MRCGP Statistics 2012-2013

Annual Report
(August 2012 – July 2013) on the results of the AKT and CSA Assessments

Introduction

This Report relates to the formal MRCGP assessments conducted in the academical year 2012-13. It presents the statistics that summarise the outcomes of all the diets of the MRCGP examinations during that period – the Applied Knowledge Test (AKT – 3 diets) and the Clinical Skills Assessment (CSA – 4 diets).

The Report first presents an updated summary of both of these assessments and their standard-setting procedures. Further information may be found on the College's website. Tables follow, first for the AKT and then for the CSA. These give information on the candidature and the attempts at the test, for each of them:

- Candidate Demographics:
  Source/Year of Primary Medical Qualification, Sex, Ethnic Group, Training Deanery, UK Medical School
- Main Results: Overall and by Exam Diet and Attempt
- Results by Individual Demographics (candidates on first attempt)
- Detailed Results by Training Deanery
- AKT mean sub-component scores, by candidate year of training
- CSA feedback statements for all candidates: aggregate summaries by source of PMQ
- CSA case performance by curriculum areas
- CSA: information about sex and ethnic group of role players

This report is descriptive, only. Data are presented without psychometric comment other than that which follows and at the end of the report, reviewing test accuracy and reliability. Candidates self-report their demographic variables, but wherever possible these are checked against the GMC's List of Registered Medical Practitioners. The reported 'attempt' is from the College's records.

This Report has been developed following comments from the College's Assessment Development Committee, especially the Deanery representatives. It presents requested detailed variations amongst Deaneries.

Please Note:

a) Interactions between variables: as in previous years, there are many significant differences between sub-groups on their performance on both the tests reported, for example by gender and country of primary medical training. But variables may well interact with others, to potential confusion of the unwary.

b) As increasing use is made by overseas (and UK) candidates of **medical schools in other countries**, 'country of primary medical qualification' should not be equated with 'country of origin/secondary education'. This applies particularly to medical qualifications from certain Caribbean and central- and eastern-European countries. Data from the PLAB office show that, after Pakistani and Indian nationals, British nationals are the third commonest national group to sit the PLAB assessments.

c) The report provides only a **snapshot** of the results of a developing set of assessment procedures, and specific sub-group results can change, year on year. Bigger pictures can be seen by contrasting it with earlier reports.

d) Teething problems with the College's new building meant that, because of unacceptable noise, **some candidates sitting the November 2012 and May 2013 CSA were allowed an additional 'non-counting' attempt** subsequently. The original scores of these candidates have been replaced by their re-take scores.

Acknowledgements: As ever, I am very grateful to the two Clinical Assessment Leads (currently: Carol Blow, AKT and Adrian Freeman CSA) for their advice and support in preparing this report. They wrote the introductory comments on their respective components and scanned the draft report.

Richard Wakeford
December 2013

CONTENTS

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

The MRCGP and its Function

The MRCGP comprises three sets of assessment procedures whose combined summative function is to assure the Deaneries, the College and the GMC of the competence of exiting trainee General Practitioners (GPs) across a broad and carefully-defined three year (occasionally, four) full-time training curriculum. Satisfactory completion of the three assessment components of the MRCGP renders a trainee (GP Specialist Registrar) eligible to apply both for a Certificate of Completion of Training (CCT) from the GMC (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 probable re-validation).

The MRCGP's three assessment components are the following, each of which must be separately passed:

a. ***Applied Knowledge Test*** *(multi-choice computer-presented 'paper', available in test centres throughout the UK)*
b. ***Clinical Skills Assessment*** *(an integrated 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, Trainers and others*

The curriculum, the training and the assessments are based on medical practice in the UK National Health Service. Entry to the assessments is only permissible to doctors undergoing GP training within the UK state health care system. Accordingly, no external candidates take these assessments, as happens in certain other Royal Colleges' examinations. (The College has other arrangements to support GPs practising in other countries and who seek affiliation or Membership through the quite separate 'MRCGP [International]' assessment route, see the College website.)

Note that the workplace-based assessments, being essentially formative, with candidate performance and development on them being reviewed towards a determination of progression annually by the Deaneries and not the College, are not covered by this report. Please also note that the report, for convenience of comprehension, reports on the 'Stages' of training as 'Years': for most trainees, the two are operationally synonymous, but for part-time trainees, of course, the 'Stages' will be longer. Currently, trainees studying less than full time are not separately identified in the annual report.

The Applied Knowledge Test

The multi-choice ***Applied Knowledge Test*** is a 3-hr 200-item computer-delivered and marked assessment which was previously available in any of the three years of training (Year 1 = ST1 etc); for candidates who commenced training since August 2010, the AKT has only been available in the ST2, 3 and additional 4th years. 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 four formats: single best answer (including images and graphics), extended matching questions, completion of tables/algorithms, and a small number of free text answers. A 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 using a modification of the Angoff procedure, where a group of 'judges' periodically 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, newly-qualified GPs, and representatives of bodies with a stake in the outcome of the examination (including the training community) are invited to act either as judges or observers, as appropriate, in the standard-setting process. This standard is maintained between 'Angoffs' by the use of test equating, using sets of items with known performance characteristics.

A 'just passing score' (JPS) is accordingly determined for the test as a whole, and a statistical review may sometimes cause the removal of one or two poorly-performing test items on any diet. The measurement error of the resultant test is then calculated, and a passing standard ('pass-mark') set, taking account of this measurement error, as is usual in high stakes testing. The accuracy of the AKT is estimated by calculating Cronbach's *alpha* (reliability), together with the measurement error. Candidates are then 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, raw or percentage scores need to be adjusted to a common pass-mark (here, zero) to permit comparability.

The Clinical Skills Assessment

The **Clinical Skills Assessment** is an OSCE-style assessment using simulated patients or role players that may be taken only in the final year of training (Year 3 = ST3, or the fourth year of an extended training programme). Since 2010, the CSA has comprised 13 cases or 'stations'. The CSA was until 2012 delivered in a purpose-built assessment centre (in Croydon, South London), but from November 2012, it took place in an assessment centre in the College's new headquarters building in Euston. Up to (and normally) three circuits run simultaneously.

A case is depicted by a role player, and candidate performance assessed by an examiner who accompanies the role player for the day. Each case lasts 10 minutes (plus two minutes marking/changeover time). Candidates have their own 'consulting room', and the role players move around the circuits' consulting rooms like patients, accompanied by their examiner.

Cases, written by dedicated writers who are practising GPs, present typical clinical scenarios that a UK GP will encounter. Cases are written to represent the diversity of the whole UK population. 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 and be equivalently challenging.

The standard-setting method used is the borderline group method, as recommended to the College by the Regulator (the GMC). Each case is graded on three domains: Data Gathering, Examination and Clinical Skills; Clinical Management Skills; and Interpersonal Skills. Each domain is graded as: Clear Fail – Fail – Pass – Clear Pass. For standard-setting purposes only, the examiners also provide a grade to indicate the certainty of their judgement on that case – in particular if they felt that overall the candidate may be on the borderline between pass and fail.

The domain grades awarded on a case are given a numerical equivalent (zero to three, respectively) and combined to provide a case score: these are summated over the 13 cases to give a final score (which will be between zero and 117). The "cut score" – the half-way point between pass and fail – is established by the normal borderline group method. The final pass score is an adjustment of that score to take account of measurement error, as in the AKT, with the level being confirmed by an adjudicating group which includes recently-qualified GPs, lay representatives, and key stakeholders from the training community.

The overall standard of the assessment is set by ensuring that both that the cases are at an appropriate level of difficulty and challenge 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 on-going training of examiners; and an annual two-day examiners workshop to calibrate the whole panel regularly and maintain process validity.

The reliability of the CSA is estimated by calculating Cronbach's alpha using the numerical scores and accuracy calculated by the Standard Error of Measurement (SEm). Because of daily case and examiner differences, these statistics require to be estimated separately each day, 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.

Throughout this report, CSA outcomes used include the result (pass/fail) and scores adjusted to a common pass mark (zero).

2: Notes on the Tables and Statistics

General Notes: Conventions in the Charts and Tables

Tables are accompanied where possible by charts, to assist those who prefer visual rather than numerical summaries of data. Where space prevents the charts being of adequate size to read (for example) the axis scales, the relevant table should be inspected for this detail.

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**
A **DOTTED RED LINE** on a histogram denotes the passing standard
A **DOTTED GREEN LINE** on a histogram denotes the mean score for the group whose performance is represented

Certain histograms show contrasting distributions of candidates where numbers in a single group are small. To permit visibility of these small groups, the Y-axes of the histograms have been presented in a log, as opposed to a linear, scale. The relevant charts have a small label to alert the reader, as shown here. On the charts generally, groups representing single candidates have been removed, where appropriate, to avoid embarrassment.

Tables containing data also supplied to the GMC are separated out into UK, EEA, and 'rest of the world' graduates (RoW). Elsewhere, the two last groups (EEA and RoW) are combined into a single group – 'IMGs'; this is due to a general overall similarity in performance between the EEA and RoW groups, small numbers in the former, and increasing practical overlap of the two groups with both British and overseas (non–EEA) students taking EEA qualifications.

Note regarding the Interpretation of the AKT statistics

Some candidates appear twice (567) or three times (113) within this annual database on the AKT, because of retakes. Except in the Summary of Demographic Information, the statistics "for all candidates" aggregate all 3872 candidates' 4552 attempts in this period. However, where the tables present comparisons between candidates on the basis of demographic variables (gender, ethnicity, the origin of candidates' primary medical qualifications, training deanery), they mostly do so on the basis of 'first attempts' only: otherwise re-sitters will bias the results. The groups upon which each table is based are made clear in its heading.

Readers may notice that figures in this report do not always concur precisely with those given in reports of AKT examinations on the College website. The latter normally show totals and pass rates for *all* AKT candidates, including a few GP 'returners'. The figures in this report refer only to candidates 'in training' and formally eligible for the current MRCGP.

Note regarding the Interpretation of the CSA statistics

Two databases were constructed for the 2012-13 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 has been used here to provide the information on 'feedback statements' in the final table of the report and summaries of overall case performance.

Some candidates appear twice (701) or three times (71) within this annual database on the CSA, because of retakes. Except in the Summary of Demographic Information, the statistics "for all candidates" aggregate all 3282 candidates' 4054 attempts in this period.

Data Inconsistencies: Caution

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

- Most of the candidates' personal background data is self-reported on registration for assessments. It is thus subject to entry error, though major data fields have been checked by reference to the GMC's LRMP; 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, or between part-time and full-time training

However, the College would as always appreciate learning of any serious apparent errors or omissions in the data reported (for which the compiler apologises in advance). Please email him at rew5@cam.ac.uk

A: Summary of Candidate Demographics

3872 candidates made a total of 4552 attempts at the AKT during 2012-13. The tables below show the origin of the 3872 candidates, by UK medical school or non-UK country of primary medical qualification—and the percentage from each out of the total of that part of the candidature.

Overleaf, the background demographic characteristics of the 3872 are shown, by training Deanery. Other tables report on the attempts.

1. Source of Primary Medical Qualification; year of qualification

UK, EEA or RoW Graduate

	Frequency	Percent
UK Graduate	2731	70.5
EEA Graduate	136	3.5
RoW Graduate	1005	26.0
Total	3872	100.0

UK Medical School

	Frequency	Percent
Aberdeen	77	2.8
Belfast	54	2.0
Birmingham	182	6.7
Brighton and Sussex	45	1.6
Bristol	87	3.2
Cambridge	24	.9
Dundee	57	2.1
Edinburgh	54	2.0
Glasgow	81	3.0
Hull York	55	2.0
Keele	3	.1
Leeds	120	4.4
Leicester	100	3.7
Liverpool	138	5.1
London - Barts and the London	166	6.1
London - Imperial College	107	3.9
London - King's College	149	5.5
London - School Unknown	1	.0
London - St George's	95	3.5
London - University College	132	4.8
Manchester	230	8.4
Newcastle	118	4.3
Norwich (UEA)	44	1.6
Nottingham	105	3.8
Oxford	30	1.1
Peninsula	63	2.3
Sheffield	111	4.1
Southampton	86	3.1
Wales - incl Cardiff & Swansea	138	5.1
Warwick	79	2.9
Total	2731	100.0

Country of Qualification[a]

	Frequency	Percent
Austria	5	3.7
Belgium	1	.7
Bulgaria	4	2.9
Czech Republic	29	21.3
Denmark	2	1.5
Germany	10	7.4
Greece	1	.7
Hungary	7	5.1
Ireland	12	8.8
Italy	1	.7
Latvia	3	2.2
Lithuania	2	1.5
Malta	1	.7
Netherlands	1	.7
Poland	29	21.3
Romania	22	16.2
Slovakia	3	2.2
Spain	2	1.5
Switzerland	1	.7
Total	136	100.0

a. UK, EEA or RoW Graduate = EEA Graduate

Candidates from the Rest of the World: see over

Country of Qualification[a]

	Frequency	Percent
Afghanistan	5	.5
Albania	2	.2
Algeria	2	.2
Armenia	2	.2
Australia	1	.1
Bangladesh	26	2.6
Belarus	5	.5
Bolivia	1	.1
Bosnia And Herzegovina	1	.1
Brazil	5	.5
Burundi	1	.1
Cayman Islands	2	.2
China	3	.3
Colombia	3	.3
Congo Dem Rep	2	.2
Croatia	1	.1
Cuba	3	.3
Dominica	1	.1
Dominican Republic	1	.1
Egypt	16	1.6
Ethiopia	2	.2
Georgia	3	.3
Ghana	5	.5
Grenada	2	.2
Guyana	4	.4
Haiti	1	.1
India	281	28.0
Iran	20	2.0
Iraq	40	4.0
Jamaica	6	.6
Jordan	2	.2
Kazakhstan	1	.1
Kenya	2	.2
Kyrgyzstan	1	.1
Libya	6	.6
Malaysia	2	.2
Moldova	1	.1
Morocco	1	.1
Myanmar	6	.6
Nepal	6	.6
Nicaragua	1	.1
Nigeria	144	14.3
Pakistan	248	24.7
Philippines	8	.8
Russian Federation	23	2.3
Saint Kitts And Nevis	8	.8
Saint Lucia	1	.1
Senegal	2	.2
Serbia	5	.5
Sierra Leone	2	.2
South Africa	10	1.0
Sri Lanka	17	1.7
Sudan	5	.5
Syria	6	.6
Tajikistan	1	.1
Trinidad And Tobago	1	.1
Tunisia	1	.1
Turkey	3	.3
Uganda	2	.2
Ukraine	31	3.1
United Arab Emirates	3	.3
United States	1	.1
Uzbekistan	1	.1
Yemen	1	.1
Zambia	1	.1
Zimbabwe	4	.4
Total	1005	100.0

a. UK, EEA or RoW Graduate = RoW Graduate

Candidates by Qualification Year

Candidates by Year Of Qualification: UK, EEA or RoW Graduate

Count

	UK, EEA or RoW Graduate			
	UK Graduate	EEA Graduate	RoW Graduate	Total
1977	0	0	1	1
1979	0	0	1	1
1980	1	0	1	2
1981	0	0	1	1
1982	0	0	1	1
1983	0	0	3	3
1984	0	0	3	3
1985	0	0	1	1
1986	0	0	6	6
1987	0	0	6	6
1988	0	0	9	9
1989	0	0	5	5
1990	0	0	15	15
1991	0	0	18	18
1992	2	1	21	24
1993	2	1	21	24
1994	4	2	26	32
1995	2	1	35	38
1996	1	1	37	39
1997	3	4	52	59
1998	4	2	69	75
1999	7	3	84	94
2000	7	6	88	101
2001	14	7	101	122
2002	19	10	95	124
2003	35	9	101	145
2004	53	13	69	135
2005	104	20	56	180
2006	190	16	40	246
2007	395	12	30	437
2008	860	15	8	883
2009	1028	13	1	1042
Total	2731	136	1005	3872

