% |
| London Imperial College | 13 13.0% | 87 87.0% | 100 100.0% |
| London King's College (incl. Guys, St T, UMDS) | 17 9.6% | 161 90.4% | 178 100.0% |
| London St George's | 3 3.7% | 79 96.3% | 82 100.0% |
| Manchester | 32 17.1% | 155 82.9% | 187 100.0% |
| Newcastle (incl. Durham) | 2 3.3% | 59 96.7% | 61 100.0% |
| Nottingham | 5 6.1% | 77 93.9% | 82 100.0% |
| Oxford | 1 3.4% | 28 96.6% | 29 100.0% |
| Peninsula | 0 .0% | 1 100.0% | 1 100.0% |
| Royal Free & University College London | 11 8.1% | 125 91.9% | 136 100.0% |
| Sheffield | 17 17.0% | 83 83.0% | 100 100.0% |
| Southampton | 4 4.5% | 84 95.5% | 88 100.0% |
| Warwick | 1 16.7% | 5 83.3% | 6 100.0% |
| Total | 199 9.1% | 1988 90.9% | 2187 100.0% |



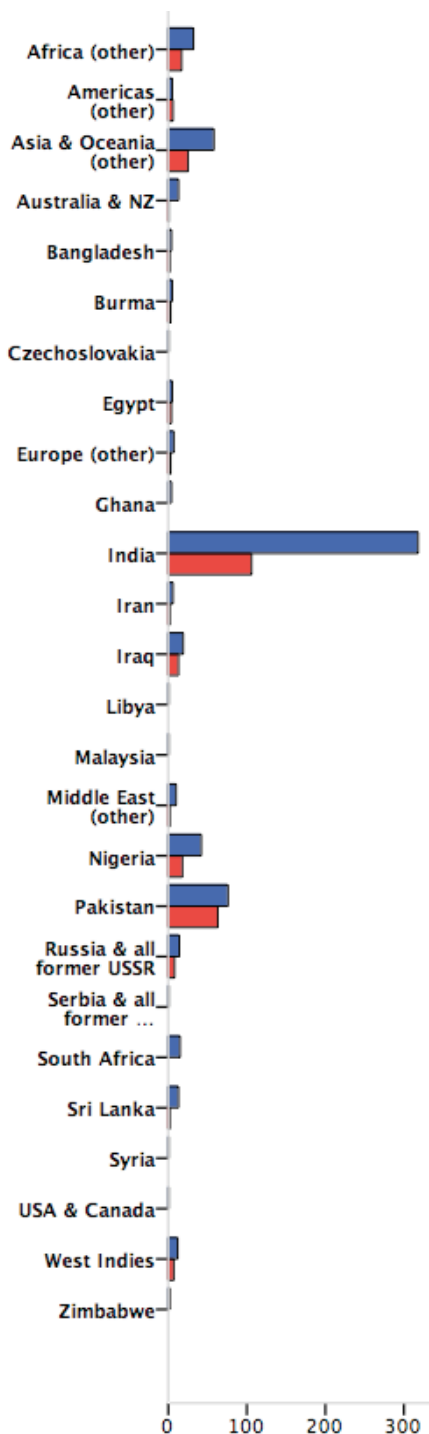
2 BY EEA COUNTRY OF GRADUATION

| | AKT Result | | Total |
|----------------|-------------|--------------|---------------|
| | Fail | Pass | |
| Austria | 15 42.9% | 20 57.1% | 35 100.0% |
| Belgium | 1 33.3% | 2 66.7% | 3 100.0% |
| Bulgaria | 4 50.0% | 4 50.0% | 8 100.0% |
| Cyprus | 0 .0% | 1 100.0% | 1 100.0% |
| Czech Republic | 19 63.3% | 11 36.7% | 30 100.0% |
| Denmark | 0 .0% | 1 100.0% | 1 100.0% |
| Estonia | 0 .0% | 1 100.0% | 1 100.0% |
| Germany | 2 7.7% | 24 92.3% | 26 100.0% |
| Greece | 1 25.0% | 3 75.0% | 4 100.0% |
| Hungary | 2 40.0% | 3 60.0% | 5 100.0% |
| Irish Republic | 8 18.6% | 35 81.4% | 43 100.0% |
| Italy | 1 50.0% | 1 50.0% | 2 100.0% |
| Latvia | 1 25.0% | 3 75.0% | 4 100.0% |
| Netherlands | 0 .0% | 1 100.0% | 1 100.0% |
| Poland | 0 .0% | 6 100.0% | 6 100.0% |
| Romania | 4 57.1% | 3 42.9% | 7 100.0% |
| Spain | 6 85.7% | 1 14.3% | 7 100.0% |
| Total | 64 34.8% | 120 65.2% | 184 100.0% |



3 BY COUNTRY OF GRADUATION, INTERNATIONALLY, OTHER THAN THE EEA

| | AKT Result | | Total |
|--------------------------------|----------------------|----------------------|-----------------------|
| | Fail | Pass | |
| Africa (other) | 17 34.7% | 32 65.3% | 49 100.0% |
| Americas (other) | 6 54.5% | 5 45.5% | 11 100.0% |
| Asia & Oceania (other) | 25 30.1% | 58 69.9% | 83 100.0% |
| Australia & NZ | 1 7.1% | 13 92.9% | 14 100.0% |
| Bangladesh | 2 33.3% | 4 66.7% | 6 100.0% |
| Burma | 3 37.5% | 5 62.5% | 8 100.0% |
| Czechoslovakia | 0 .0% | 1 100.0% | 1 100.0% |
| Egypt | 4 44.4% | 5 55.6% | 9 100.0% |
| Europe (other) | 3 30.0% | 7 70.0% | 10 100.0% |
| Ghana | 0 .0% | 4 100.0% | 4 100.0% |
| India | 106 25.0% | 318 75.0% | 424 100.0% |
| Iran | 2 25.0% | 6 75.0% | 8 100.0% |
| Iraq | 13 40.6% | 19 59.4% | 32 100.0% |
| Libya | 0 .0% | 1 100.0% | 1 100.0% |
| Malaysia | 0 .0% | 1 100.0% | 1 100.0% |
| Middle East (other) | 2 16.7% | 10 83.3% | 12 100.0% |
| Nigeria | 18 30.0% | 42 70.0% | 60 100.0% |
| Pakistan | 63 45.3% | 76 54.7% | 139 100.0% |
| Russia & all former USSR | 8 36.4% | 14 63.6% | 22 100.0% |
| Serbia & all former Yugoslavia | 0 .0% | 1 100.0% | 1 100.0% |
| South Africa | 0 .0% | 15 100.0% | 15 100.0% |
| Sri Lanka | 2 13.3% | 13 86.7% | 15 100.0% |
| Syria | 0 .0% | 1 100.0% | 1 100.0% |
| USA & Canada | 0 .0% | 1 100.0% | 1 100.0% |
| West Indies | 7 36.8% | 12 63.2% | 19 100.0% |
| Zimbabwe | 0 .0% | 2 100.0% | 2 100.0% |
| Total | 282 29.7% | 666 70.3% | 948 100.0% |

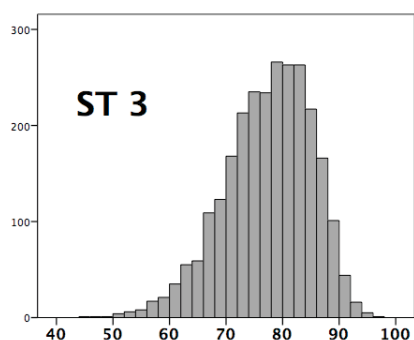
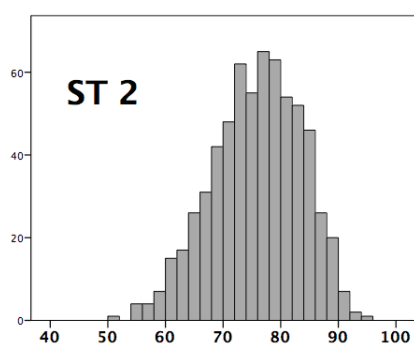
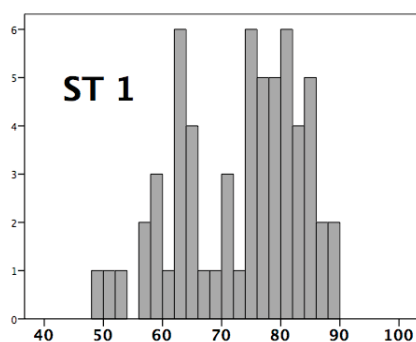


k) AKT Total and Component SCORES, by YEAR IN THE TRAINING PROGRAMME

Note: Interpret cautiously, as this is an aggregation of scores across diets which have slightly different distributions and overall pass-marks. The charts are shown to give a general impression of score differences between the components, and by training period.