2. AKT Candidates' Sex, Ethnic Group and whether UK, EEA or international graduates, by Training Deanery

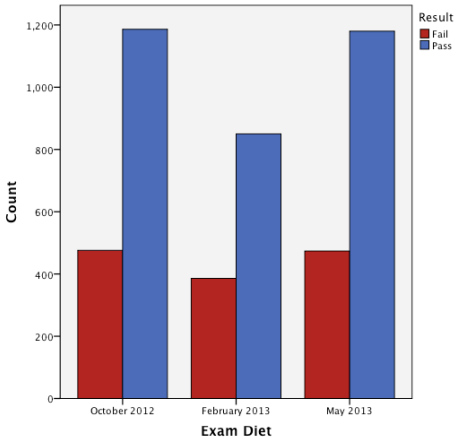
Deanery	Candidate Sex		UK, EEA or RoW Graduate			Candidate Ethnic Group						Total
	Female	Male	UK Graduate	EEA Graduate	RoW Graduate	Black	Chinese / SE Asian	Not Stated	Other Ethnicity	S Asian	White	
Armed Forces (Defence)	14	14	28	0	0	0	0	1	0	0	27	28
	50.0%	50.0%	100.0%	.0%	.0%	.0%	.0%	3.6%	.0%	.0%	96.4%	100.0%
East Midlands	148	123	154	11	106	24	5	3	11	133	95	271
	54.6%	45.4%	56.8%	4.1%	39.1%	8.9%	1.8%	1.1%	4.1%	49.1%	35.1%	100.0%
East of England	206	153	204	21	134	36	7	2	18	179	117	359
	57.4%	42.6%	56.8%	5.8%	37.3%	10.0%	1.9%	.6%	5.0%	49.9%	32.6%	100.0%
East Scotland	23	16	35	0	4	0	2	0	1	3	33	39
	59.0%	41.0%	89.7%	.0%	10.3%	.0%	5.1%	.0%	2.6%	7.7%	84.6%	100.0%
Kent, Surrey, Sussex	213	159	202	25	145	42	8	2	29	148	143	372
	57.3%	42.7%	54.3%	6.7%	39.0%	11.3%	2.2%	.5%	7.8%	39.8%	38.4%	100.0%
London	347	104	416	11	24	24	12	9	45	154	207	451
	76.9%	23.1%	92.2%	2.4%	5.3%	5.3%	2.7%	2.0%	10.0%	34.1%	45.9%	100.0%
Mersey	114	59	108	4	61	11	1	0	10	59	92	173
	65.9%	34.1%	62.4%	2.3%	35.3%	6.4%	.6%	.0%	5.8%	34.1%	53.2%	100.0%
North Scotland	36	24	40	1	19	8	1	0	3	14	34	60
	60.0%	40.0%	66.7%	1.7%	31.7%	13.3%	1.7%	.0%	5.0%	23.3%	56.7%	100.0%
North Western	161	141	218	6	78	22	5	7	13	124	131	302
	53.3%	46.7%	72.2%	2.0%	25.8%	7.3%	1.7%	2.3%	4.3%	41.1%	43.4%	100.0%
Northern	94	79	113	9	51	12	2	2	17	57	83	173
	54.3%	45.7%	65.3%	5.2%	29.5%	6.9%	1.2%	1.2%	9.8%	32.9%	48.0%	100.0%
Northern Ireland	53	11	62	2	0	0	0	1	0	1	62	64
	82.8%	17.2%	96.9%	3.1%	.0%	.0%	.0%	1.6%	.0%	1.6%	96.9%	100.0%
Oxford	70	35	91	6	8	2	5	2	4	37	55	105
	66.7%	33.3%	86.7%	5.7%	7.6%	1.9%	4.8%	1.9%	3.8%	35.2%	52.4%	100.0%
Severn	78	44	118	0	4	0	3	1	4	14	100	122
	63.9%	36.1%	96.7%	.0%	3.3%	.0%	2.5%	.8%	3.3%	11.5%	82.0%	100.0%
South East Scotland	50	23	57	3	13	3	0	2	4	7	57	73
	68.5%	31.5%	78.1%	4.1%	17.8%	4.1%	.0%	2.7%	5.5%	9.6%	78.1%	100.0%
South West Peninsula	61	37	89	2	7	2	2	3	1	5	85	98
	62.2%	37.8%	90.8%	2.0%	7.1%	2.0%	2.0%	3.1%	1.0%	5.1%	86.7%	100.0%
Wales	96	48	112	3	29	2	1	0	5	30	106	144
	66.7%	33.3%	77.8%	2.1%	20.1%	1.4%	.7%	.0%	3.5%	20.8%	73.6%	100.0%
Wessex	96	63	108	7	44	12	2	3	7	34	101	159
	60.4%	39.6%	67.9%	4.4%	27.7%	7.5%	1.3%	1.9%	4.4%	21.4%	63.5%	100.0%
West Midlands	233	151	245	12	127	18	6	12	16	209	123	384
	60.7%	39.3%	63.8%	3.1%	33.1%	4.7%	1.6%	3.1%	4.2%	54.4%	32.0%	100.0%
West Scotland	81	74	98	5	52	13	1	1	7	46	87	155
	52.3%	47.7%	63.2%	3.2%	33.5%	8.4%	.6%	.6%	4.5%	29.7%	56.1%	100.0%
Yorkshire & The Humber	204	136	233	8	99	16	4	5	25	121	169	340
	60.0%	40.0%	68.5%	2.4%	29.1%	4.7%	1.2%	1.5%	7.4%	35.6%	49.7%	100.0%
Total	2378	1494	2731	136	1005	247	67	56	220	1375	1907	3872
	61.4%	38.6%	70.5%	3.5%	26.0%	6.4%	1.7%	1.4%	5.7%	35.5%	49.3%	100.0%

B: Main Results: Overall, & by Exam Diet, Stage & Attempt (All Candidates)

1. AKT Result & Scores (scaled; pass mark = 0), overall and by exam diet (all candidates)

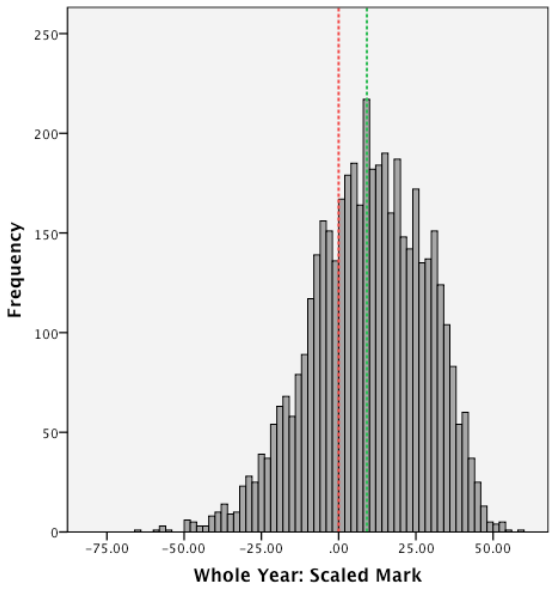
Exam Diet * Result Crosstabulation

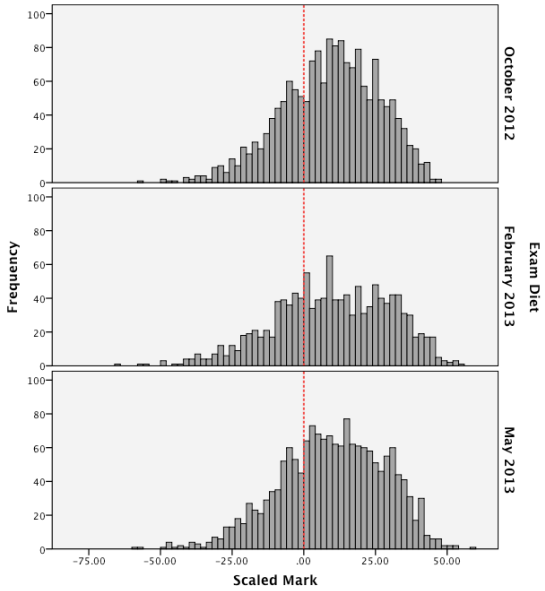
		Result		
		Fail	Pass	Total
Exam Diet	October 2012	476	1186	1662
		28.6%	71.4%	100.0%
	February 2013	386	850	1236
		31.2%	68.8%	100.0%
	May 2013	474	1180	1654
		28.7%	71.3%	100.0%
Total		1336	3216	4552
		29.3%	70.7%	100.0%



Scaled Mark

Exam Diet	Mean	N	Std. Deviation
October 2012	8.7383	1662	17.01278
February 2013	9.4021	1236	20.15650
May 2013	9.3851	1654	18.25307
Total	9.1536	4552	18.35765

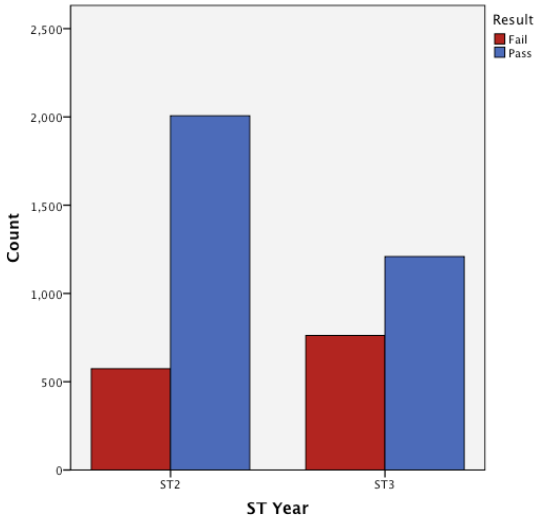




2. AKT Result and scores, by Stage (Year) of Training (all candidates)

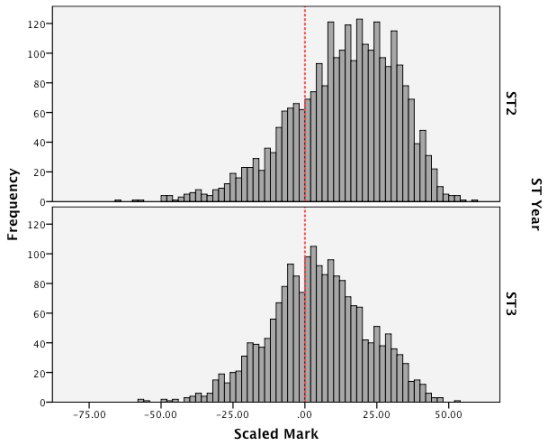
ST Year * Result Crosstabulation

		Result		
		Fail	Pass	Total
ST Year	ST2	574	2007	2581
		22.2%	77.8%	100.0%
	ST3	762	1209	1971
		38.7%	61.3%	100.0%
Total		1336	3216	4552
		29.3%	70.7%	100.0%



Scaled Mark

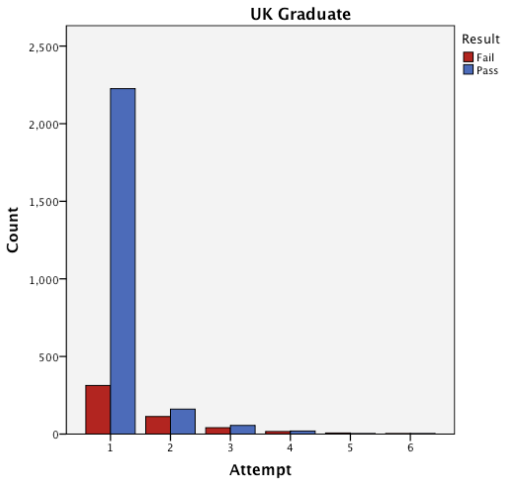
ST Year	Mean	N	Std. Deviation
ST2	13.0081	2581	18.39164
ST3	4.1060	1971	17.04647
Total	9.1536	4552	18.35765

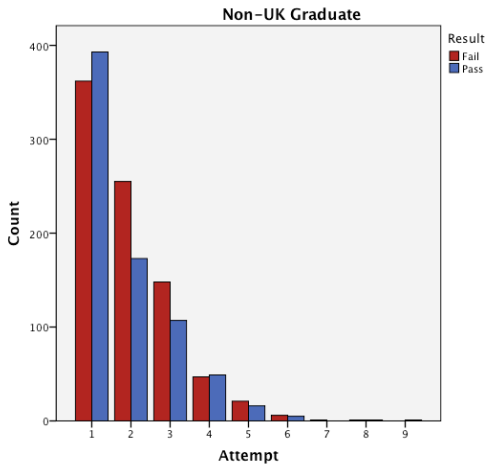


3. Result and scores, by attempt at the AKT: all graduates, and separated by source of primary medical qualification, UK/non-UK (all candidates)

Attempt * Result * UK or non-UK Graduate Crosstabulation

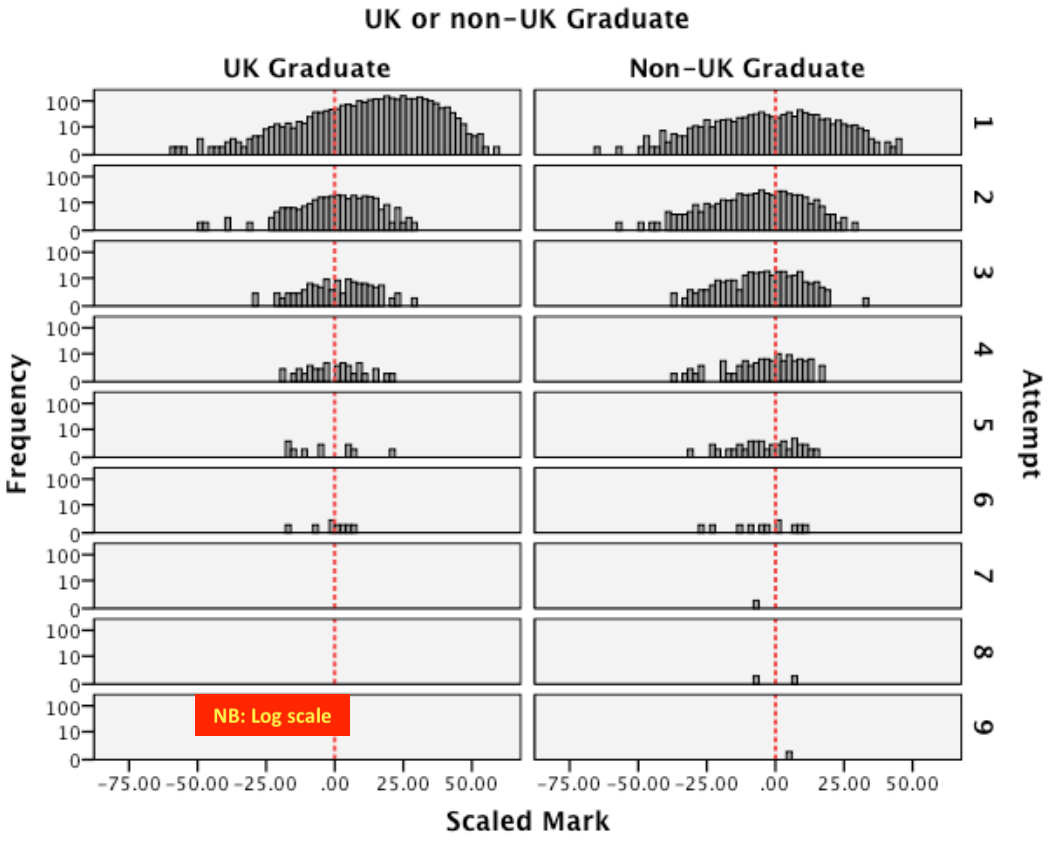
UK or non-UK Graduate		Result		
		Fail	Pass	Total
UK Graduate	1	313	2226	2539
		12.3%	87.7%	100.0%
	2	113	161	274
		41.2%	58.8%	100.0%
	3	41	56	97
		42.3%	57.7%	100.0%
	4	17	20	37
		45.9%	54.1%	100.0%
	5	7	4	11
		63.6%	36.4%	100.0%
	6	4	4	8
		50.0%	50.0%	100.0%
	Total	495	2471	2966
		16.7%	83.3%	100.0%
Non-UK Graduate	1	362	393	755
		47.9%	52.1%	100.0%
	2	255	173	428
		59.6%	40.4%	100.0%
	3	148	107	255
		58.0%	42.0%	100.0%
	4	47	49	96
		49.0%	51.0%	100.0%
	5	21	16	37
		56.8%	43.2%	100.0%
	6	6	5	11
		54.5%	45.5%	100.0%
	7	1	0	1
		100.0%	.0%	100.0%
	8	1	1	2
		50.0%	50.0%	100.0%
	9	0	1	1
		.0%	100.0%	100.0%
	Total	841	745	1586
		53.0%	47.0%	100.0%
Total	1	675	2619	3294
		20.5%	79.5%	100.0%
	2	368	334	702
		52.4%	47.6%	100.0%
	3	189	163	352
		53.7%	46.3%	100.0%
	4	64	69	133
		48.1%	51.9%	100.0%
	5	28	20	48
		58.3%	41.7%	100.0%
	6	10	9	19
		52.6%	47.4%	100.0%
	7	1	0	1
		100.0%	.0%	100.0%
	8	1	1	2
		50.0%	50.0%	100.0%
	9	0	1	1
		.0%	100.0%	100.0%
	Total	1336	3216	4552
		29.3%	70.7%	100.0%



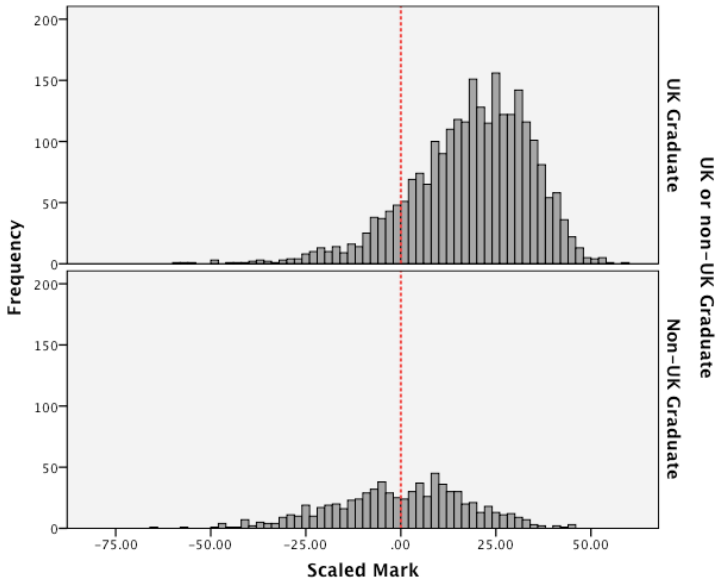


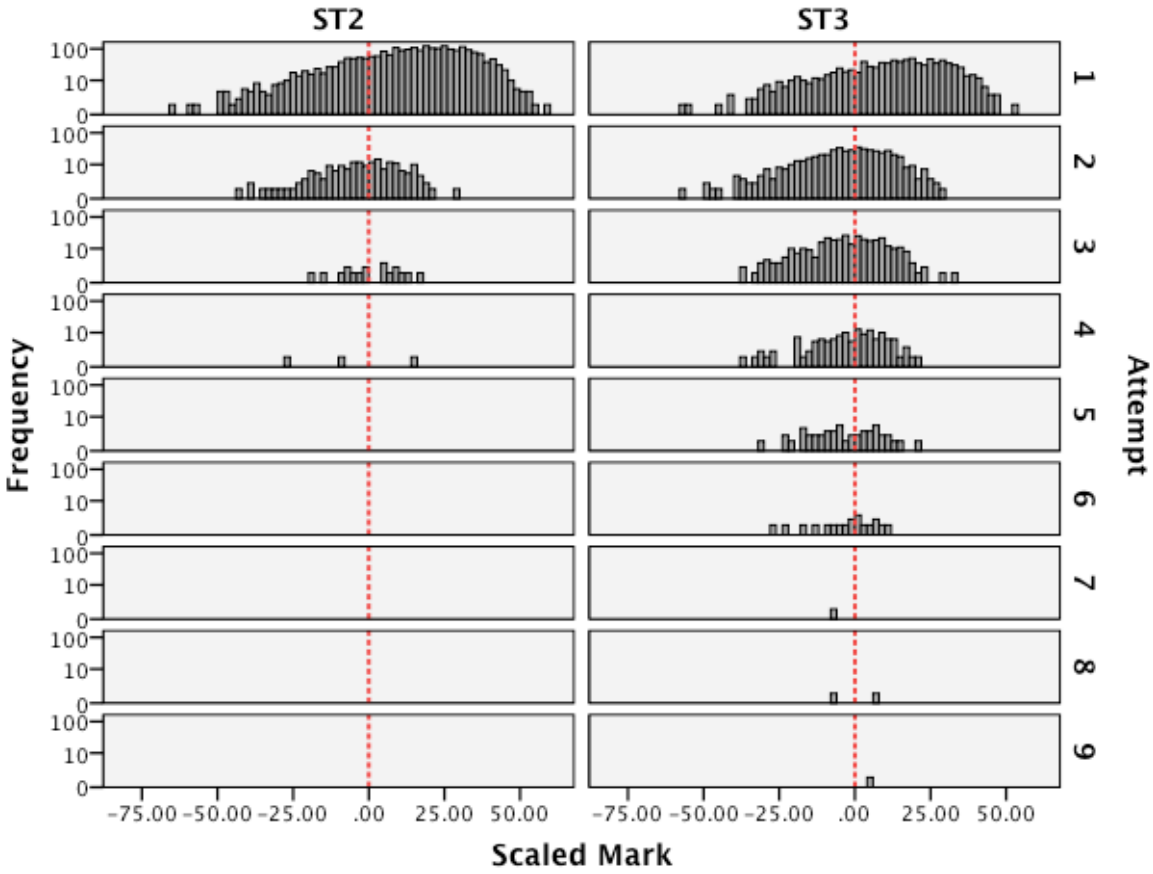
Scaled Mark

Attempt	UK or non-UK Graduate	Mean	N	Std. Deviation
1	UK Graduate	17.92	2539	15.88
	Non-UK Graduate	-.51	755	17.93
	Total	13.70	3294	18.11
2	UK Graduate	1.14	274	12.37
	Non-UK Graduate	-5.38	428	13.81
	Total	-2.83	702	13.63
3	UK Graduate	1.02	97	11.43
	Non-UK Graduate	-3.97	255	11.98
	Total	-2.59	352	12.02
4	UK Graduate	-.43	37	10.13
	Non-UK Graduate	-2.83	96	12.25
	Total	-2.17	133	11.71
5	UK Graduate	-4.91	11	12.64
	Non-UK Graduate	-3.76	37	11.17
	Total	-4.02	48	11.40
6	UK Graduate	-1.50	8	7.48
	Non-UK Graduate	-5.18	11	12.22
	Total	-3.63	19	10.40
7	Non-UK Graduate	-7.00	1	.
	Total	-7.00	1	.
8	Non-UK Graduate	-1.00	2	9.90
	Total	-1.00	2	9.90
9	Non-UK Graduate	5.00	1	.
	Total	5.00	1	.
Total	UK Graduate	15.45	2966	16.51
	Non-UK Graduate	-2.63	1586	15.65
	Total	9.15	4552	18.36



4. Score on AKT on a) first attempt and b) by ST Year and attempt by source of PMQ, UK and non-UK Graduates compared



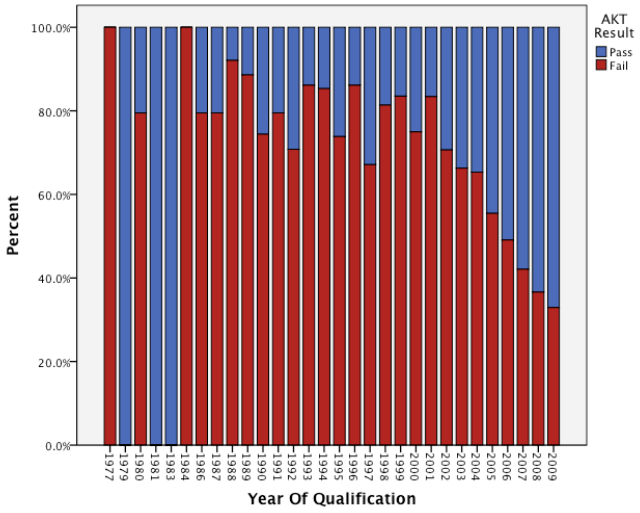


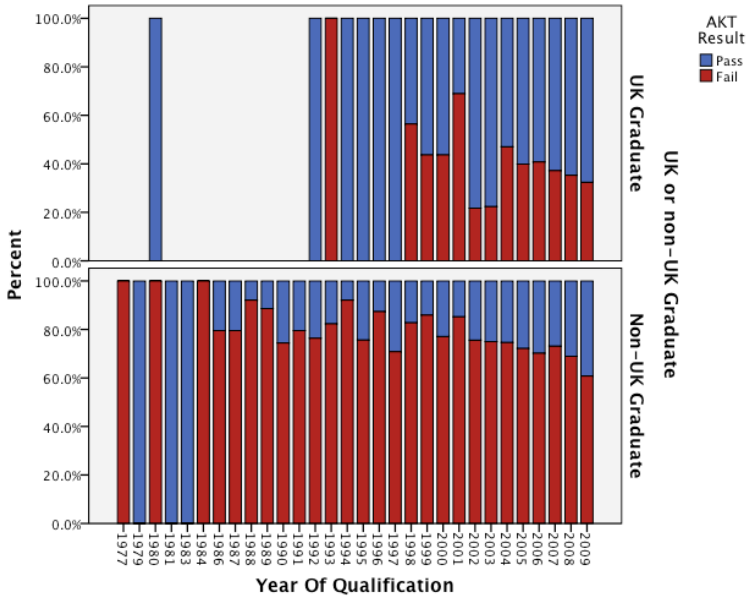
5. Result on AKT on first attempt by year of qualification a) for all candidates and b) for UK and non-UK Graduates separately

Year Of Qualification * UK or non-UK Graduate Crosstabulation

Count

		UK or non-UK Graduate		Total
		IMG	UK Graduate	
Year Of Qualification	1977	1	0	1
	1979	1	0	1
	1980	1	1	2
	1981	1	0	1
	1983	2	0	2
	1984	1	0	1
	1986	2	0	2
	1987	2	0	2
	1988	8	0	8
	1989	3	0	3
	1990	7	0	7
	1991	10	0	10
	1992	11	2	13
	1993	11	2	13
	1994	16	4	20
	1995	18	1	19
	1996	25	1	26
	1997	26	3	29
	1998	47	4	51
	1999	54	6	60
	2000	56	6	62
	2001	67	11	78
	2002	79	15	94
	2003	78	29	107
	2004	58	43	101
	2005	55	89	144
	2006	45	166	211
	2007	34	340	374
	2008	22	788	810
	2009	14	1028	1042
Total		755	2539	3294





6. Candidates with Disabilities: prevalence overall and by attempt; outcomes

UK Equality Legislation permits examination candidates with disabilities to request 'reasonable accommodations' in regard to their disabilities, without affecting the standard of the examination. The tables below record the prevalence of such candidates in attempts at the AKT in 2021-13, together with the results of the assessments.

There were 193 disabled candidate-attempts at the AKT (see first table below), representing 4.2% of attempts, about double the number of the previous year. The second, larger table shows the outcomes for these candidates.

The overall pass rate for candidates reporting disabilities was 72% on first attempt, 37% on subsequent attempts, combined.

Readers should be cautious in their interpretation of these results. By no means all re-sitting candidates who register a disability at the second or later attempt had declared it at their first attempt.

Disabilities Reported

	Frequency	Percent
(No disability)	4359	95.8
Dyslexia	138	3.0
Hearing impaired	14	.3
More than one disability	6	.1
Other disability	27	.6
Physical disabilities	4	.1
Speech impaired	1	.0
Visually impaired	3	.1
Total	4552	100.0

Results

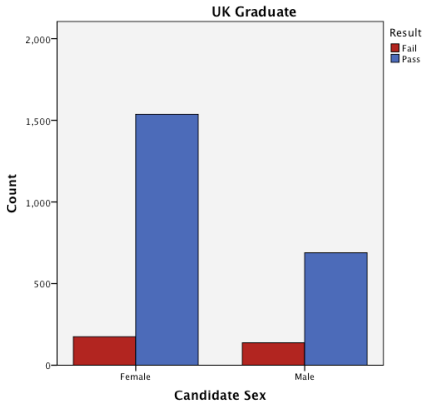
			Attempt							
Result			1	2	3	4	5	6	8	Total
Fail	Disabilities	Dyslexia	22	18	13	8	6	2		69
		Hearing impaired	1	2	2	1				6
		More than one disability	1		1		1			3
		Other disability	2	1	2	2	1	1		9
		Visually impaired	1							1
	Total		27	21	18	11	8	3		88
Pass	Disabilities	Dyslexia	44	9	8	3	2	2	1	69
		Hearing impaired	6	1	1					8
		More than one disability	1			2				3
		Other disability	13	1	2		2			18
		Physical disabilities	3			1				4
		Speech impaired	1							1
		Visually impaired	1	1						2
	Total		69	12	11	6	4	2	1	105

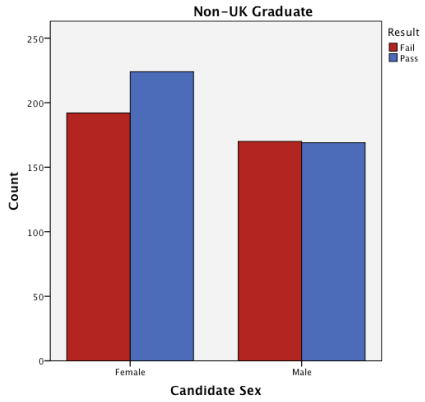
C: Results by Individual Demographics (Candidates on first attempt, only)

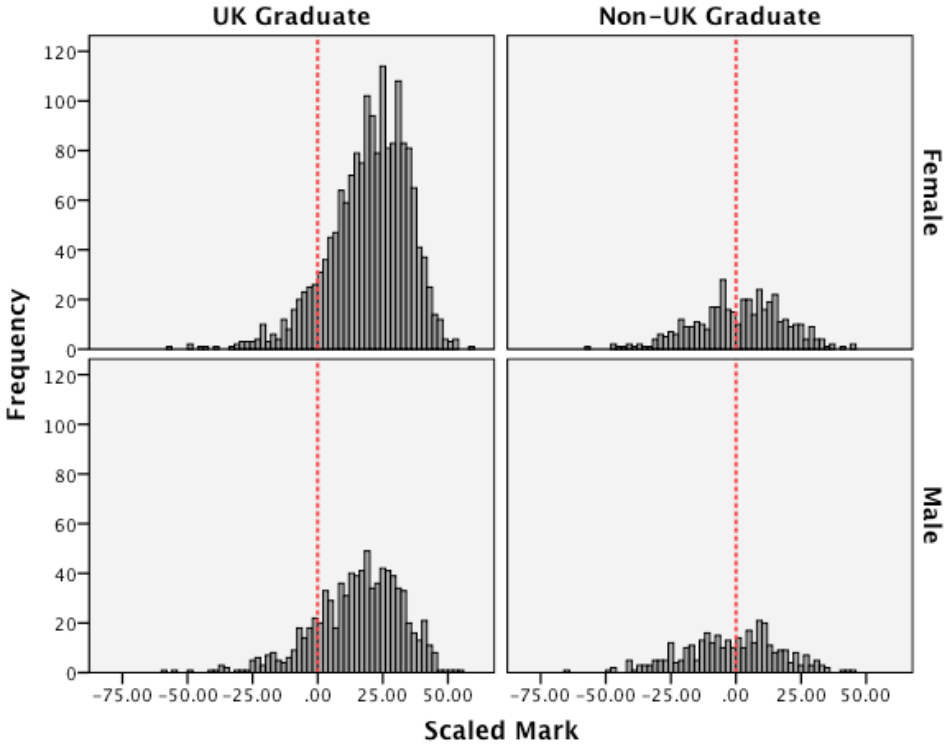
1. AKT Result and scores by candidate sex, and within source of PMQ (1st attempt)