| Year of Training | | N | Minimum | Maximum | Mean | Std. Deviation |
|------------------|--------------------------------|------|---------|---------|-------|----------------|
| ST1 | Clinical Management Score | 60 | 48.72 | 90.38 | 73.99 | 10.26 |
| | Evidence Interpretation Score | 60 | 30 | 100 | 72.75 | 19.69 |
| | Organisational Questions Score | 60 | 31.82 | 90.91 | 66.22 | 12.62 |
| | Total Score (%) | 60 | 48.48 | 88.89 | 73.05 | 10.35 |
| | Valid N (listwise) | 60 | | | | |
| ST2 | Clinical Management Score | 648 | 52.56 | 95.63 | 77.02 | 7.80 |
| | Evidence Interpretation Score | 648 | 20 | 100 | 73.89 | 16.58 |
| | Organisational Questions Score | 648 | 31.82 | 100.00 | 69.25 | 11.22 |
| | Total Score (%) | 648 | 50.00 | 94.95 | 75.91 | 7.77 |
| | Valid N (listwise) | 648 | | | | |
| ST3 | Clinical Management Score | 2632 | 47.44 | 98.13 | 78.64 | 7.90 |
| | Evidence Interpretation Score | 2632 | 15 | 100 | 74.88 | 15.05 |
| | Organisational Questions Score | 2632 | 27.27 | 100.00 | 70.47 | 11.21 |
| | Total Score (%) | 2632 | 45.45 | 96.97 | 77.48 | 7.78 |
| | Valid N (listwise) | 2632 | | | | |

Distribution of Total Score, by Year



4: CSA Statistics

Summary of Demographic Information on CSA Candidates

Note that 2030 candidates made a total of 2435 attempts at the CSA during 2008. This table shows the background demographic characteristics of the 2030, by training Deanery. Other tables report on the 2435 attempts.

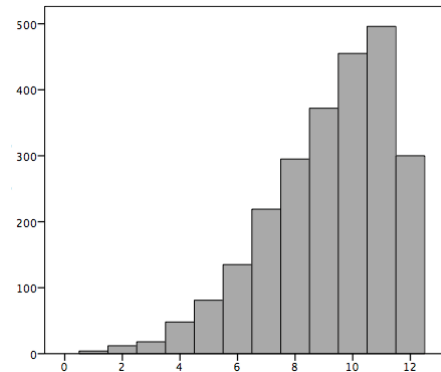
| Training Deanery | Candidate Gender | | Classified Candidate Ethnicity | | | | | UK or non-UK Graduate | | | Total |
|--------------------------------|-----------------------|----------------------|--------------------------------|----------------------|--------------------|--------------------|--------------------|-----------------------|-----------------------|-------------------|------------------------|
| | Female | Male | White | Asian | Black | Other Ethnicity | Unknown | Non-UK Graduate | UK Graduate | Unknown | |
| (Unknown) | 6 66.7% | 3 33.3% | 1 11.1% | 1 11.1% | 0 .0% | 1 11.1% | 6 66.7% | 0 .0% | 1 11.1% | 8 88.9% | 9 100.0% |
| Armed Forces (Defence) | 19 54.3% | 16 45.7% | 30 85.7% | 5 14.3% | 0 .0% | 0 .0% | 0 .0% | 3 8.6% | 32 91.4% | 0 .0% | 35 100.0% |
| East Midlands | 44 68.8% | 20 31.3% | 30 46.9% | 25 39.1% | 5 7.8% | 2 3.1% | 2 3.1% | 27 42.2% | 37 57.8% | 0 .0% | 64 100.0% |
| East of England | 77 55.8% | 61 44.2% | 55 39.9% | 66 47.8% | 8 5.8% | 6 4.3% | 3 2.2% | 53 38.4% | 83 60.1% | 2 1.4% | 138 100.0% |
| East Scotland | 20 66.7% | 10 33.3% | 26 86.7% | 4 13.3% | 0 .0% | 0 .0% | 0 .0% | 2 6.7% | 28 93.3% | 0 .0% | 30 100.0% |
| Kent, Surrey, Sussex | 96 54.2% | 81 45.8% | 78 44.1% | 66 37.3% | 10 5.6% | 17 9.6% | 6 3.4% | 67 37.9% | 110 62.1% | 0 .0% | 177 100.0% |
| London | 160 65.8% | 83 34.2% | 92 37.9% | 118 48.6% | 17 7.0% | 14 5.8% | 2 .8% | 55 22.6% | 187 77.0% | 1 .4% | 243 100.0% |
| Mersey | 56 65.9% | 29 34.1% | 46 54.1% | 30 35.3% | 0 .0% | 5 5.9% | 4 4.7% | 24 28.2% | 61 71.8% | 0 .0% | 85 100.0% |
| North Scotland | 24 49.0% | 25 51.0% | 33 67.3% | 13 26.5% | 0 .0% | 1 2.0% | 2 4.1% | 15 30.6% | 34 69.4% | 0 .0% | 49 100.0% |
| North Western | 86 50.9% | 83 49.1% | 73 43.2% | 76 45.0% | 6 3.6% | 9 5.3% | 5 3.0% | 63 37.3% | 106 62.7% | 0 .0% | 169 100.0% |
| Northern | 42 53.8% | 36 46.2% | 32 41.0% | 40 51.3% | 3 3.8% | 2 2.6% | 1 1.3% | 42 53.8% | 36 46.2% | 0 .0% | 78 100.0% |
| Northern Ireland | 36 64.3% | 20 35.7% | 56 100.0% | 0 .0% | 0 .0% | 0 .0% | 0 .0% | 4 7.1% | 52 92.9% | 0 .0% | 56 100.0% |
| Oxford | 47 68.1% | 22 31.9% | 35 50.7% | 29 42.0% | 0 .0% | 5 7.2% | 0 .0% | 18 26.1% | 51 73.9% | 0 .0% | 69 100.0% |
| Severn | 50 66.7% | 25 33.3% | 66 88.0% | 6 8.0% | 1 1.3% | 2 2.7% | 0 .0% | 12 16.0% | 63 84.0% | 0 .0% | 75 100.0% |
| South East Scotland | 42 61.8% | 26 38.2% | 47 69.1% | 15 22.1% | 2 2.9% | 4 5.9% | 0 .0% | 21 30.9% | 47 69.1% | 0 .0% | 68 100.0% |
| South West Peninsula | 13 48.1% | 14 51.9% | 21 77.8% | 3 11.1% | 2 7.4% | 1 3.7% | 0 .0% | 4 14.8% | 23 85.2% | 0 .0% | 27 100.0% |
| South Yorkshire & South Humber | 20 46.5% | 23 53.5% | 15 34.9% | 25 58.1% | 1 2.3% | 1 2.3% | 1 2.3% | 23 53.5% | 20 46.5% | 0 .0% | 43 100.0% |
| Wales | 55 47.8% | 60 52.2% | 53 46.1% | 55 47.8% | 4 3.5% | 2 1.7% | 1 .9% | 51 44.3% | 63 54.8% | 1 .9% | 115 100.0% |
| Wessex | 63 55.3% | 51 44.7% | 86 75.4% | 23 20.2% | 0 .0% | 4 3.5% | 1 .9% | 28 24.6% | 86 75.4% | 0 .0% | 114 100.0% |
| West Midlands | 97 52.4% | 88 47.6% | 51 27.6% | 111 60.0% | 5 2.7% | 11 5.9% | 7 3.8% | 93 50.3% | 91 49.2% | 1 .5% | 185 100.0% |
| West Scotland | 72 55.8% | 57 44.2% | 93 72.1% | 32 24.8% | 2 1.6% | 2 1.6% | 0 .0% | 32 24.8% | 96 74.4% | 1 .8% | 129 100.0% |
| Yorkshire | 35 48.6% | 37 51.4% | 37 51.4% | 29 40.3% | 2 2.8% | 2 2.8% | 2 2.8% | 24 33.3% | 48 66.7% | 0 .0% | 72 100.0% |
| Total | 1160 57.1% | 870 42.9% | 1056 52.0% | 772 38.0% | 68 3.3% | 91 4.5% | 43 2.1% | 661 32.6% | 1355 66.7% | 14 .7% | 2030 100.0% |

a) CSA Result, OVERALL; No of Cases Passed, OVERALL

| | N | Minimum | Maximum | Mean | Std. Deviation |
|------------------|------|---------|---------|------|----------------|
| CSA Cases Passed | 2435 | 1 | 12 | 9.17 | 2.168 |
| | 2435 | | | | |

| | Frequency | Percent |
|-------|-----------|---------|
| Fail | 517 | 21.2 |
| Pass | 1918 | 78.8 |
| Total | 2435 | 100.0 |