Candidate Sex * Result * UK or non-UK Graduate Crosstabulation

UK or non-UK Graduate			Result		Total
			Fail	Pass	
UK Graduate	Candidate Sex	Female	175	1537	1712
			10.2%	89.8%	100.0%
		Male	138	689	827
			16.7%	83.3%	100.0%
	Total		313	2226	2539
			12.3%	87.7%	100.0%
Non-UK Graduate	Candidate Sex	Female	192	224	416
			46.2%	53.8%	100.0%
		Male	170	169	339
			50.1%	49.9%	100.0%
	Total		362	393	755
			47.9%	52.1%	100.0%
Total	Candidate Sex	Female	367	1761	2128
			17.2%	82.8%	100.0%
		Male	308	858	1166
			26.4%	73.6%	100.0%
	Total		675	2619	3294
			20.5%	79.5%	100.0%



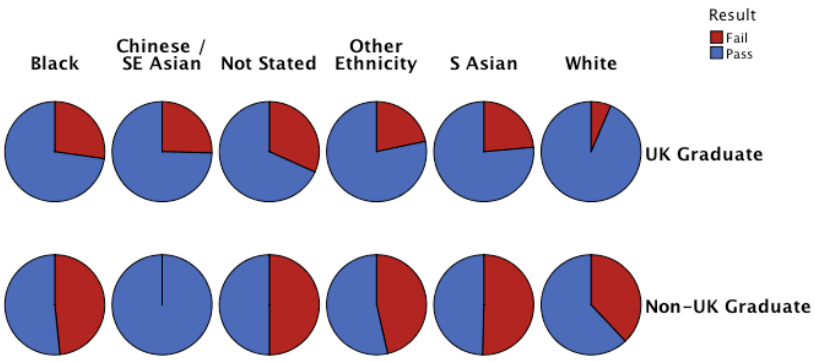




2. AKT Result by classified candidate ethnicity, and separated by source of primary medical qualification (1st attempt)

Candidate Ethnic Group * Result * UK or non-UK Graduate Crosstabulation

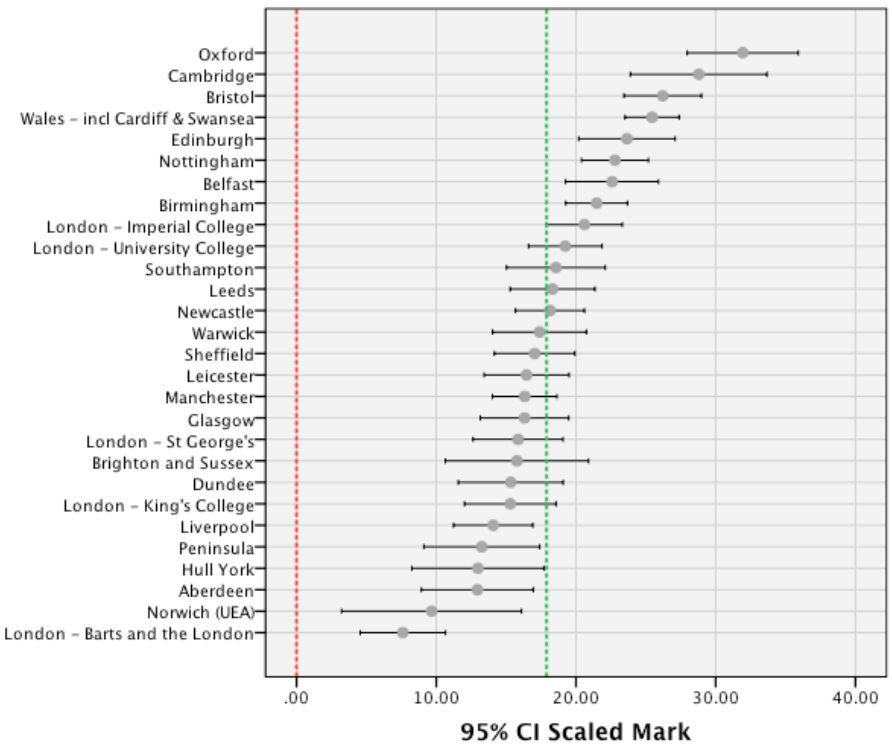
UK or non-UK Graduate		Result		Total
		Fail	Pass	
UK Graduate	Black	12	32	44
		27.3%	72.7%	100.0%
	Chinese / SE Asian	15	44	59
		25.4%	74.6%	100.0%
	Not Stated	13	28	41
		31.7%	68.3%	100.0%
	Other Ethnicity	26	94	120
		21.7%	78.3%	100.0%
	S Asian	137	443	580
		23.6%	76.4%	100.0%
	White	110	1585	1695
		6.5%	93.5%	100.0%
	Total	313	2226	2539
		12.3%	87.7%	100.0%
Non-UK Graduate	Black	60	64	124
		48.4%	51.6%	100.0%
	Chinese / SE Asian	0	3	3
		.0%	100.0%	100.0%
	Not Stated	5	5	10
		50.0%	50.0%	100.0%
	Other Ethnicity	26	30	56
		46.4%	53.6%	100.0%
	S Asian	233	229	462
		50.4%	49.6%	100.0%
	White	38	62	100
		38.0%	62.0%	100.0%
	Total	362	393	755
		47.9%	52.1%	100.0%
Total	Black	72	96	168
		42.9%	57.1%	100.0%
	Chinese / SE Asian	15	47	62
		24.2%	75.8%	100.0%
	Not Stated	18	33	51
		35.3%	64.7%	100.0%
	Other Ethnicity	52	124	176
		29.5%	70.5%	100.0%
	S Asian	370	672	1042
		35.5%	64.5%	100.0%
	White	148	1647	1795
		8.2%	91.8%	100.0%
	Total	675	2619	3294
		20.5%	79.5%	100.0%



3. AKT Result and Scores by PMQ, subdivided (1st attempt)

UK Graduates

UK Medical School	N	Min	Max	Mean	SD	% Fail	% Pass
Aberdeen	70	-29	45	12.94	16.80	20.0%	80.0%
Belfast	53	-15	44	22.58	12.06	3.8%	96.2%
Birmingham	169	-19	47	21.48	14.54	8.3%	91.7%
Brighton and Sussex	44	-50	41	15.77	16.85	15.9%	84.1%
Bristol	86	-16	58	26.21	12.95	3.5%	96.5%
Cambridge	23	5	45	28.78	11.31		100.0%
Dundee	55	-29	35	15.33	13.91	9.1%	90.9%
Edinburgh	54	-4	52	23.65	12.67	1.9%	98.1%
Glasgow	76	-20	41	16.32	13.86	10.5%	89.5%
Hull York	53	-32	50	12.98	17.13	17.0%	83.0%
Keele	3	1	29	16.67	14.29		100.0%
Leeds	113	-32	51	18.32	16.32	15.0%	85.0%
Leicester	93	-24	43	16.46	14.78	14.0%	86.0%
Liverpool	123	-37	53	14.07	15.95	17.1%	82.9%
London - Barts and the London	140	-39	42	7.61	18.29	30.0%	70.0%
London - Imperial College	104	-21	49	20.61	13.93	8.7%	91.3%
London - King's College	136	-60	44	15.29	19.31	14.7%	85.3%
London - School Unknown	1	22	22	22.00	.		100.0%
London - St George's	89	-37	48	15.85	15.32	15.7%	84.3%
London - University College	124	-18	51	19.23	14.83	12.1%	87.9%
Manchester	213	-49	50	16.33	17.13	14.6%	85.4%
Newcastle	108	-14	46	18.14	12.97	9.3%	90.7%
Norwich (UEA)	36	-45	38	9.67	19.03	27.8%	72.2%
Nottingham	100	-12	44	22.79	12.04	7.0%	93.0%
Oxford	30	4	53	31.93	10.66		100.0%
Peninsula	54	-42	41	13.26	15.19	11.1%	88.9%
Sheffield	102	-24	55	17.04	14.68	12.7%	87.3%
Southampton	81	-55	39	18.56	15.99	12.3%	87.7%
Wales - incl Cardiff & Swansea	132	-6	49	25.45	11.23	3.0%	97.0%
Warwick	74	-26	41	17.39	14.47	10.8%	89.2%

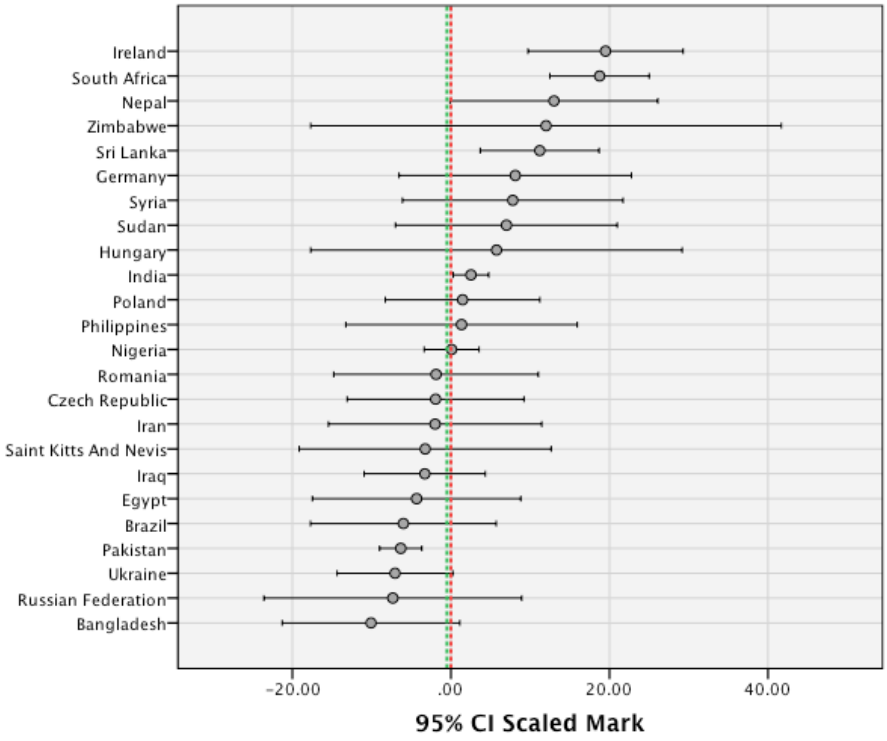


Non-UK Graduates (pass-rates only, in view of generally small numbers) (1st attempt)

Country	Fail N	Pass N	Pass %	Total N
Afghanistan	2	0	0.0%	2
Algeria	2	0	0.0%	2
Armenia	0	1	100.0%	1
Australia	0	1	100.0%	1
Austria	1	1	50.0%	2
Bangladesh	9	3	25.0%	12
Belarus	0	2	100.0%	2
Belgium	1	0	0.0%	1
Brazil	4	1	20.0%	5
Bulgaria	1	1	50.0%	2
Cayman Islands	1	1	50.0%	2
Colombia	1	1	50.0%	2
Croatia	1	0	0.0%	1
Czech Republic	9	7	43.8%	16
Denmark	1	0	0.0%	1
Dominica	1	0	0.0%	1
Dominican Republic	1	0	0.0%	1
Egypt	4	5	55.6%	9
Ethiopia	1	0	0.0%	1
Georgia	1	1	50.0%	2
Germany	3	6	66.7%	9
Ghana	1	1	50.0%	2
Greece	1	0	0.0%	1
Grenada	1	1	50.0%	2
Guyana	1	1	50.0%	2
Haiti	1	0	0.0%	1
Hungary	1	3	75.0%	4
India	79	123	60.9%	202
Iran	8	6	42.9%	14
Iraq	13	10	43.5%	23
Ireland	1	11	91.7%	12
Jamaica	1	2	66.7%	3
Jordan	1	1	50.0%	2
Kenya	1	0	0.0%	1

Country	Fail N	Pass N	Pass %	Total N
Kyrgyzstan	1	0	0.0%	1
Latvia	2	0	0.0%	2
Libya	2	1	33.3%	3
Lithuania	1	0	0.0%	1
Malaysia	0	2	100.0%	2
Malta	1	0	0.0%	1
Myanmar	1	2	66.7%	3
Nepal	0	5	100.0%	5
Netherlands	0	1	100.0%	1
Nigeria	42	54	56.3%	96
Pakistan	101	62	38.0%	163
Philippines	3	3	50.0%	6
Poland	8	11	57.9%	19
Romania	9	8	47.1%	17
Russian Federation	6	3	33.3%	9
Saint Kitts And Nevis	5	3	37.5%	8
Senegal	0	2	100.0%	2
Serbia	2	1	33.3%	3
Sierra Leone	0	1	100.0%	1
Slovakia	1	1	50.0%	2
South Africa	0	8	100.0%	8
Spain	0	1	100.0%	1
Sri Lanka	2	13	86.7%	15
Sudan	1	3	75.0%	4
Switzerland	0	1	100.0%	1
Syria	1	4	80.0%	5
Tunisia	1	0	0.0%	1
Turkey	2	1	33.3%	3
Uganda	2	0	0.0%	2
Ukraine	12	7	36.8%	19
United Arab Emirates	0	1	100.0%	1
United States	0	1	100.0%	1
Zambia	0	1	100.0%	1
Zimbabwe	2	2	50.0%	4

Non-UK Graduates – Countries with 4+ Candidates on First Attempt



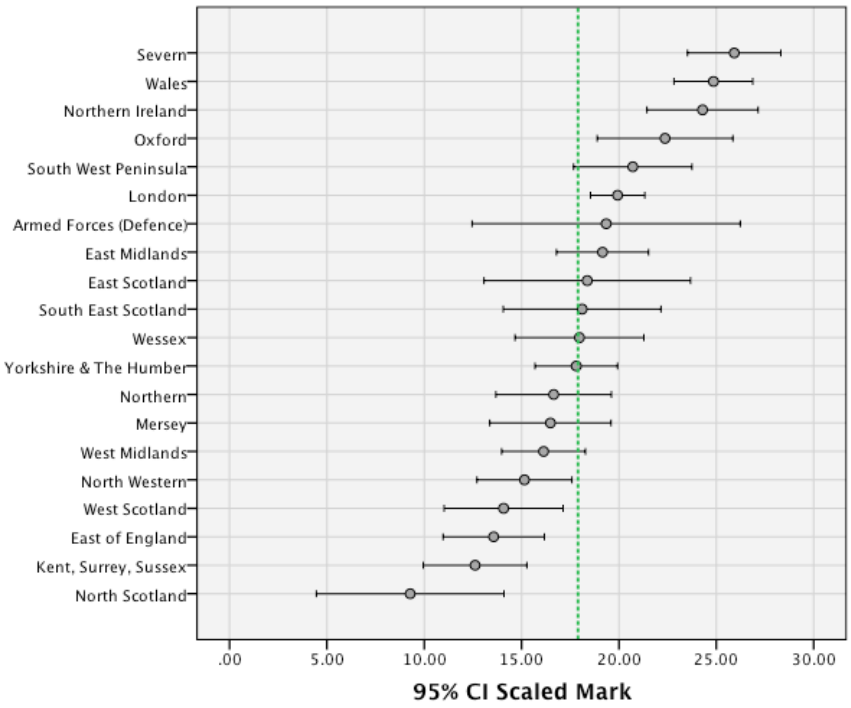
D: Results by Training Deanery

1. Results for all attempts, combined by sex, ethnic group and source of PMQ

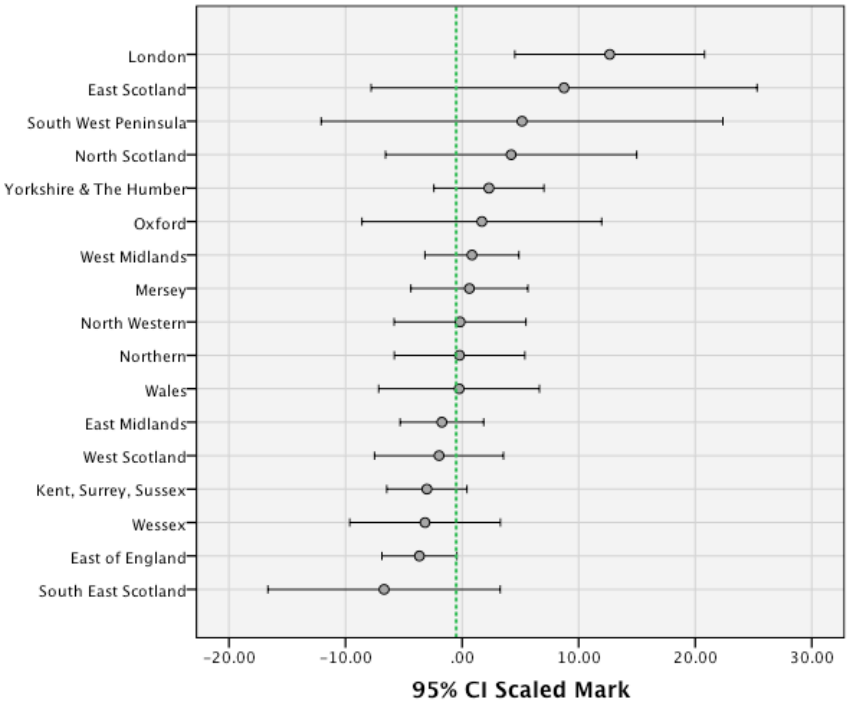
Deanery	Sex				Ethnic Group												Source of PMQ						Total
	Female		Male		Black		Chinese/SE Asian		Not Stated		Other		S Asian		White		UK Grad		EEA Grad		RoW Grad		
	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	
Armed Forces (Defence)	4	11	3	12					0	1					7	22	7	23					30
	26.70%	73.30%	20.00%	80.00%					0.00%	100.00%					24.10%	75.90%	23.30%	76.70%					100.00%
East Midlands	51	123	62	88	14	17	0	5	1	2	4	9	83	88	11	90	26	140	10	6	77	65	324
	29.30%	70.70%	41.30%	58.70%	45.20%	54.80%	0.00%	100.00%	33.30%	66.70%	30.80%	69.20%	48.50%	51.50%	10.90%	89.10%	15.70%	84.30%	62.50%	37.50%	54.20%	45.80%	100.00%
East of England	97	158	93	118	32	20	1	6	1	1	16	10	119	131	21	108	61	176	13	14	116	86	466
	38.00%	62.00%	44.10%	55.90%	61.50%	38.50%	14.30%	85.70%	50.00%	50.00%	61.50%	38.50%	47.60%	52.40%	16.30%	83.70%	25.70%	74.30%	48.10%	51.90%	57.40%	42.60%	100.00%
East Scotland	4	20	0	16			1	2			0	1	1	2	2	31	3	33			1	3	40
	16.70%	83.30%	0.00%	100.00%			33.30%	66.70%			0.00%	100.00%	33.30%	66.70%	6.10%	93.90%	8.30%	91.70%			25.00%	75.00%	100.00%
Kent, Surrey, Sussex	95	167	115	109	30	29	2	7	2	1	29	17	113	94	34	128	67	167	21	18	122	91	486
	36.30%	63.70%	51.30%	48.70%	50.80%	49.20%	22.20%	77.80%	66.70%	33.30%	63.00%	37.00%	54.60%	45.40%	21.00%	79.00%	28.60%	71.40%	53.80%	46.20%	57.30%	42.70%	100.00%
London	31	331	21	93	5	20	2	10	1	8	7	42	28	139	9	205	38	393	2	11	12	20	476
	8.60%	91.40%	18.40%	81.60%	20.00%	80.00%	16.70%	83.30%	11.10%	88.90%	14.30%	85.70%	16.80%	83.20%	4.20%	95.80%	8.80%	91.20%	15.40%	84.60%	37.50%	62.50%	100.00%
Mersey	44	85	37	41	7	6	0	1			8	6	42	33	24	80	28	91	4	4	49	31	207
	34.10%	65.90%	47.40%	52.60%	53.80%	46.20%	0.00%	100.00%			57.10%	42.90%	56.00%	44.00%	23.10%	76.90%	23.50%	76.50%	50.00%	50.00%	61.30%	38.80%	100.00%
North Scotland	11	30	11	17	4	6	1	0			4	1	4	11	9	29	12	31	0	1	10	15	69
	26.80%	73.20%	39.30%	60.70%	40.00%	60.00%	100.00%	0.00%			80.00%	20.00%	26.70%	73.30%	23.70%	76.30%	27.90%	72.10%	0.00%	100.00%	40.00%	60.00%	100.00%
North Western	52	132	67	112	14	17	1	5	6	1	8	10	74	85	16	126	51	193	2	5	66	46	363
	28.30%	71.70%	37.40%	62.60%	45.20%	54.80%	16.70%	83.30%	85.70%	14.30%	44.40%	55.60%	46.50%	53.50%	11.30%	88.70%	20.90%	79.10%	28.60%	71.40%	58.90%	41.10%	100.00%
Northern	29	80	48	54	9	8	0	2	4	0	8	13	41	36	15	75	32	99	10	3	35	32	211
	26.60%	73.40%	47.10%	52.90%	52.90%	47.10%	0.00%	100.00%	100.00%	0.00%	38.10%	61.90%	53.20%	46.80%	16.70%	83.30%	24.40%	75.60%	76.90%	23.10%	52.20%	47.80%	100.00%
Northern Ireland	0	53	0	11					0	1			0	1	0	62	0	62	0	2			64
	0.00%	100.00%	0.00%	100.00%					0.00%	100.00%			0.00%	100.00%	0.00%	100.00%	0.00%	100.00%	0.00%	100.00%			100.00%
Oxford	14	61	6	33	0	2	3	2	0	2	3	3	9	32	5	53	11	82	5	5	4	7	114
	18.70%	81.30%	15.40%	84.60%	0.00%	100.00%	60.00%	40.00%	0.00%	100.00%	50.00%	50.00%	22.00%	78.00%	8.60%	91.40%	11.80%	88.20%	50.00%	50.00%	36.40%	63.60%	100.00%
Severn	5	75	1	43			0	3	0	1	1	3	5	11	0	100	4	115			2	3	124
	6.30%	93.80%	2.30%	97.70%			0.00%	100.00%	0.00%	100.00%	25.00%	75.00%	31.30%	68.80%	0.00%	100.00%	3.40%	96.60%			40.00%	60.00%	100.00%
South East Scotland	8	45	11	17	2	2			0	2	3	2	5	5	9	51	6	53	3	1	10	8	81
	15.10%	84.90%	39.30%	60.70%	50.00%	50.00%			0.00%	100.00%	60.00%	40.00%	50.00%	50.00%	15.00%	85.00%	10.20%	89.80%	75.00%	25.00%	55.60%	44.40%	100.00%
South West Peninsula	13	56	3	36	0	2	1	1	0	3	0	1	3	4	12	81	11	84	1	2	4	6	108
	18.80%	81.20%	7.70%	92.30%	0.00%	100.00%	50.00%	50.00%	0.00%	100.00%	0.00%	100.00%	42.90%	57.10%	12.90%	87.10%	11.60%	88.40%	33.30%	66.70%	40.00%	60.00%	100.00%
Wales	14	89	12	43	0	2	0	1			4	3	19	22	3	104	3	110	5	2	18	20	158
	13.60%	86.40%	21.80%	78.20%	0.00%	100.00%	0.00%	100.00%			57.10%	42.90%	46.30%	53.70%	2.80%	97.20%	2.70%	97.30%	71.40%	28.60%	47.40%	52.60%	100.00%
Wessex	27	85	29	48	10	6	1	2	1	2	6	4	20	25	18	94	20	99	6	4	30	30	189
	24.10%	75.90%	37.70%	62.30%	62.50%	37.50%	33.30%	66.70%	33.30%	66.70%	60.00%	40.00%	44.40%	55.60%	16.10%	83.90%	16.80%	83.20%	60.00%	40.00%	50.00%	50.00%	100.00%
West Midlands	75	192	85	108	14	14	2	6	7	8	6	12	117	146	14	114	58	214	9	8	93	78	460
	28.10%	71.90%	44.00%	56.00%	50.00%	50.00%	25.00%	75.00%	46.70%	53.30%	33.30%	66.70%	44.50%	55.50%	10.90%	89.10%	21.30%	78.70%	52.90%	47.10%	54.40%	45.60%	100.00%
West Scotland	18	70	42	54	8	8	0	1	0	1	1	6	34	29	17	79	21	89	1	4	38	31	184
	20.50%	79.50%	43.80%	56.30%	50.00%	50.00%	0.00%	100.00%	0.00%	100.00%	14.30%	85.70%	54.00%	46.00%	17.70%	82.30%	19.10%	80.90%	20.00%	80.00%	55.10%	44.90%	100.00%
Yorkshire & The Humber	46	184	52	116	4	15	1	3	1	4	14	19	60	97	18	162	36	217	6	5	56	78	398
	20.00%	80.00%	31.00%	69.00%	21.10%	78.90%	25.00%	75.00%	20.00%	80.00%	42.40%	57.60%	38.20%	61.80%	10.00%	90.00%	14.20%	85.80%	54.50%	45.50%	41.80%	58.20%	100.00%
TOTAL	638	2047	698	1169	153	174	16	57	24	38	122	162	777	991	244	1794	495	2471	98	95	743	650	4552
	23.80%	76.20%	37.40%	62.60%	46.80%	53.20%	21.90%	78.10%	38.70%	61.30%	43.00%	57.00%	43.90%	56.10%	12.00%	88.00%	16.70%	83.30%	50.80%	49.20%	53.30%	46.70%	100.00%

2. Graphical Representation of Candidate Scores by Deanery, by source of PMQ

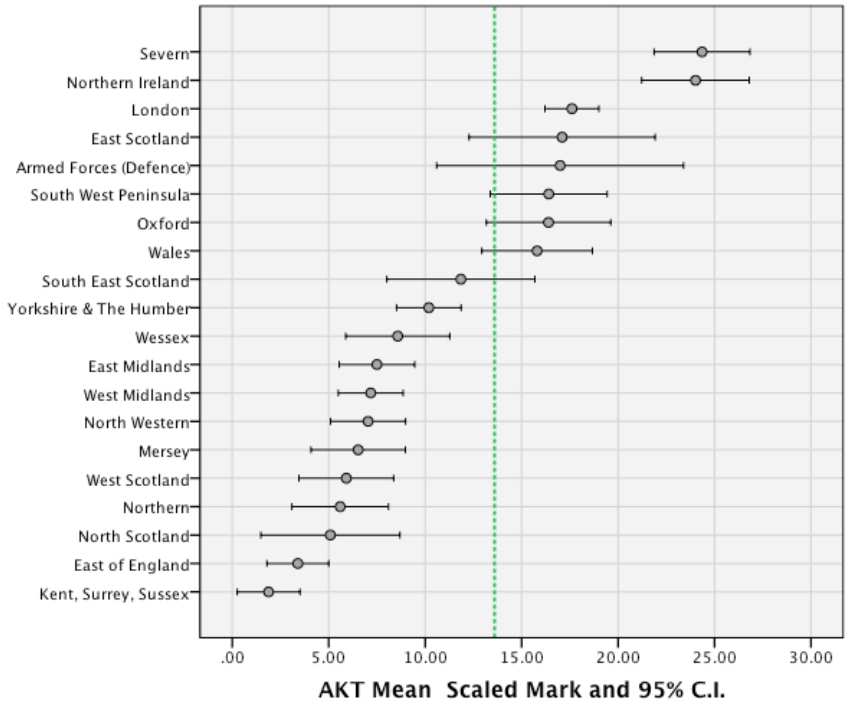
UK Graduates, First Attempt



Non-UK Graduates, First Attempt



All Graduates, All Attempts



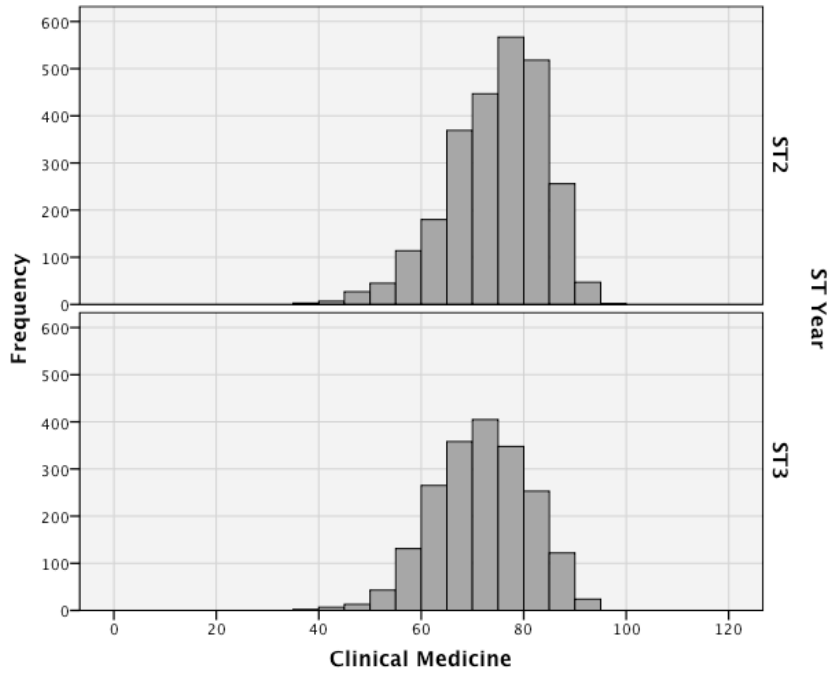
E: AKT sub-Scores and Distributions, by Year of Training

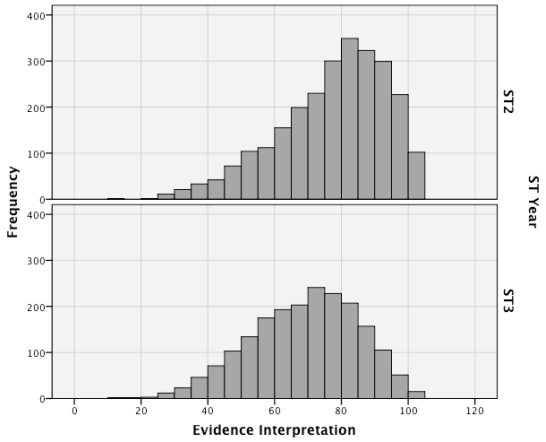
1. Descriptive Statistics of the three Scores, all candidates

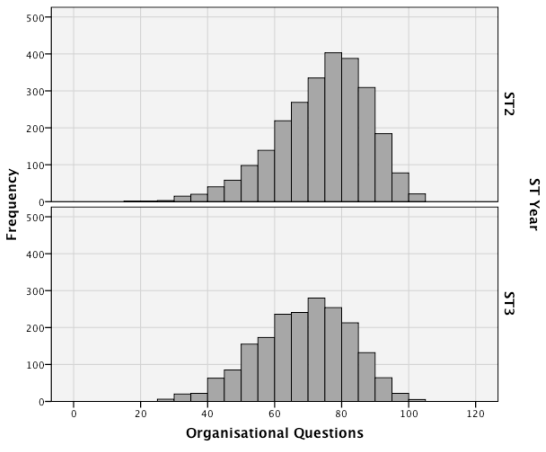
Descriptive Statistics

ST Year		N	Minimum	Maximum	Mean	Std. Deviation
ST2	Clinical_Medicine	2581	35.00	96.25	74.45	9.39
	Evidence_Interpretation	2581	10.00	100.00	74.88	16.23
	Organisational_Questions	2581	15.00	100.00	71.94	13.66
ST3	Clinical_Medicine	1971	36.25	93.75	71.85	9.30
	Evidence_Interpretation	1971	10.00	100.00	66.44	16.06
	Organisational_Questions	1971	25.00	100.00	66.07	13.93

2. Distributions of Scores on the three sub-Components by Training Year, all candidates







A: Summary of Candidate Demographics

3282 candidates made a total of 4054 attempts at the CSA during 2012-13. The tables below show the origin of the 3282 candidates, by UK medical school or non-UK country of primary medical qualification—and the percentage from each out of the total of that part of the candidature. On the next page, the background demographic characteristics of the 3282 are shown, by training Deanery. Other tables report on the 4054 attempts.