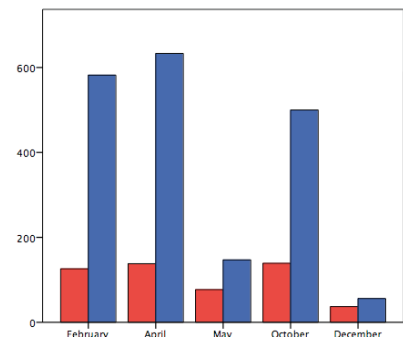
| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 1 | 4 | .2 | .2 | .2 |
| 2 | 12 | .5 | .5 | .7 |
| 3 | 18 | .7 | .7 | 1.4 |
| 4 | 48 | 2.0 | 2.0 | 3.4 |
| 5 | 81 | 3.3 | 3.3 | 6.7 |
| 6 | 135 | 5.5 | 5.5 | 12.2 |
| 7 | 219 | 9.0 | 9.0 | 21.2 |
| 8 | 295 | 12.1 | 12.1 | 33.3 |
| 9 | 372 | 15.3 | 15.3 | 48.6 |
| 10 | 455 | 18.7 | 18.7 | 67.3 |
| 11 | 496 | 20.4 | 20.4 | 87.7 |
| 12 | 300 | 12.3 | 12.3 | 100.0 |
| Total | 2435 | 100.0 | 100.0 | |



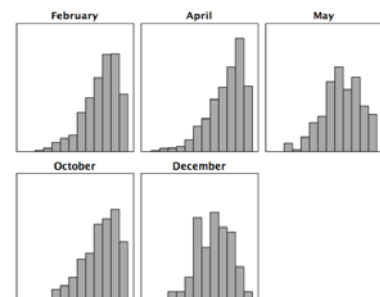
b) CSA Result, overall; No of Cases Passed - by CSA DIET

Result: $df = 4, X^2 = 52.5, p < .0001$

| | | CSA Result | | Total |
|----------|----------|------------|-------|--------|
| | | Fail | Pass | |
| CSA Diet | February | 126 | 582 | 708 |
| | | 17.8% | 82.2% | 100.0% |
| | April | 138 | 633 | 771 |
| | | 17.9% | 82.1% | 100.0% |
| | May | 77 | 147 | 224 |
| | | 34.4% | 65.6% | 100.0% |
| | October | 139 | 500 | 639 |
| | | 21.8% | 78.2% | 100.0% |
| | December | 37 | 56 | 93 |
| | | 39.8% | 60.2% | 100.0% |
| Total | | 517 | 1918 | 2435 |
| | | 21.2% | 78.8% | 100.0% |



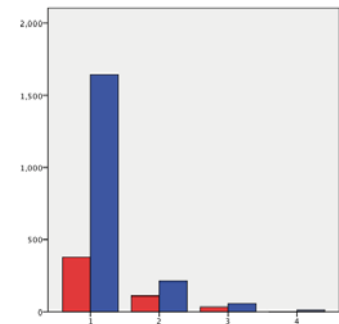
| CSA Diet | N | Minimum | Maximum | Mean | Std. Deviation |
|----------|-----|---------|---------|------|----------------|
| February | 708 | 2 | 12 | 9.34 | 2.044 |
| | 708 | | | | |
| April | 771 | 1 | 12 | 9.41 | 2.145 |
| | 771 | | | | |
| May | 224 | 2 | 12 | 8.33 | 2.266 |
| | 224 | | | | |
| October | 639 | 1 | 12 | 9.18 | 2.190 |
| | 639 | | | | |
| December | 93 | 3 | 12 | 7.94 | 2.010 |
| | 93 | | | | |



c) CSA Result, overall; No of Cases Passed - by ATTEMPT at the CSA

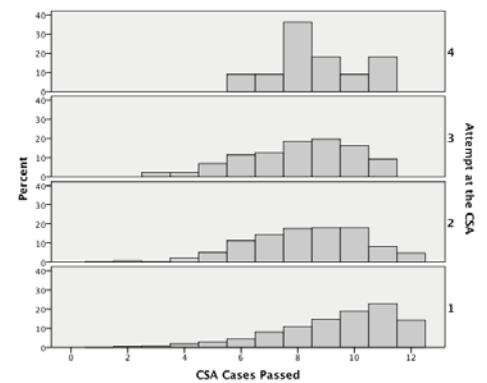
Result: $df = 3, X^2 = 51.3, p < .0001$

| | Attempt at the CSA | CSA Result | | Total |
|-------|--------------------|--------------|---------------|----------------|
| | | Fail | Pass | |
| | 1 | 375 18.6% | 1643 81.4% | 2018 100.0% |
| | 2 | 109 34.1% | 211 65.9% | 320 100.0% |
| | 3 | 31 36.0% | 55 64.0% | 86 100.0% |
| | 4 | 2 18.2% | 9 81.8% | 11 100.0% |
| Total | | 517 21.2% | 1918 78.8% | 2435 100.0% |



Cases Passed

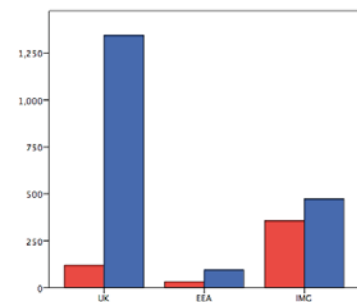
| Attempt at the CSA | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|------|---------|---------|------|----------------|
| 1 | 2018 | 1 | 12 | 9.37 | 2.149 |
| 2 | 320 | 1 | 12 | 8.28 | 2.038 |
| 3 | 86 | 3 | 11 | 8.02 | 1.976 |
| 4 | 11 | 6 | 11 | 8.64 | 1.567 |



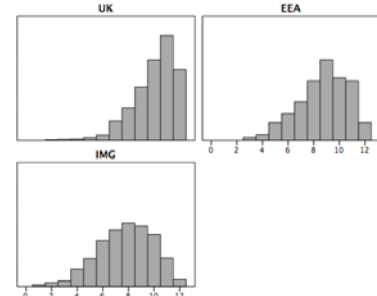
d) CSA Result, overall; No of Cases Passed - by SOURCE OF PRIMARY MEDICAL QUALIFICATION (PMQ)

Result: $df = 2, X^2 = 49.0, p < .0001$

| | Source of Primary Medical Qualification | CSA Result | | Total |
|-------|---|--------------|---------------|----------------|
| | | Fail | Pass | |
| | UK | 120 8.2% | 1344 91.8% | 1464 100.0% |
| | EEA | 31 24.8% | 94 75.2% | 125 100.0% |
| | IMG | 358 43.1% | 473 56.9% | 831 100.0% |
| Total | | 509 21.0% | 1911 79.0% | 2420 100.0% |



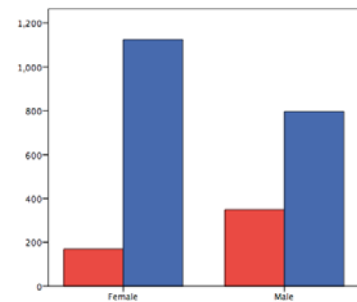
| Source of Primary Medical Qualification | N | Minimum | Maximum | Mean | Std. Deviation |
|---|------|---------|---------|-------|----------------|
| UK | 1464 | 2 | 12 | 10.04 | 1.666 |
| EEA | 125 | 3 | 12 | 8.73 | 1.969 |
| IMG | 831 | 1 | 12 | 7.76 | 2.183 |
| (Unknown) | 15 | 2 | 10 | 6.87 | 2.295 |



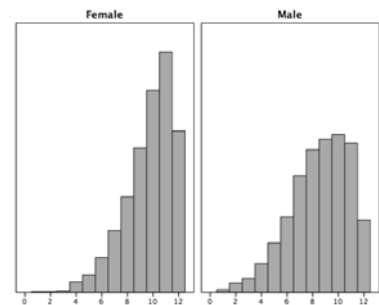
e) CSA Result, overall; No of Cases Passed - by CANDIDATE GENDER

Result: $df = 1, X^2 = 109.4, p < .0001$

| | | CSA Result | | Total |
|------------------|--------|------------|-------|--------|
| | | Fail | Pass | |
| Candidate Gender | Female | 169 | 1123 | 1292 |
| | | 13.1% | 86.9% | 100.0% |
| | Male | 348 | 795 | 1143 |
| | | 30.4% | 69.6% | 100.0% |
| Total | | 517 | 1918 | 2435 |
| | | 21.2% | 78.8% | 100.0% |



| Candidate Gender | N | Minimum | Maximum | Mean | Std. Deviation |
|------------------|------|---------|---------|------|----------------|
| Female | 1292 | 1 | 12 | 9.72 | 1.883 |
| Male | 1143 | 1 | 12 | 8.55 | 2.297 |