1. Source of Primary Medical Qualification; year of qualification

UK, EEA, or International Graduate

	Frequency	Percent
UK Graduate	2099	64.0
EEA Graduate	135	4.1
Rest-of-World Graduate	1048	31.9
Total	3282	100.0

UK Medical School

	Frequency	Percent
Aberdeen	59	2.8
Belfast	58	2.8
Birmingham	120	5.7
Brighton and Sussex	24	1.1
Bristol	53	2.5
Cambridge	30	1.4
Dundee	43	2.0
Edinburgh	64	3.0
Glasgow	74	3.5
Hull York	31	1.5
Leeds	98	4.7
Leicester	82	3.9
Liverpool	85	4.0
London - Barts and the London	110	5.2
London - Imperial College	87	4.1
London - King's College	124	5.9
London - St George's	66	3.1
London - University College	96	4.6
London (school unknown)	2	.1
Manchester	172	8.2
Newcastle	105	5.0
Norwich (UEA)	32	1.5
Nottingham	99	4.7
Oxford	21	1.0
Peninsula	34	1.6
Sheffield	87	4.1
Southampton	74	3.5
Wales (incl Cardiff & Swansea)	95	4.5
Warwick	74	3.5
Total	2099	100.0

Country of Qualification - EEA

	Frequency	Percent
Austria	2	1.5
Bulgaria	3	2.2
Czech Republic	24	17.8
Denmark	1	.7
Germany	14	10.4
Greece	3	2.2
Hungary	4	3.0
Ireland	20	14.8
Italy	2	1.5
Latvia	5	3.7
Lithuania	3	2.2
Poland	29	21.5
Romania	19	14.1
Slovakia	5	3.7
Spain	1	.7
Total	135	100.0

For Graduates of Medical Schools of the Rest of the World, see overleaf

Country of Qualification -Rest of World

	Frequency	Percent
Afghanistan	7	.7
Albania	3	.3
Algeria	1	.1
Armenia	2	.2
Bangladesh	37	3.5
Belarus	5	.5
Belgium	1	.1
Bolivia	1	.1
Bosnia And Herzegovina	1	.1
Brazil	5	.5
Burundi	1	.1
Cayman Islands	1	.1
China	6	.6
Colombia	3	.3
Congo, Dem Rep	2	.2
Cuba	2	.2
Dominica	1	.1
Egypt	17	1.6
Ethiopia	1	.1
Georgia	1	.1
Ghana	6	.6
Grenada	2	.2
Guyana	2	.2
Haiti	1	.1
India	345	32.9
Iran	14	1.3
Iraq	35	3.3
Jamaica	3	.3
Jordan	3	.3
Kazakhstan	2	.2
Kenya	1	.1
Kyrgyzstan	1	.1
Libya	6	.6
Moldova	1	.1
Mongolia	1	.1
Morocco	1	.1
Myanmar	6	.6
Nepal	6	.6
New Zealand	1	.1
Nigeria	128	12.2
Oman	1	.1
Pakistan	251	24.0
Philippines	9	.9
Russian Federation	32	3.1
Saint Kitts And Nevis	2	.2
Saint Lucia	1	.1
Senegal	1	.1
Serbia	5	.5
Sierra Leone	1	.1
South Africa	13	1.2
Sri Lanka	16	1.5
Sudan	4	.4
Syria	4	.4
Tajikistan	1	.1
Turkey	5	.5
Ukraine	24	2.3
United Arab Emirates	4	.4
Uzbekistan	1	.1
Yemen	1	.1
Zambia	2	.2
Zimbabwe	7	.7
Total	1048	100.0

Year Of Qualification * UK, EEA, or International Graduate Crosstabulation

Count

	UK, EEA, or RoW Graduate			
	UK Grad	EEA Grad	RoW Grad	Total
1979	0	0	1	1
1982	0	0	3	3
1983	0	0	3	3
1984	0	0	1	1
1985	0	0	5	5
1986	0	0	8	8
1987	0	0	8	8
1988	0	0	10	10
1989	0	0	9	9
1990	0	1	19	20
1991	0	1	14	15
1992	1	2	25	28
1993	1	0	21	22
1994	1	3	32	36
1995	3	0	48	51
1996	5	3	50	58
1997	5	5	72	82
1998	4	5	71	80
1999	6	4	90	100
2000	7	6	102	115
2001	23	6	126	155
2002	29	10	113	152
2003	34	14	91	139
2004	59	16	59	134
2005	123	25	38	186
2006	233	14	24	271
2007	460	12	5	477
2008	1105	8	0	1113
Total	2099	135	1048	3282

2. CSA Candidates' Sex, Ethnic Group and whether UK or non-UK graduates, by Training Deanery

Deanery	Ethnic Group						UK, EEA, or RoW Graduate			Candidate Sex		Total
	Not stated	White	S Asian	Black	Chinese / SE Asian	Other Ethnicity	UK Graduate	EEA Graduate	Rest-of-World Graduate	Female	Male	
Armed Forces (Defence)	1	22	2	0	0	1	26	0	0	15	11	26
	3.80%	84.60%	7.70%	0.00%	0.00%	3.80%	100.00%	0.00%	0.00%	57.70%	42.30%	100.00%
East Midlands	3	62	131	22	4	11	120	6	107	106	127	233
	1.30%	26.60%	56.20%	9.40%	1.70%	4.70%	51.50%	2.60%	45.90%	45.50%	54.50%	100.00%
East of England	0	100	137	35	2	11	134	18	133	158	127	285
	0.00%	35.10%	48.10%	12.30%	0.70%	3.90%	47.00%	6.30%	46.70%	55.40%	44.60%	100.00%
East Scotland	0	20	6	1	1	2	24	0	6	19	11	30
	0.00%	66.70%	20.00%	3.30%	3.30%	6.70%	80.00%	0.00%	20.00%	63.30%	36.70%	100.00%
Kent, Surrey, Sussex	2	103	140	43	4	23	134	20	161	157	158	315
	0.60%	32.70%	44.40%	13.70%	1.30%	7.30%	42.50%	6.30%	51.10%	49.80%	50.20%	100.00%
London	7	153	128	17	11	27	303	7	33	253	90	343
	2.00%	44.60%	37.30%	5.00%	3.20%	7.90%	88.30%	2.00%	9.60%	73.80%	26.20%	100.00%
Mersey	1	55	53	8	3	5	66	5	54	63	62	125
	0.80%	44.00%	42.40%	6.40%	2.40%	4.00%	52.80%	4.00%	43.20%	50.40%	49.60%	100.00%
North Scotland	0	25	8	8	0	2	25	2	16	24	19	43
	0.00%	58.10%	18.60%	18.60%	0.00%	4.70%	58.10%	4.70%	37.20%	55.80%	44.20%	100.00%
North Western	0	110	132	18	6	13	172	9	98	140	139	279
	0.00%	39.40%	47.30%	6.50%	2.20%	4.70%	61.60%	3.20%	35.10%	50.20%	49.80%	100.00%
Northern	3	85	53	4	0	8	97	8	48	79	74	153
	2.00%	55.60%	34.60%	2.60%	0.00%	5.20%	63.40%	5.20%	31.40%	51.60%	48.40%	100.00%
Northern Ireland	1	63	0	0	0	0	63	1	0	49	15	64
	1.60%	98.40%	0.00%	0.00%	0.00%	0.00%	98.40%	1.60%	0.00%	76.60%	23.40%	100.00%
Oxford	0	42	30	3	1	5	63	4	14	51	30	81
	0.00%	51.90%	37.00%	3.70%	1.20%	6.20%	77.80%	4.90%	17.30%	63.00%	37.00%	100.00%
Severn	0	93	15	2	1	3	100	5	9	74	40	114
	0.00%	81.60%	13.20%	1.80%	0.90%	2.60%	87.70%	4.40%	7.90%	64.90%	35.10%	100.00%
South East Scotland	1	50	4	2	1	0	53	0	5	40	18	58
	1.70%	86.20%	6.90%	3.40%	1.70%	0.00%	91.40%	0.00%	8.60%	69.00%	31.00%	100.00%
South West Peninsula	1	76	6	2	1	4	78	5	7	53	37	90
	1.10%	84.40%	6.70%	2.20%	1.10%	4.40%	86.70%	5.60%	7.80%	58.90%	41.10%	100.00%
Wales	1	75	26	2	1	3	80	6	22	67	41	108
	0.90%	69.40%	24.10%	1.90%	0.90%	2.80%	74.10%	5.60%	20.40%	62.00%	38.00%	100.00%
Wessex	1	78	36	10	2	7	83	9	42	83	51	134
	0.70%	58.20%	26.90%	7.50%	1.50%	5.20%	61.90%	6.70%	31.30%	61.90%	38.10%	100.00%
West Midlands	3	106	193	18	5	18	190	18	135	173	170	343
	0.90%	30.90%	56.30%	5.20%	1.50%	5.20%	55.40%	5.20%	39.40%	50.40%	49.60%	100.00%
West Scotland	1	81	50	5	2	0	96	5	38	80	59	139
	0.70%	58.30%	36.00%	3.60%	1.40%	0.00%	69.10%	3.60%	27.30%	57.60%	42.40%	100.00%
Yorkshire & The Humber	4	146	130	14	3	22	192	7	120	182	137	319
	1.30%	45.80%	40.80%	4.40%	0.90%	6.90%	60.20%	2.20%	37.60%	57.10%	42.90%	100.00%
TOTAL	30	1545	1280	214	48	165	2099	135	1048	1866	1416	3282
	0.90%	47.10%	39.00%	6.50%	1.50%	5.00%	64.00%	4.10%	31.90%	56.90%	43.10%	100.00%

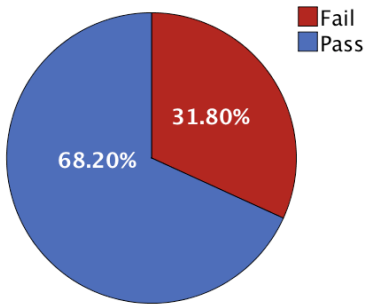
B: Main Results: Overall, and by Exam Diet and Attempt (All Candidates)

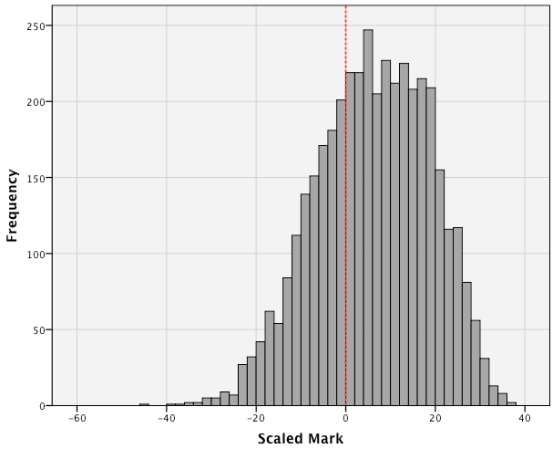
1. CSA Result and scores, overall

The pass-mark varies day-on-day (see introduction): marks have been re-scaled in this report to a pass-mark of zero

CSA Result

	Frequency	Percent
Fail	1289	31.8
Pass	2765	68.2
Total	4054	100.0

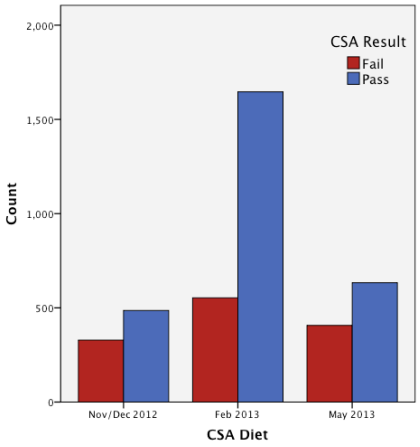


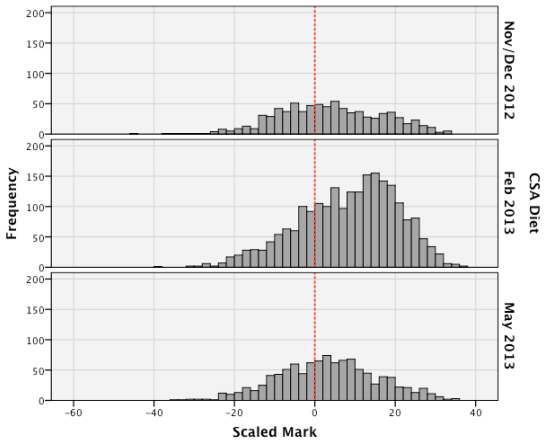


2. CSA Result and scores, by CSA Diet (all candidates)

CSA Diet * CSA Result Crosstabulation

		CSA Result		
		Fail	Pass	Total
CSA Diet	Nov/Dec 2012	329	486	815
		40.4%	59.6%	100.0%
	Feb 2013	553	1646	2199
		25.1%	74.9%	100.0%
	May 2013	407	633	1040
		39.1%	60.9%	100.0%
Total		1289	2765	4054
		31.8%	68.2%	100.0%

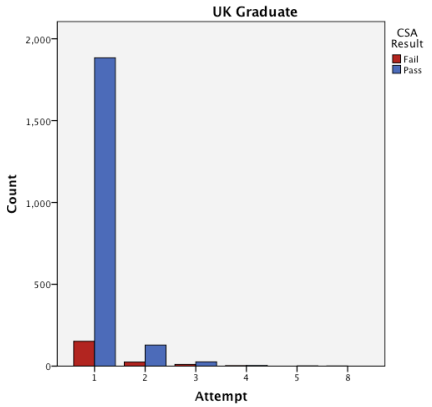


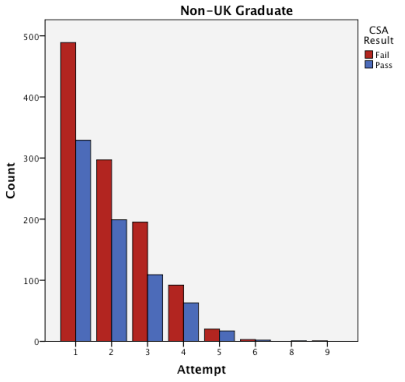


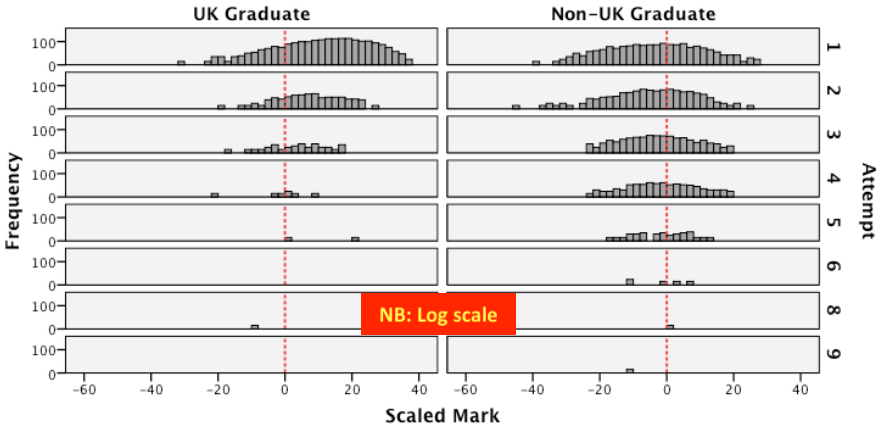
3. Result and scores, by attempt at the CSA: all graduates, and separated by source of primary medical qualification, UK/non-UK (all candidates)

Attempt * CSA Result * UK or Non-UK Graduate (from GMC) Crosstabulation

UK or Non-UK Graduate (from GMC)		CSA Result		Total
		Fail	Pass	
UK Graduate	1	152	1884	2036
		7.5%	92.5%	100.0%
	2	25	129	154
		16.2%	83.8%	100.0%
	3	11	26	37
		29.7%	70.3%	100.0%
	4	3	4	7
		42.9%	57.1%	100.0%
	5	0	2	2
		.0%	100.0%	100.0%
	8	1	0	1
		100.0%	.0%	100.0%
	Total	192	2045	2237
		8.6%	91.4%	100.0%
Non-UK Graduate	1	489	329	818
		59.8%	40.2%	100.0%
	2	297	199	496
		59.9%	40.1%	100.0%
	3	195	109	304
		64.1%	35.9%	100.0%
	4	92	63	155
		59.4%	40.6%	100.0%
	5	20	17	37
		54.1%	45.9%	100.0%
	6	3	2	5
		60.0%	40.0%	100.0%
	8	0	1	1
		.0%	100.0%	100.0%
	9	1	0	1
		100.0%	.0%	100.0%
	Total	1097	720	1817
		60.4%	39.6%	100.0%
Total	1	641	2213	2854
		22.5%	77.5%	100.0%
	2	322	328	650
		49.5%	50.5%	100.0%
	3	206	135	341
		60.4%	39.6%	100.0%
	4	95	67	162
		58.6%	41.4%	100.0%
	5	20	19	39
		51.3%	48.7%	100.0%
	6	3	2	5
		60.0%	40.0%	100.0%
	8	1	1	2
		50.0%	50.0%	100.0%
	9	1	0	1
		100.0%	.0%	100.0%
	Total	1289	2765	4054
		31.8%	68.2%	100.0%







4. Candidates with Disabilities: prevalence overall and by attempt; outcomes

UK Equality Legislation permits examination candidates with disabilities to request reasonable accommodations in regard to their disabilities, without affecting the difficulty of the examination. The tables below record the prevalence of such candidates in attempts at the CSA in 2012-13, together with the results of the assessments.

There were 140 disabled candidate-attempts at the CSA (see first table below), representing 3.5 % of all attempts, a large increase on the previous year (= 84). The second, larger table shows the outcomes for these candidates.

Readers should be cautious in their interpretation of these results. By no means all re-sitting candidates who register a disability at the second or later attempt had declared it at their first attempt.

The pass rate for candidates reporting disabilities was 79% on first attempt, 60% on subsequent attempts, combined.

Disability Reported

	Frequency	Percent
Dyslexia	86	61.4
Hearing impaired	11	7.9
More than one disability	3	2.1
Other disability	19	13.6
Physical disabilities	9	6.4
Speech impaired	9	6.4
Visually impaired	3	2.1
Total	140	100.0

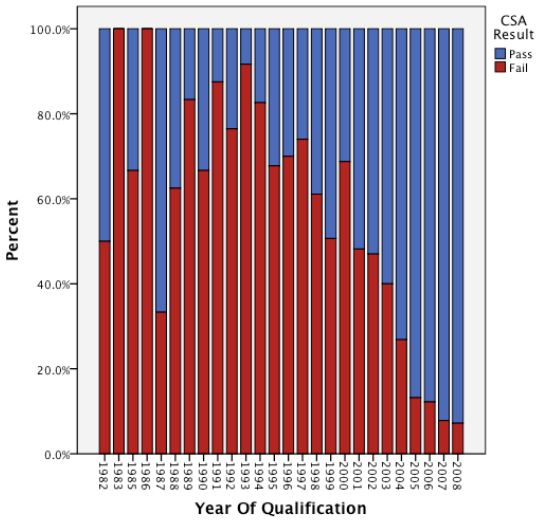
			Attempt							
Result			1	2	3	4	5	6	8	Total
Fail	Disabilities	Dyslexia	10	9	4	3				26
		Hearing impaired	1							1
		More than one disability	1							1
		Other disability	2		2			1		5
		Physical disabilities	1							1
		Speech impaired	1		2	1	1			5
		Visually impaired	1							1
	Total		17	9	8	4	1	1		40
Pass	Disabilities	Dyslexia	43	9	3	2	3			60
		Hearing impaired	8	1	1					10
		More than one disability	1			1				2
		Other disability	9	2	2				1	14
		Physical disabilities	4	3			1			8
		Speech impaired	1	1		1	1			4
		Visually impaired				2				2
	Total		66	16	6	6	5		1	100

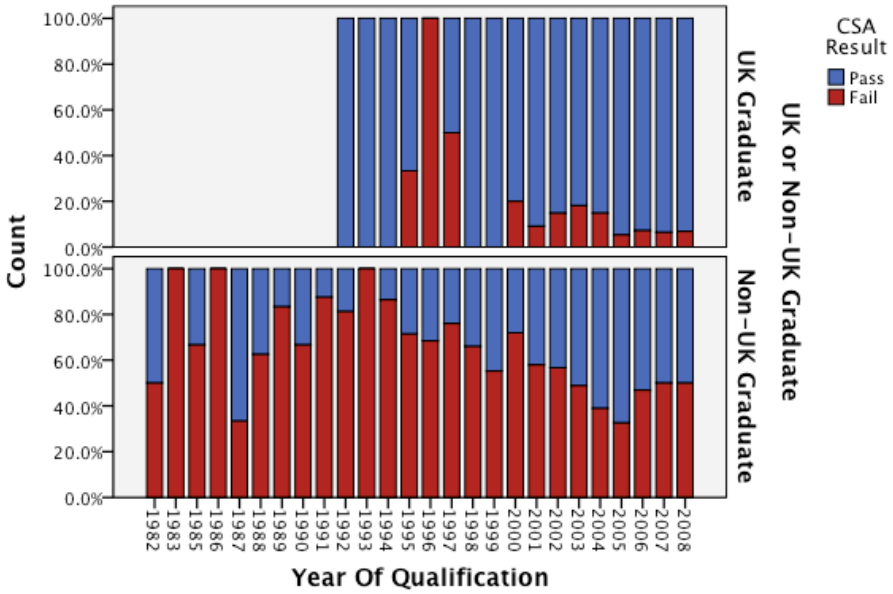
5. Result on CSA on first attempt by year of qualification a) for all candidates and b) for UK and non-UK Graduates separately

Year Of Qualification * UK or Non-UK Graduate Crosstabulation

Count

		UK or Non-UK Graduate		
		UK Graduate	Non-UK Graduate	Total
Year Of Qualification	1982	0	2	2
	1983	0	2	2
	1985	0	3	3
	1986	0	4	4
	1987	0	3	3
	1988	0	8	8
	1989	0	6	6
	1990	0	15	15
	1991	0	8	8
	1992	1	16	17
	1993	1	11	12
	1994	1	22	23
	1995	3	28	31
	1996	2	38	40
	1997	4	46	50
	1998	4	50	54
	1999	6	67	73
	2000	5	75	80
	2001	22	88	110
	2002	27	90	117
	2003	33	82	115
	2004	54	54	108
	2005	113	46	159
	2006	222	32	254
	2007	433	14	447
	2008	1105	8	1113
Total		2036	818	2854



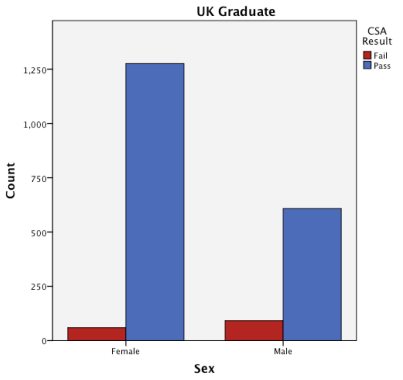


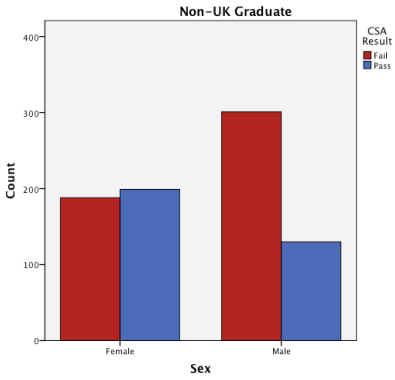
C: Results by Individual Demographics (Candidates on first attempt, only)

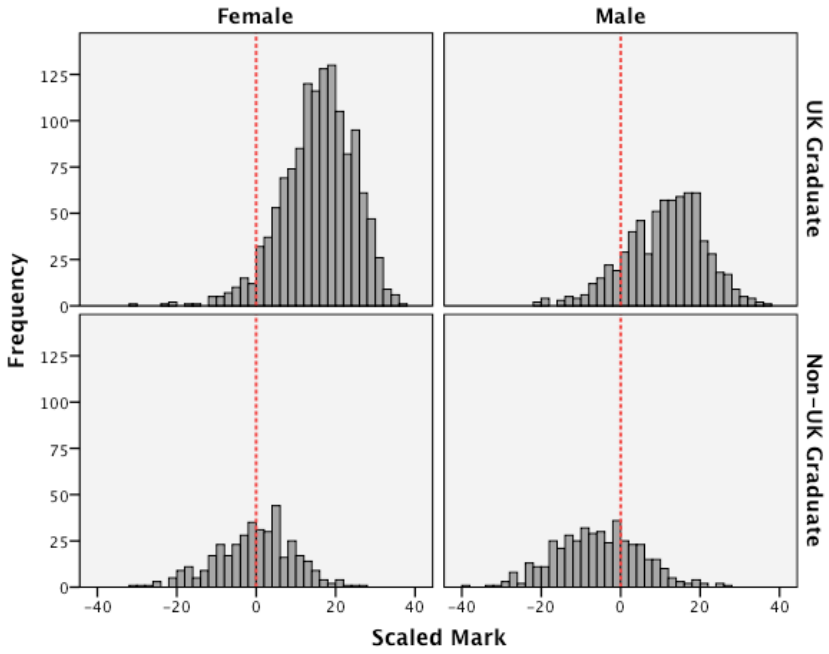
1. Result and scores by candidate sex, and within source of PMQ (1st attempt)

Sex * CSA Result * UK or Non-UK Graduate (from GMC) Crosstabulation

UK or Non-UK Graduate (from GMC)		CSA Result		
		Fail	Pass	Total
UK Graduate	Female	60	1276	1336
		4.5%	95.5%	100.0%
	Male	92	608	700
		13.1%	86.9%	100.0%
	Total	152	1884	2036
		7.5%	92.5%	100.0%
Non-UK Graduate	Female	188	199	387
		48.6%	51.4%	100.0%
	Male	301	130	431
		69.8%	30.2%	100.0%
	Total	489	329	818
		59.8%	40.2%	100.0%
Total	Female	248	1475	1723
		14.4%	85.6%	100.0%
	Male	393	738	1131
		34.7%	65.3%	100.0%
	Total	641	2213	2854
		22.5%	77.5%	100.0%



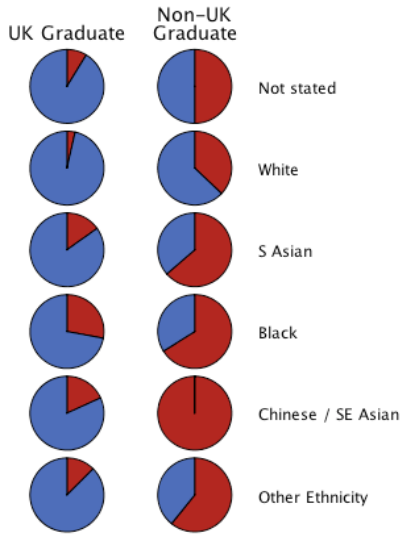


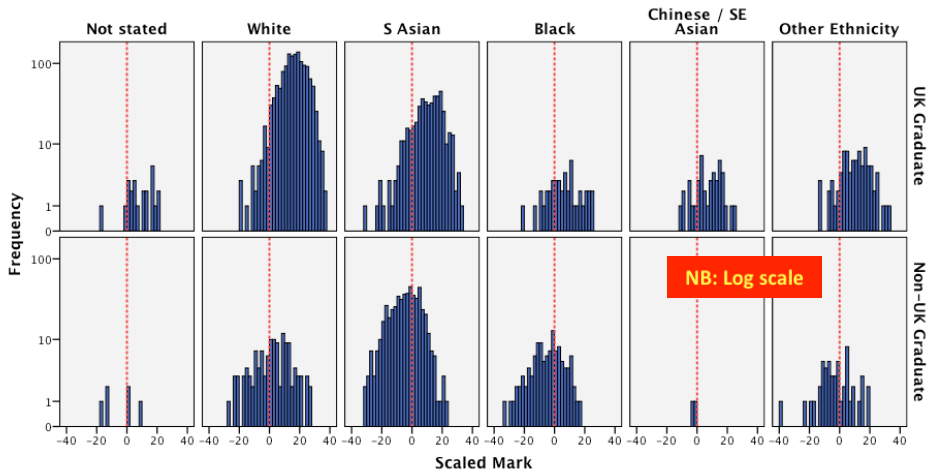


2. Result by classified candidate ethnicity, and separated by source of primary medical qualification, UK/non-UK graduates (1st attempt)

Ethnic Group * CSA Result * UK or Non-UK Graduate (from GMC) Crosstabulation

UK or Non-UK Graduate (from GMC)		CSA Result		Total
		Fail	Pass	
UK Graduate	Not stated	2	21	23
		8.7%	91.3%	100.0%
	White	48	1322	1370
		3.5%	96.5%	100.0%
	S Asian	71	397	468
		15.2%	84.8%	100.0%
	Black	12	31	43
		27.9%	72.1%	100.0%
	Chinese / SE Asian	8	36	44
		18.2%	81.8%	100.0%
	Other Ethnicity	11	77	88
		12.5%	87.5%	100.0%
	Total	152	1884	2036
		7.5%	92.5%	100.0%
Non-UK Graduate	Not stated	3	3	6
		50.0%	50.0%	100.0%
	White	46	78	124
		37.1%	62.9%	100.0%
	S Asian	333	190	523
		63.7%	36.3%	100.0%
	Black	74	38	112
		66.1%	33.9%	100.0%
	Chinese / SE Asian	2	0	2
		100.0%	.0%	100.0%
	Other Ethnicity	31	20	51
		60.8%	39.2%	100.0%
	Total	489	329	818
		59.8%	40.2%	100.0%
Total	Not stated	5	24	29
		17.2%	82.8%	100.0%
	White	94	1400	1494
		6.3%	93.7%	100.0%
	S Asian	404	587	991
		40.8%	59.2%	100.0%
	Black	86	69	155
		55.5%	44.5%	100.0%
	Chinese / SE Asian	10	36	46
		21.7%	78.3%	100.0%
	Other Ethnicity	42	97	139
		30.2%	69.8%	100.0%
	Total	641	2213	2854
		22.5%	77.5%	100.0%