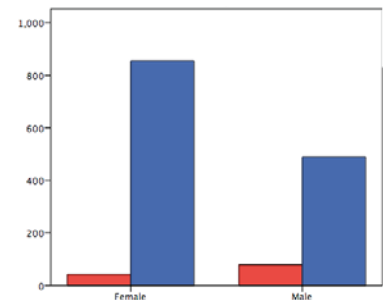


f) CSA Result, overall - by CANDIDATE GENDER *within* SOURCE OF PMQ

1 UK GRADUATES

$df = 1, X^2 = 39.1, p < .0001$

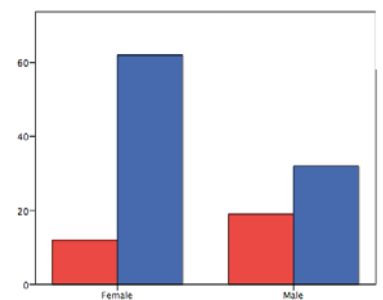
| | | CSA Result | | Total |
|--------|--|------------|-------|--------|
| | | Fail | Pass | |
| Female | | 42 | 855 | 897 |
| | | 4.7% | 95.3% | 100.0% |
| Male | | 79 | 489 | 568 |
| | | 13.9% | 86.1% | 100.0% |
| Total | | 121 | 1344 | 1465 |
| | | 8.3% | 91.7% | 100.0% |



2 EEA GRADUATES

$df = 1, X^2 = 7.2, p < .01$

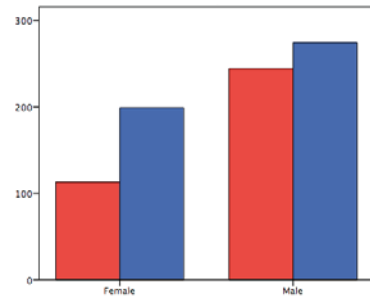
| | | CSA Result | | Total |
|--------|--|------------|-------|--------|
| | | Fail | Pass | |
| Female | | 12 | 62 | 74 |
| | | 16.2% | 83.8% | 100.0% |
| Male | | 19 | 32 | 51 |
| | | 37.3% | 62.7% | 100.0% |
| Total | | 31 | 94 | 125 |
| | | 24.8% | 75.2% | 100.0% |



3 INTERNATIONAL MEDICAL GRADUATES

df = 1, $X^2 = 9.4$, $p < .005$

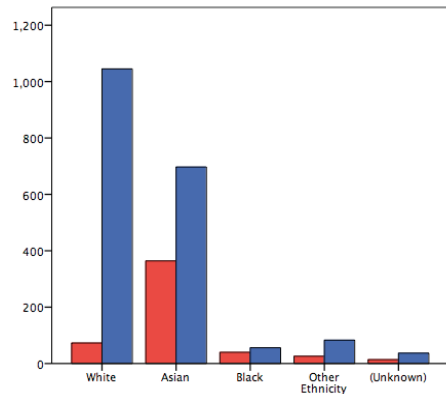
| | CSA Result | | Total |
|--------|--------------|--------------|---------------|
| | Fail | Pass | |
| Female | 113 36.2% | 199 63.8% | 312 100.0% |
| Male | 244 47.1% | 274 52.9% | 518 100.0% |
| Total | 357 43.0% | 473 57.0% | 830 100.0% |



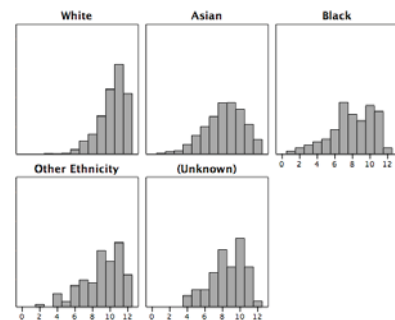
g) CSA Result, overall; No of Cases Passed - by CLASSIFIED CANDIDATE ETHNICITY

Result: df = 4, $X^2 = 278.6$, $p < .0001$

| | CSA Result | | Total |
|-----------------|--------------|---------------|----------------|
| | Fail | Pass | |
| White | 73 6.5% | 1045 93.5% | 1118 100.0% |
| Asian | 364 34.3% | 697 65.7% | 1061 100.0% |
| Black | 40 41.7% | 56 58.3% | 96 100.0% |
| Other Ethnicity | 26 23.9% | 83 76.1% | 109 100.0% |
| (Unknown) | 14 27.5% | 37 72.5% | 51 100.0% |
| Total | 517 21.2% | 1918 78.8% | 2435 100.0% |



| Classified Candidate Ethnicity | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------------------|--------------|---------|---------|-------|----------------|
| White | 1118 1118 | 3 | 12 | 10.23 | 1.524 |
| Asian | 1061 1061 | 1 | 12 | 8.22 | 2.202 |
| Black | 96 96 | 1 | 12 | 7.95 | 2.485 |
| Other Ethnicity | 109 109 | 2 | 12 | 9.07 | 2.251 |
| (Unknown) | 51 51 | 4 | 12 | 8.53 | 1.983 |

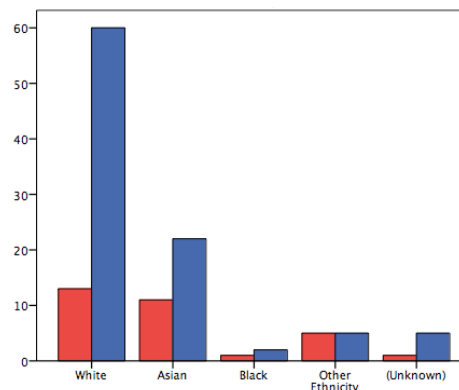


h) CSA Result - by CLASSIFIED CANDIDATE ETHNICITY *within* SOURCE OF PMQ

1 UK GRADUATES

df = 4, $X^2 = 61.9$, $p < .0001$

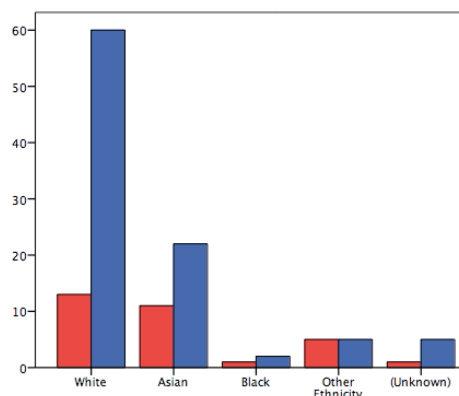
| | CSA Result | | Total |
|-----------------|-------------|---------------|----------------|
| | Fail | Pass | |
| White | 46 4.6% | 953 95.4% | 999 100.0% |
| Asian | 58 16.3% | 298 83.7% | 356 100.0% |
| Black | 5 29.4% | 12 70.6% | 17 100.0% |
| Other Ethnicity | 10 14.9% | 57 85.1% | 67 100.0% |
| (Unknown) | 2 7.7% | 24 92.3% | 26 100.0% |
| Total | 121 8.3% | 1344 91.7% | 1465 100.0% |



2 EEA GRADUATES

(X^2 n/a)

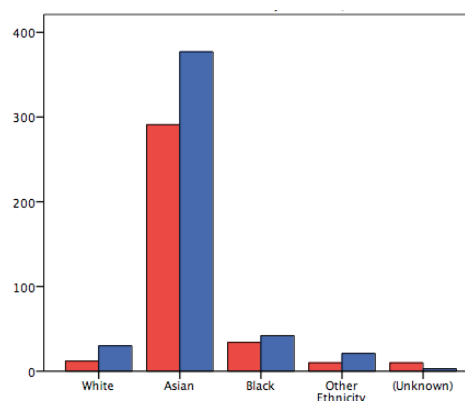
| | CSA Result | | Total |
|-----------------|-------------|-------------|---------------|
| | Fail | Pass | |
| White | 13 17.8% | 60 82.2% | 73 100.0% |
| Asian | 11 33.3% | 22 66.7% | 33 100.0% |
| Black | 1 33.3% | 2 66.7% | 3 100.0% |
| Other Ethnicity | 5 50.0% | 5 50.0% | 10 100.0% |
| (Unknown) | 1 16.7% | 5 83.3% | 6 100.0% |
| Total | 31 24.8% | 94 75.2% | 125 100.0% |



3 INTERNATIONAL MEDICAL GRADUATES

df = 4, $X^2 = 11.3$, $p < .05$

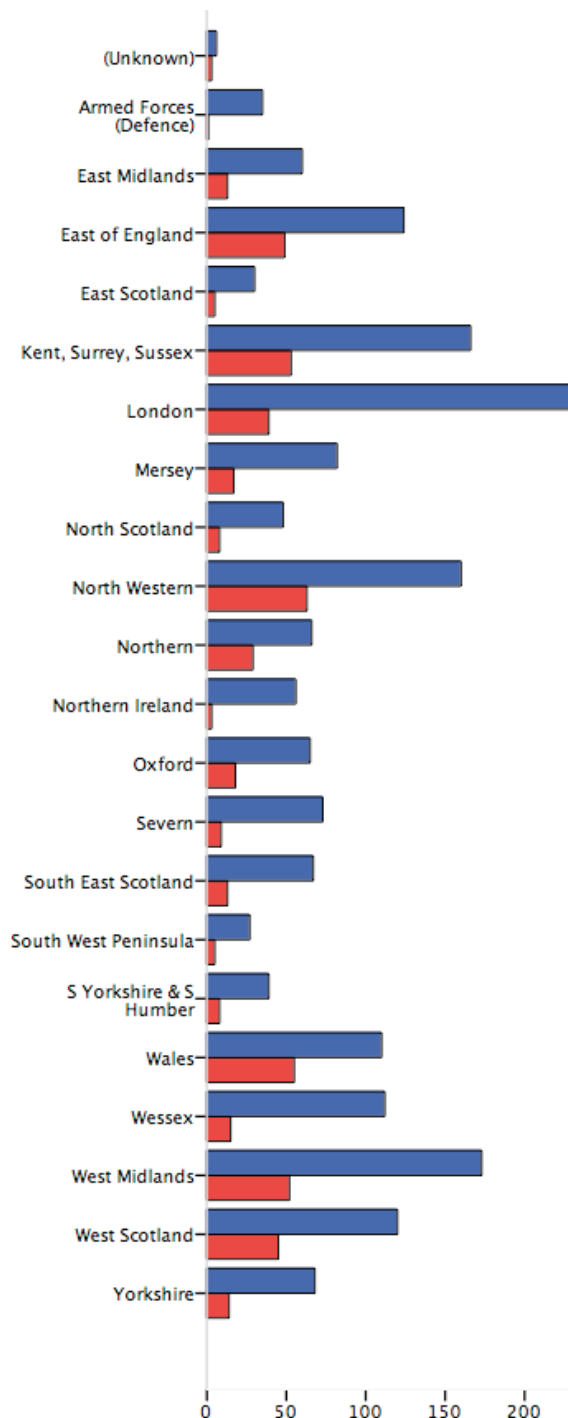
| | CSA Result | | Total |
|-----------------|--------------|--------------|---------------|
| | Fail | Pass | |
| White | 12 28.6% | 30 71.4% | 42 100.0% |
| Asian | 291 43.6% | 377 56.4% | 668 100.0% |
| Black | 34 44.7% | 42 55.3% | 76 100.0% |
| Other Ethnicity | 10 32.3% | 21 67.7% | 31 100.0% |
| (Unknown) | 10 76.9% | 3 23.1% | 13 100.0% |
| Total | 357 43.0% | 473 57.0% | 830 100.0% |



i) CSA Result, overall - by TRAINING DEANERY

df = 21, $\chi^2 = 80.3$, $p < .0001$

| | CSA Result | | Total |
|--------------------------------|--------------|---------------|----------------|
| | Fail | Pass | |
| (Unknown) | 3 33.3% | 6 66.7% | 9 100.0% |
| Armed Forces (Defence) | 1 2.8% | 35 97.2% | 36 100.0% |
| East Midlands | 13 17.8% | 60 82.2% | 73 100.0% |
| East of England | 49 28.3% | 124 71.7% | 173 100.0% |
| East Scotland | 5 14.3% | 30 85.7% | 35 100.0% |
| Kent, Surrey, Sussex | 53 24.2% | 166 75.8% | 219 100.0% |
| London | 39 14.4% | 231 85.6% | 270 100.0% |
| Mersey | 17 17.2% | 82 82.8% | 99 100.0% |
| North Scotland | 8 14.3% | 48 85.7% | 56 100.0% |
| North Western | 63 28.3% | 160 71.7% | 223 100.0% |
| Northern | 29 30.5% | 66 69.5% | 95 100.0% |
| Northern Ireland | 3 5.1% | 56 94.9% | 59 100.0% |
| Oxford | 18 21.7% | 65 78.3% | 83 100.0% |
| Severn | 9 11.0% | 73 89.0% | 82 100.0% |
| South East Scotland | 13 16.3% | 67 83.8% | 80 100.0% |
| South West Peninsula | 5 15.6% | 27 84.4% | 32 100.0% |
| South Yorkshire & South Humber | 8 17.0% | 39 83.0% | 47 100.0% |
| Wales | 55 33.3% | 110 66.7% | 165 100.0% |
| Wessex | 15 11.8% | 112 88.2% | 127 100.0% |
| West Midlands | 52 23.1% | 173 76.9% | 225 100.0% |
| West Scotland | 45 27.3% | 120 72.7% | 165 100.0% |
| Yorkshire | 14 17.1% | 68 82.9% | 82 100.0% |
| Total | 517 21.2% | 1918 78.8% | 2435 100.0% |



j) CSA No of Cases Passed - by TRAINING DEANERY

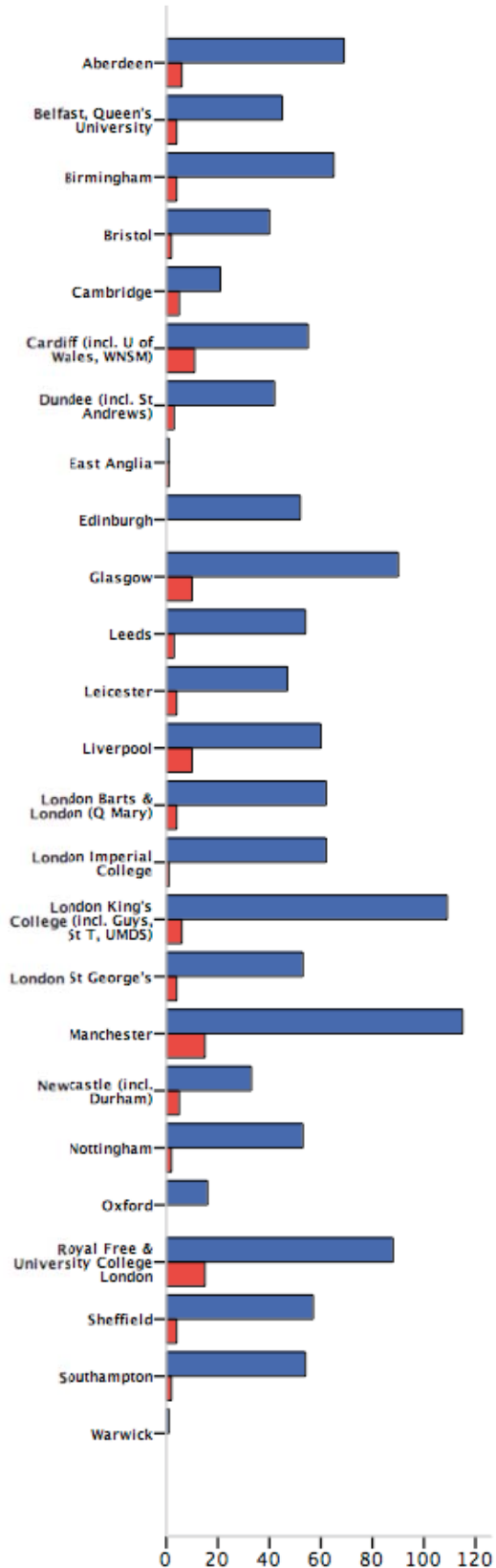
Anova F = 5.4, p<.0001

| Training Deanery | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------------------|------------|---------|---------|-------|----------------|
| (Unknown) | 9 9 | 4 | 11 | 7.78 | 2.489 |
| Armed Forces (Defence) | 36 36 | 3 | 12 | 10.17 | 1.732 |
| East Midlands | 73 73 | 3 | 12 | 9.19 | 2.259 |
| East of England | 173 173 | 1 | 12 | 8.76 | 2.329 |
| East Scotland | 35 35 | 2 | 12 | 9.63 | 2.059 |
| Kent, Surrey, Sussex | 219 219 | 2 | 12 | 8.89 | 2.261 |
| London | 270 270 | 3 | 12 | 9.70 | 1.948 |
| Mersey | 99 99 | 2 | 12 | 9.13 | 2.188 |
| North Scotland | 56 56 | 2 | 12 | 9.41 | 1.970 |
| North Western | 223 223 | 1 | 12 | 8.64 | 2.285 |
| Northern | 95 95 | 3 | 12 | 8.78 | 2.406 |
| Northern Ireland | 59 59 | 6 | 12 | 9.92 | 1.304 |
| Oxford | 83 83 | 1 | 12 | 9.14 | 2.073 |
| Severn | 82 82 | 2 | 12 | 9.96 | 1.997 |
| South East Scotland | 80 80 | 2 | 12 | 9.73 | 2.170 |
| South West Peninsula | 32 32 | 6 | 12 | 10.06 | 1.759 |
| South Yorkshire & South Humber | 47 47 | 6 | 12 | 9.64 | 1.938 |
| Wales | 165 165 | 3 | 12 | 8.56 | 2.179 |
| Wessex | 127 127 | 2 | 12 | 9.76 | 1.875 |
| West Midlands | 225 225 | 3 | 12 | 8.90 | 2.072 |
| West Scotland | 165 165 | 2 | 12 | 9.00 | 2.258 |
| Yorkshire | 82 82 | 2 | 12 | 9.29 | 2.082 |

k) CSA Result - by SOURCE OF PRIMARY MEDICAL QUALIFICATION, subdivided

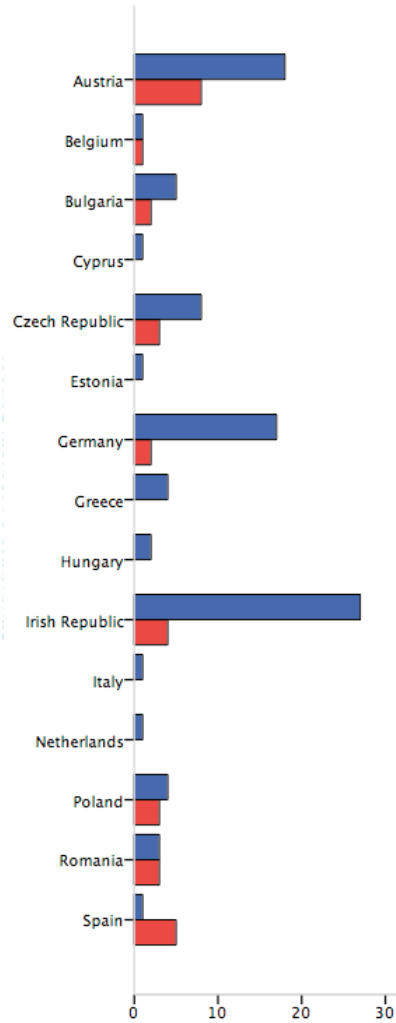
1 BY UK MEDICAL SCHOOL

| | CSA Result | | Total |
|--|---------------------|-----------------------|------------------------|
| | Fail | Pass | |
| Aberdeen | 6 8.0% | 69 92.0% | 75 100.0% |
| Belfast, Queen's University | 4 8.2% | 45 91.8% | 49 100.0% |
| Birmingham | 4 5.8% | 65 94.2% | 69 100.0% |
| Bristol | 2 4.8% | 40 95.2% | 42 100.0% |
| Cambridge | 5 19.2% | 21 80.8% | 26 100.0% |
| Cardiff (incl. U of Wales, WNSM) | 11 16.7% | 55 83.3% | 66 100.0% |
| Dundee (incl. St Andrews) | 3 6.7% | 42 93.3% | 45 100.0% |
| East Anglia | 1 50.0% | 1 50.0% | 2 100.0% |
| Edinburgh | 0 .0% | 52 100.0% | 52 100.0% |
| Glasgow | 10 10.0% | 90 90.0% | 100 100.0% |
| Leeds | 3 5.3% | 54 94.7% | 57 100.0% |
| Leicester | 4 7.8% | 47 92.2% | 51 100.0% |
| Liverpool | 10 14.3% | 60 85.7% | 70 100.0% |
| London Barts & London (Q Mary) | 4 6.1% | 62 93.9% | 66 100.0% |
| London Imperial College | 1 1.6% | 62 98.4% | 63 100.0% |
| London King's College (incl. Guys, St T, UMDS) | 6 5.2% | 109 94.8% | 115 100.0% |
| London St George's | 4 7.0% | 53 93.0% | 57 100.0% |
| Manchester | 15 11.5% | 115 88.5% | 130 100.0% |
| Newcastle (incl. Durham) | 5 13.2% | 33 86.8% | 38 100.0% |
| Nottingham | 2 3.6% | 53 96.4% | 55 100.0% |
| Oxford | 0 .0% | 16 100.0% | 16 100.0% |
| Royal Free & University College London | 15 14.6% | 88 85.4% | 103 100.0% |
| Sheffield | 4 6.6% | 57 93.4% | 61 100.0% |
| Southampton | 2 3.6% | 54 96.4% | 56 100.0% |
| Warwick | 0 .0% | 1 100.0% | 1 100.0% |
| Total | 121 8.3% | 1344 91.7% | 1465 100.0% |



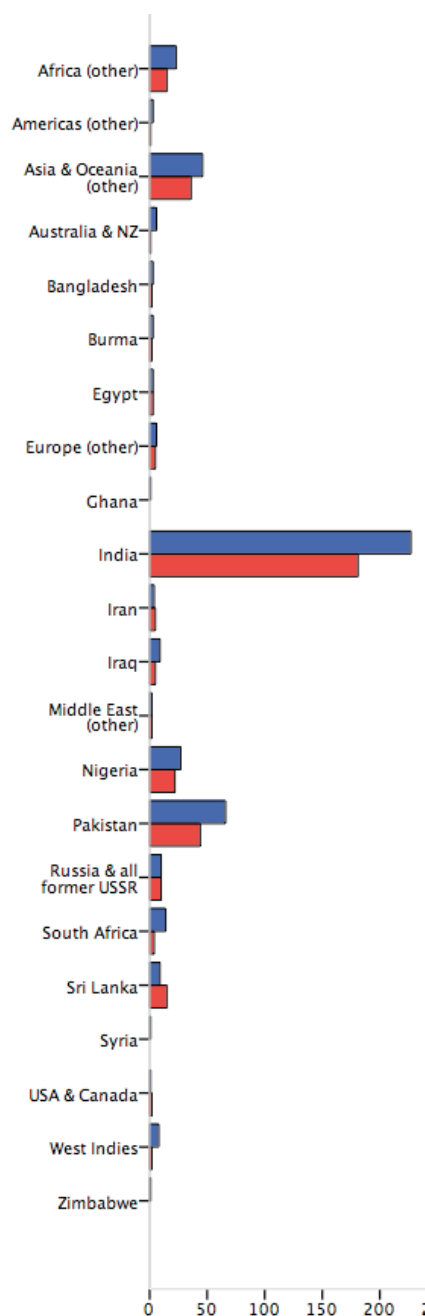
2 BY EEA COUNTRY

| | CSA Result | | Total |
|----------------|-------------|-------------|---------------|
| | Fail | Pass | |
| Austria | 8 30.8% | 18 69.2% | 26 100.0% |
| Belgium | 1 50.0% | 1 50.0% | 2 100.0% |
| Bulgaria | 2 28.6% | 5 71.4% | 7 100.0% |
| Cyprus | 0 .0% | 1 100.0% | 1 100.0% |
| Czech Republic | 3 27.3% | 8 72.7% | 11 100.0% |
| Estonia | 0 .0% | 1 100.0% | 1 100.0% |
| Germany | 2 10.5% | 17 89.5% | 19 100.0% |
| Greece | 0 .0% | 4 100.0% | 4 100.0% |
| Hungary | 0 .0% | 2 100.0% | 2 100.0% |
| Irish Republic | 4 12.9% | 27 87.1% | 31 100.0% |
| Italy | 0 .0% | 1 100.0% | 1 100.0% |
| Netherlands | 0 .0% | 1 100.0% | 1 100.0% |
| Poland | 3 42.9% | 4 57.1% | 7 100.0% |
| Romania | 3 50.0% | 3 50.0% | 6 100.0% |
| Spain | 5 83.3% | 1 16.7% | 6 100.0% |
| Total | 31 24.8% | 94 75.2% | 125 100.0% |



3 BY COUNTRY OF GRADUATION, INTERNATIONALLY, OTHER THAN THE EEA

| | CSA Result | | Total |
|--------------------------|----------------------|----------------------|-----------------------|
| | Fail | Pass | |
| Africa (other) | 15 39.5% | 23 60.5% | 38 100.0% |
| Americas (other) | 1 25.0% | 3 75.0% | 4 100.0% |
| Asia & Oceania (other) | 36 43.9% | 46 56.1% | 82 100.0% |
| Australia & NZ | 1 14.3% | 6 85.7% | 7 100.0% |
| Bangladesh | 2 40.0% | 3 60.0% | 5 100.0% |
| Burma | 2 40.0% | 3 60.0% | 5 100.0% |
| Egypt | 3 50.0% | 3 50.0% | 6 100.0% |
| Europe (other) | 5 45.5% | 6 54.5% | 11 100.0% |
| Ghana | 0 .0% | 1 100.0% | 1 100.0% |
| India | 181 44.4% | 227 55.6% | 408 100.0% |
| Iran | 5 55.6% | 4 44.4% | 9 100.0% |
| Iraq | 5 35.7% | 9 64.3% | 14 100.0% |
| Middle East (other) | 2 50.0% | 2 50.0% | 4 100.0% |
| Nigeria | 22 44.9% | 27 55.1% | 49 100.0% |
| Pakistan | 44 40.0% | 66 60.0% | 110 100.0% |
| Russia & all former USSR | 10 50.0% | 10 50.0% | 20 100.0% |
| South Africa | 4 22.2% | 14 77.8% | 18 100.0% |
| Sri Lanka | 15 62.5% | 9 37.5% | 24 100.0% |
| Syria | 0 .0% | 1 100.0% | 1 100.0% |
| USA & Canada | 2 66.7% | 1 33.3% | 3 100.0% |
| West Indies | 2 20.0% | 8 80.0% | 10 100.0% |
| Zimbabwe | 0 .0% | 1 100.0% | 1 100.0% |
| Total | 357 43.0% | 473 57.0% | 830 100.0% |



I) SA Feedback Statements, AS % OF ALL CASES: ALL CANDIDATES, and by SOURCE OF PRIMARY MEDICAL QUALIFICATION

Table gives the numbered feedback statements in order of prevalence, by candidate group, together with the percentage given feedback of all cases seen in that candidate group. *Note that this table (and the next) relates only to CSA diets before October 2008, when some changes were made to the feedback statements.* See also note on p 4.

| ALL CANDIDATES (n = 1703 incl 10 with unknown medical school) = 20436 CASES | |
|---|-------|
| 06 Does not develop a management plan (including prescribing and referral) that is appropriate and in line with current best practice | 12.7% |
| 14 Does not recognise the challenge (e.g. the patient's problem, ethical dilemma etc.) | 8.7% |
| 09 Does not identify patient's agenda, health beliefs & preferences / does not make use of verbal & non-verbal cues | 8.1% |
| 10 Does not develop a shared management plan or clarify the roles of doctor and patient | 8.1% |
| 05 Does not make appropriate diagnosis | 6.6% |
| 01 Disorganised and unsystematic in gathering information from history taking, examination and investigation | 6.3% |
| 02 Does not identify abnormal findings or results or fails to recognise their implications | 5.6% |
| 03 Data gathering does not appear to be guided by the probabilities of disease | 5.4% |
| 11 Does not use explanations that are relevant and understandable to the patient | 5.2% |
| 16 Shows inappropriate doctor- centeredness | 5.2% |
| 07 Follow-up arrangements and safety netting are inadequate | 4.5% |
| 13 Disorganised / unstructured consultation | 4.5% |
| 08 Does not demonstrate an awareness of management of risk, and health promotion | 3.9% |
| 15 Shows poor time management | 3.8% |
| 12 Does not show sensitivity for the patient's feelings in all aspects of the consultation including physical examination | 3.5% |
| 04 Does not undertake physical examination competently, or use instruments proficiently | 2.0% |

| UK GRADUATES only (n = 1146) = 13752 CASES | |
|---|------|
| 06 Does not develop a management plan (including prescribing and referral) that is appropriate and in line with current best practice | 9.6% |
| 14 Does not recognise the challenge (e.g. the patient's problem, ethical dilemma etc.) | 6.3% |
| 10 Does not develop a shared management plan or clarify the roles of doctor and patient | 5.2% |
| 05 Does not make appropriate diagnosis | 5.1% |
| 09 Does not identify patient's agenda, health beliefs & preferences / does not make use of verbal & non-verbal cues | 5.1% |
| 02 Does not identify abnormal findings or results or fails to recognise their implications | 4.3% |
| 03 Data gathering does not appear to be guided by the probabilities of disease | 4.0% |
| 01 Disorganised and unsystematic in gathering information from history taking, examination and investigation | 3.7% |
| 11 Does not use explanations that are relevant and understandable to the patient | 3.1% |
| 07 Follow-up arrangements and safety netting are inadequate | 3.1% |
| 16 Shows inappropriate doctor- centeredness | 2.9% |
| 08 Does not demonstrate an awareness of management of risk, and health promotion | 2.9% |
| 15 Shows poor time management | 2.7% |
| 13 Disorganised / unstructured consultation | 2.5% |
| 12 Does not show sensitivity for the patient's feelings in all aspects of the consultation including physical examination | 2.2% |
| 04 Does not undertake physical examination competently, or use instruments proficiently | 1.6% |

| EEA GRADUATES only (n = 75) = 900 CASES | |
|---|-------|
| 06 Does not develop a management plan (including prescribing and referral) that is appropriate and in line with current best practice | 14.3% |
| 14 Does not recognise the challenge (e.g. the patient's problem, ethical dilemma etc.) | 10.7% |
| 10 Does not develop a shared management plan or clarify the roles of doctor and patient | 9.6% |
| 01 Disorganised and unsystematic in gathering information from history taking, examination and investigation | 9.6% |
| 09 Does not identify patient's agenda, health beliefs & preferences / does not make use of verbal & non-verbal cues | 9.2% |
| 05 Does not make appropriate diagnosis | 7.8% |
| 03 Data gathering does not appear to be guided by the probabilities of disease | 7.7% |
| 02 Does not identify abnormal findings or results or fails to recognise their implications | 7.0% |
| 13 Disorganised / unstructured consultation | 6.9% |
| 16 Shows inappropriate doctor- centeredness | 6.2% |
| 07 Follow-up arrangements and safety netting are inadequate | 5.7% |
| 08 Does not demonstrate an awareness of management of risk, and health promotion | 5.4% |
| 11 Does not use explanations that are relevant and understandable to the patient | 5.3% |
| 15 Shows poor time management | 5.2% |
| 12 Does not show sensitivity for the patient's feelings in all aspects of the consultation including physical examination | 4.6% |
| 04 Does not undertake physical examination competently, or use instruments proficiently | 3.3% |

| INTERNATIONAL MEDICAL GRADUATES, NOT EEA, only (n = 472) = 5664 CASES | |
|---|-------|
| 06 Does not develop a management plan (including prescribing and referral) that is appropriate and in line with current best practice | 20.0% |
| 09 Does not identify patient's agenda, health beliefs & preferences / does not make use of verbal & non-verbal cues | 14.9% |
| 10 Does not develop a shared management plan or clarify the roles of doctor and patient | 14.5% |
| 14 Does not recognise the challenge (e.g. the patient's problem, ethical dilemma etc.) | 13.8% |
| 01 Disorganised and unsystematic in gathering information from history taking, examination and investigation | 11.8% |
| 11 Does not use explanations that are relevant and understandable to the patient | 10.3% |
| 16 Shows inappropriate doctor- centeredness | 10.2% |
| 05 Does not make appropriate diagnosis | 9.7% |
| 13 Disorganised / unstructured consultation | 8.7% |
| 03 Data gathering does not appear to be guided by the probabilities of disease | 8.5% |
| 02 Does not identify abnormal findings or results or fails to recognise their implications | 8.4% |
| 07 Follow-up arrangements and safety netting are inadequate | 7.8% |
| 12 Does not show sensitivity for the patient's feelings in all aspects of the consultation including physical examination | 6.4% |
| 08 Does not demonstrate an awareness of management of risk, and health promotion | 6.2% |
| 15 Shows poor time management | 6.1% |
| 04 Does not undertake physical examination competently, or use instruments proficiently | 2.9% |

m) SA Feedback Statements, AS % OF FAILED CASES ONLY: ALL CANDIDATES, and by SOURCE OF PRIMARY MEDICAL QUALIFICATION

Table gives the numbered feedback statements as previous Table, but as % of failed cases only.

| ALL CANDIDATES (n = 1703 incl 10 with unknown medical school) = 4702 FAILED CASES | |
|---|-------|
| 06 Does not develop a management plan (including prescribing and referral) that is appropriate and in line with current best practice | 55.1% |
| 14 Does not recognise the challenge (e.g. the patient's problem, ethical dilemma etc.) | 37.5% |
| 09 Does not identify patient's agenda, health beliefs & preferences / does not make use of verbal & non-verbal cues | 35.0% |
| 10 Does not develop a shared management plan or clarify the roles of doctor and patient | 34.8% |
| 05 Does not make appropriate diagnosis | 28.4% |
| 01 Disorganised and unsystematic in gathering information from history taking, examination and investigation | 27.0% |
| 02 Does not identify abnormal findings or results or fails to recognise their implications | 24.2% |
| 03 Data gathering does not appear to be guided by the probabilities of disease | 23.5% |
| 11 Does not use explanations that are relevant and understandable to the patient | 22.7% |
| 16 Shows inappropriate doctor- centeredness | 22.3% |
| 07 Follow-up arrangements and safety netting are inadequate | 19.6% |
| 13 Disorganised / unstructured consultation | 19.4% |
| 08 Does not demonstrate an awareness of management of risk, and health promotion | 17.0% |
| 15 Shows poor time management | 16.1% |
| 12 Does not show sensitivity for the patient's feelings in all aspects of the consultation including physical examination | 15.2% |
| 04 Does not undertake physical examination competently, or use instruments proficiently | 8.7% |

| UK GRADUATES only (n = 1146) = 2318 FAILED CASES | |
|---|-------|
| 06 Does not develop a management plan (including prescribing and referral) that is appropriate and in line with current best practice | 56.4% |
| 14 Does not recognise the challenge (e.g. the patient's problem, ethical dilemma etc.) | 37.4% |
| 10 Does not develop a shared management plan or clarify the roles of doctor and patient | 30.9% |
| 09 Does not identify patient's agenda, health beliefs & preferences / does not make use of verbal & non-verbal cues | 30.3% |
| 05 Does not make appropriate diagnosis | 30.3% |
| 02 Does not identify abnormal findings or results or fails to recognise their implications | 25.5% |
| 03 Data gathering does not appear to be guided by the probabilities of disease | 23.5% |
| 01 Disorganised and unsystematic in gathering information from history taking, examination and investigation | 21.5% |
| 11 Does not use explanations that are relevant and understandable to the patient | 18.4% |
| 07 Follow-up arrangements and safety netting are inadequate | 18.2% |
| 16 Shows inappropriate doctor- centeredness | 17.2% |
| 08 Does not demonstrate an awareness of management of risk, and health promotion | 16.9% |
| 15 Shows poor time management | 15.6% |
| 13 Disorganised / unstructured consultation | 14.7% |
| 12 Does not show sensitivity for the patient's feelings in all aspects of the consultation including physical examination | 13.2% |
| 04 Does not undertake physical examination competently, or use instruments proficiently | 9.2% |

| EEA GRADUATES only (n = 75) = 256 FAILED CASES | |
|---|-------|
| 06 Does not develop a management plan (including prescribing and referral) that is appropriate and in line with current best practice | 50.4% |
| 14 Does not recognise the challenge (e.g. the patient's problem, ethical dilemma etc.) | 37.5% |
| 10 Does not develop a shared management plan or clarify the roles of doctor and patient | 33.6% |
| 01 Disorganised and unsystematic in gathering information from history taking, examination and investigation | 33.6% |
| 09 Does not identify patient's agenda, health beliefs & preferences / does not make use of verbal & non-verbal cues | 32.4% |
| 05 Does not make appropriate diagnosis | 27.3% |
| 03 Data gathering does not appear to be guided by the probabilities of disease | 27.0% |
| 02 Does not identify abnormal findings or results or fails to recognise their implications | 24.6% |
| 13 Disorganised / unstructured consultation | 24.2% |
| 16 Shows inappropriate doctor- centeredness | 21.9% |
| 07 Follow-up arrangements and safety netting are inadequate | 19.9% |
| 08 Does not demonstrate an awareness of management of risk, and health promotion | 19.1% |
| 11 Does not use explanations that are relevant and understandable to the patient | 18.8% |
| 15 Shows poor time management | 18.4% |
| 12 Does not show sensitivity for the patient's feelings in all aspects of the consultation including physical examination | 16.0% |
| 04 Does not undertake physical examination competently, or use instruments proficiently | 11.7% |

| INTERNATIONAL MEDICAL GRADUATES, NOT EEA, only (n = 472) = 2076 FAILED CASES | |
|---|-------|
| 06 Does not develop a management plan (including prescribing and referral) that is appropriate and in line with current best practice | 54.3% |
| 09 Does not identify patient's agenda, health beliefs & preferences / does not make use of verbal & non-verbal cues | 40.3% |
| 10 Does not develop a shared management plan or clarify the roles of doctor and patient | 39.2% |
| 14 Does not recognise the challenge (e.g. the patient's problem, ethical dilemma etc.) | 37.6% |
| 01 Disorganised and unsystematic in gathering information from history taking, examination and investigation | 32.1% |
| 11 Does not use explanations that are relevant and understandable to the patient | 28.0% |
| 16 Shows inappropriate doctor- centeredness | 27.5% |
| 05 Does not make appropriate diagnosis | 26.5% |
| 13 Disorganised / unstructured consultation | 23.7% |
| 03 Data gathering does not appear to be guided by the probabilities of disease | 23.1% |
| 02 Does not identify abnormal findings or results or fails to recognise their implications | 22.7% |
| 07 Follow-up arrangements and safety netting are inadequate | 21.1% |
| 12 Does not show sensitivity for the patient's feelings in all aspects of the consultation including physical examination | 17.3% |
| 08 Does not demonstrate an awareness of management of risk, and health promotion | 16.7% |
| 15 Shows poor time management | 16.5% |
| 04 Does not undertake physical examination competently, or use instruments proficiently | 7.9% |

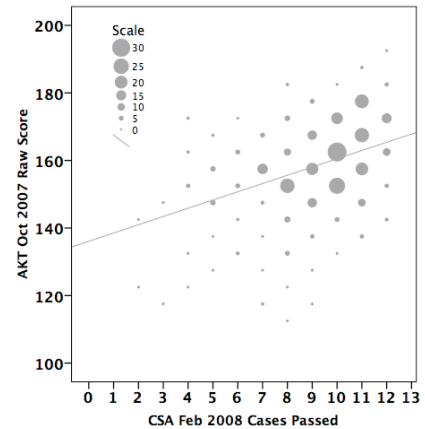
5: Inter-component Statistics and Analytical Statistics of Test Quality

Inter-component Statistics

Currently it is only possible to make comparisons between the performance of candidates between the AKT and the CSA. Even this is not straightforward: candidates may take the AKT at any time in their training, and the CSA at any time in their final year; thus one candidate may take both tests at about the same time in their training, another might take them two years apart; and of course candidates can have more than one attempt at either test.

That said, many candidates take the AKT late in ST2 or early in ST3 and the CSA in the middle of ST3. When numbers are large (hundreds) in this situation, typical correlations between AKT and CSA are between 0.4 and 0.5.

The accompanying scatterplot is an example showing such a relationship between an October AKT (2007) and the CSA the following February (2008). $n = 374$, $r = 0.39$



Test Quality Information

Coefficient alpha (and the measurement error estimate) of the three diets of the AKT is straightforwardly calculated. It was constant at 0.88/0.89 over the three diets; no more than two items were excluded from the 200 in any diet.

Estimating and representing the reliability of a clinical test of the form of the CSA is more difficult using classical psychometric test theory. In a multi-choice test such as the AKT, all the candidates have to respond to all the test items, which are exactly the same for everyone (roughly 1000 candidates/diet). The 'items' (stations or cases) in the CSA are only the same for a day at a time (max 78 candidates), and indeed there are different sets of examiners on each of the three circuits—so there is only consistency for 26 candidates. This is of course not at all unusual in a high stakes clinical test, where a variety of imperatives conflict—eg item stability vs test security and fairness.

Thus the quality of the CSA is monitored at a number of levels of detail with different objectives—but with reliability and fairness always foremost in mind. Reliability (eg an alpha coefficient) is explored with reference to both days and circuits, towards case, palette and examiner monitoring and development. Daily alpha coefficients—probably something which it is fair to assess, combining circuits across examiners—give a reasonable indication of reliability, but they are very dependent on the variance in candidate ability. And our analyses show that the range and variance in ability of candidate groups varies greatly day on day: here, ability can be estimated not just from a rather self-fulfilling analysis of CSA performance, but by looking at predictive surrogates (eg degree origin) and correlates (eg AKT performance). Finally, the alpha coefficient is estimated on the basis of global scores which, having limited variance (0, 1, 2 or 3), tend to minimise the consequent alpha coefficients.

On this basis, overall, the CSA daily alpha averaged 0.70 in 2008 with the 12 cases presently used. The level of these estimates is confirmed by a recent more complex generalisability study ("G-study") undertaken for the College by statisticians at Peninsula College of Medicine and Dentistry: their analyses of 'G' were in extremely close concordance (on the January/February 2009 CSA data) with our local ones of alpha.

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