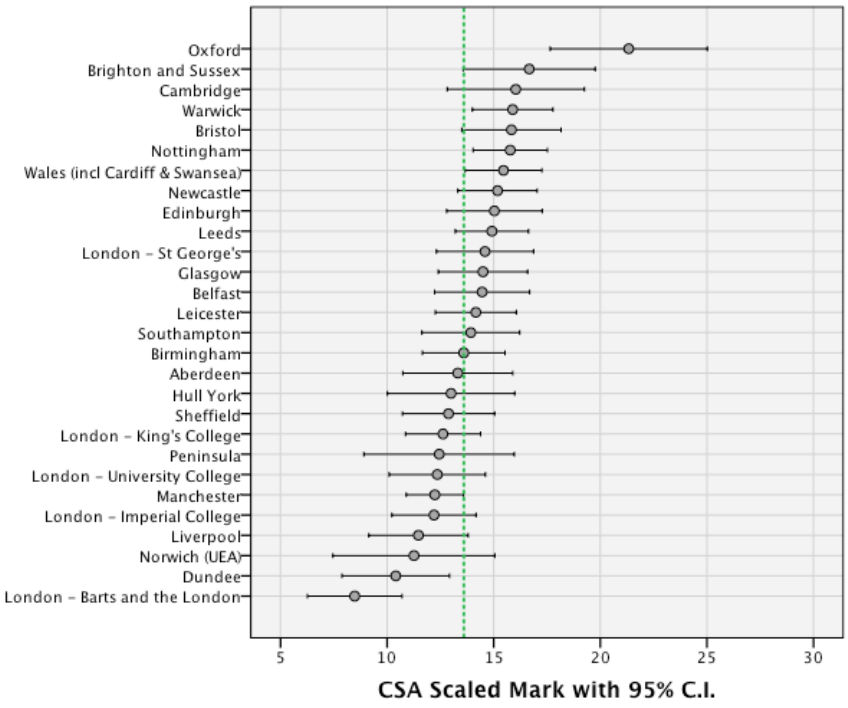




3. CSA Result and Scores by PMQ, subdivided (1st attempt)

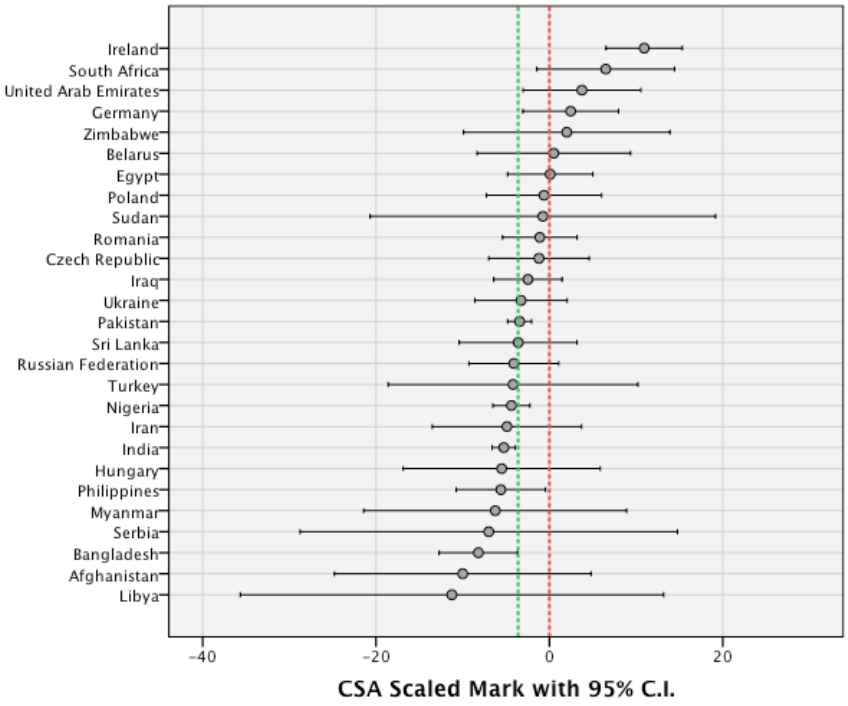
UK Graduates (by medical school)

UK Medical School		Descriptive Statistics				CSA Result	
	N	Min	Max	Mean	SD	Fail	Pass
Aberdeen	57	-20	33	13.32	9.72	7.0%	93.0%
Belfast	57	-7	28	14.46	8.41	5.3%	94.7%
Birmingham	118	-17	33	13.59	10.62	10.2%	89.8%
Brighton and Sussex	24	4	30	16.67	7.34	0.0%	100.0%
Bristol	53	-3	32	15.83	8.45	3.8%	96.2%
Cambridge	29	-1	29	16.03	8.46	3.4%	96.6%
Dundee	42	-8	25	10.4	8.10	9.5%	90.5%
Edinburgh	62	-6	35	15.03	8.83	6.5%	93.5%
Glasgow	73	-7	31	14.49	9.00	4.1%	95.9%
Hull York	31	-8	29	13	8.15	6.5%	93.5%
Leeds	96	-8	32	14.92	8.48	2.1%	97.9%
Leicester	81	-4	30	14.16	8.60	7.4%	92.6%
Liverpool	83	-22	31	11.47	10.67	13.3%	86.7%
London - Barts and the London	96	-24	27	8.48	10.96	17.7%	82.3%
London - Imperial College	86	-13	29	12.2	9.21	7.0%	93.0%
London - King's College	119	-32	32	12.62	9.71	7.6%	92.4%
London - St George's	61	-5	37	14.59	8.89	4.9%	95.1%
London - University College	96	-20	35	12.35	11.13	13.5%	86.5%
London (school unknown)	1	19	19	19	.	0.0%	100.0%
Manchester	169	-11	30	12.24	8.85	10.1%	89.9%
Newcastle	100	-12	35	15.18	9.38	5.0%	95.0%
Norwich (UEA)	31	-11	33	11.26	10.35	12.9%	87.1%
Nottingham	98	-20	30	15.78	8.69	3.1%	96.9%
Oxford	21	5	34	21.33	8.10	0.0%	100.0%
Peninsula	34	-15	29	12.44	10.12	8.8%	91.2%
Sheffield	83	-16	33	12.88	9.90	9.6%	90.4%
Southampton	69	-22	34	13.93	9.57	5.8%	94.2%
Wales (incl Cardiff & Swansea)	94	-12	37	15.46	8.79	5.3%	94.7%
Warwick	72	-11	33	15.89	8.04	1.4%	98.6%



Non-UK Graduates (by country; chart overleaf only shows countries with ≥4 candidates: 1st attempt)

Country of Qualification	N	Descriptive Statistics				CSA Result	
		Min	Max	Mean	SD	Fail	Pass
Afghanistan	4	-21	1	-10.00	9.31	75.0%	25.0%
Albania	1	-17	-17	-17.00	.	100.0%	0.0%
Algeria	1	-39	-39	-39.00	.	100.0%	0.0%
Armenia	1	-16	-16	-16.00	.	100.0%	0.0%
Austria	2	-4	6	1.00	7.07	50.0%	50.0%
Bangladesh	21	-32	5	-8.19	9.95	71.4%	28.6%
Belarus	4	-7	6	0.50	5.57	25.0%	75.0%
Belgium	1	24	24	24.00	.	0.0%	100.0%
Bolivia	1	2	2	2.00	.	0.0%	100.0%
Brazil	3	-3	13	4.00	8.19	33.3%	66.7%
Bulgaria	1	-13	-13	-13.00	.	100.0%	0.0%
Burundi	1	-21	-21	-21.00	.	100.0%	0.0%
Cayman Islands	1	5	5	5.00	.	0.0%	100.0%
China	3	-29	1	-15.33	15.18	66.7%	33.3%
Colombia	3	-12	4	-1.67	8.96	33.3%	66.7%
Congo, Dem Rep	1	-18	-18	-18.00	.	100.0%	0.0%
Cuba	1	-2	-2	-2.00	.	100.0%	0.0%
Czech Republic	20	-26	20	-1.20	12.40	55.0%	45.0%
Denmark	1	-4	-4	-4.00	.	100.0%	0.0%
Dominica	1	-27	-27	-27.00	.	100.0%	0.0%
Egypt	10	-11	9	0.10	6.89	40.0%	60.0%
Georgia	1	-6	-6	-6.00	.	100.0%	0.0%
Germany	11	-17	9	2.45	8.21	27.3%	72.7%
Ghana	3	-11	-1	-4.33	5.77	100.0%	0.0%
Greece	3	-14	13	-4.33	15.04	66.7%	33.3%
Grenada	1	0	0	0.00	.	0.0%	100.0%
Guyana	2	1	20	10.50	13.44	0.0%	100.0%
Haiti	1	-11	-11	-11.00	.	100.0%	0.0%
Hungary	4	-16	-1	-5.50	7.14	100.0%	0.0%
India	231	-31	21	-5.26	10.35	65.4%	34.6%
Iran	10	-23	10	-4.90	12.03	50.0%	50.0%
Iraq	25	-17	18	-2.48	9.55	68.0%	32.0%
Ireland	17	-7	25	10.94	8.56	11.8%	88.2%
Jamaica	1	-11	-11	-11.00	.	100.0%	0.0%
Jordan	3	-14	10	0.33	12.66	33.3%	66.7%
Kazakhstan	1	-7	-7	-7.00	.	100.0%	0.0%
Kenya	1	-13	-13	-13.00	.	100.0%	0.0%
Kyrgyzstan	1	5	5	5.00	.	0.0%	100.0%
Latvia	3	-17	10	-6.00	14.18	66.7%	33.3%
Libya	4	-23	10	-11.25	15.35	75.0%	25.0%
Lithuania	3	-11	7	-1.67	9.02	66.7%	33.3%
Moldova	1	13	13	13.00	.	0.0%	100.0%
Mongolia	1	-3	-3	-3.00	.	100.0%	0.0%
Myanmar	4	-18	5	-6.25	9.54	75.0%	25.0%
Nepal	3	-21	3	-6.67	12.66	66.7%	33.3%
New Zealand	1	12	12	12.00	.	0.0%	100.0%
Nigeria	87	-30	17	-4.38	10.06	65.5%	34.5%
Oman	1	13	13	13.00	.	0.0%	100.0%
Pakistan	172	-28	23	-3.44	9.25	60.5%	39.5%
Philippines	5	-10	0	-5.60	4.16	80.0%	20.0%
Poland	21	-23	27	-0.62	14.61	52.4%	47.6%
Romania	18	-18	11	-1.11	8.64	38.9%	61.1%
Russian Federation	20	-24	26	-4.10	11.06	55.0%	45.0%
Saint Kitts And Nevis	1	5	5	5.00	.	0.0%	100.0%
Saint Lucia	1	-18	-18	-18.00	.	100.0%	0.0%
Senegal	1	4	4	4.00	.	0.0%	100.0%
Serbia	5	-28	9	-7.00	17.54	40.0%	60.0%
Sierra Leone	1	-16	-16	-16.00	.	100.0%	0.0%
Slovakia	2	-23	1	-11.00	16.97	50.0%	50.0%
South Africa	12	-24	21	6.50	12.51	25.0%	75.0%
Spain	1	-5	-5	-5.00	.	100.0%	0.0%
Sri Lanka	10	-17	11	-3.60	9.50	70.0%	30.0%
Sudan	4	-12	12	-0.75	12.53	50.0%	50.0%
Syria	3	-6	2	-3.00	4.36	66.7%	33.3%
Tajikistan	1	-20	-20	-20.00	.	100.0%	0.0%
Turkey	5	-21	10	-4.20	11.61	60.0%	40.0%
Ukraine	18	-33	17	-3.28	10.71	66.7%	33.3%
United Arab Emirates	4	-1	9	3.75	4.27	25.0%	75.0%
Uzbekistan	1	-15	-15	-15.00	.	100.0%	0.0%
Yemen	1	-19	-19	-19.00	.	100.0%	0.0%
Zambia	1	-24	-24	-24.00	.	100.0%	0.0%
Zimbabwe	4	-8	10	2.00	7.48	25.0%	75.0%


Ireland
South Africa
United Arab Emirates
Germany
Zimbabwe
Belarus
Egypt
Poland
Sudan
Romania
Czech Republic
Iraq
Ukraine
Pakistan
Sri Lanka
Russian Federation
Turkey
Nigeria
Iran
India
Hungary
Philippines
Myanmar
Serbia
Bangladesh
Afghanistan
Libya
-40
-20
0
20
CSA Scaled Mark with 95% C.I.

D: Results by Training Deanery

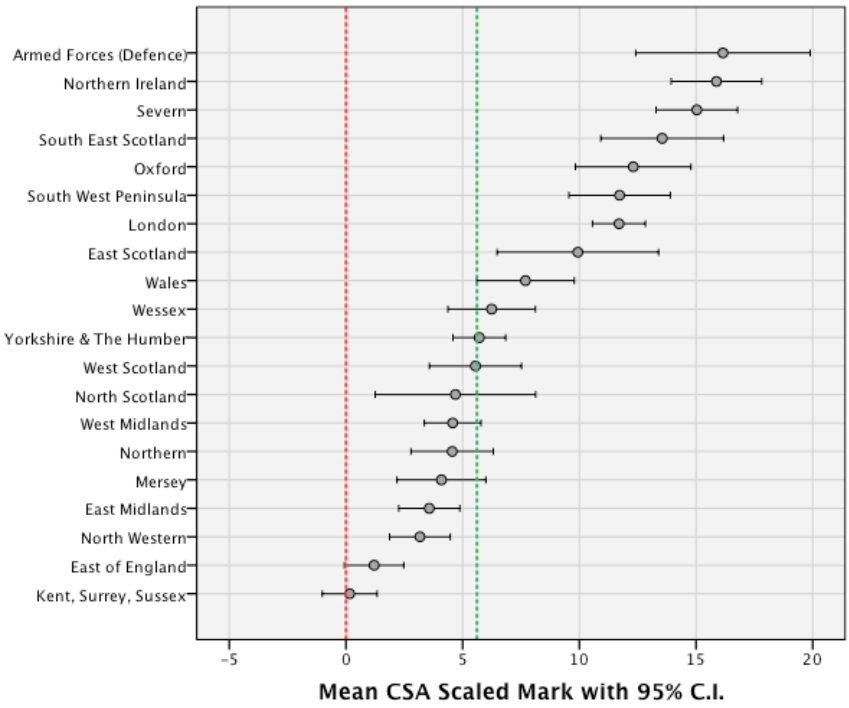
1. Results for all attempts, combined: by sex, ethnic group and source of PMQ

(percentages rounded off for clarity)

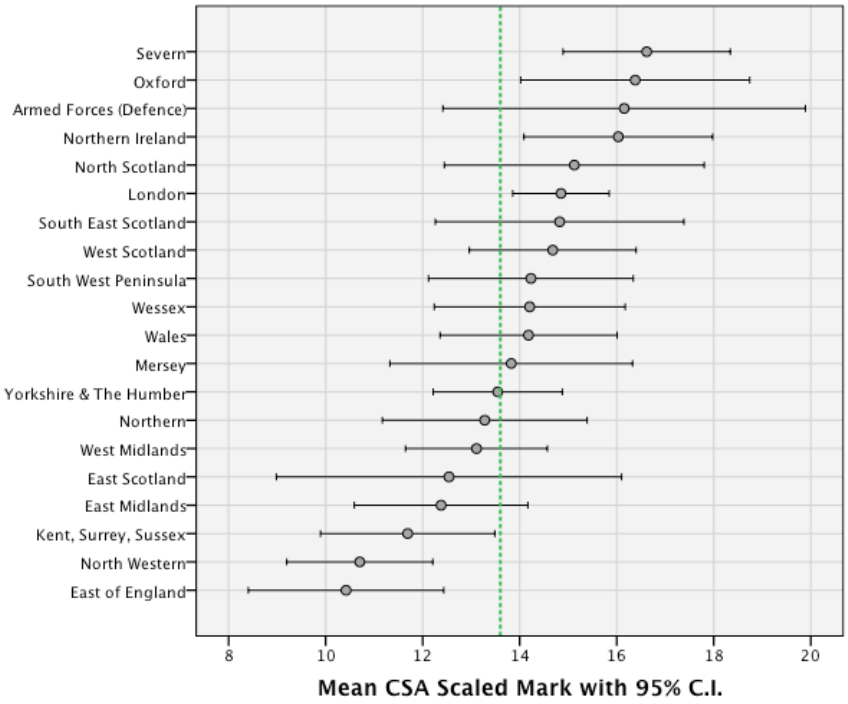
Deanery	Sex				Ethnicity												Source of PMQ						All Graduates		Total N
	Female		Male		Not stated		White		S Asian		Black		Chinese / SE A		Other Ethnicity		UK Grad		EEA Grad		RoW Grad				
	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	
Armed Forces (Defence)	0	15	0	11	0	1	0	22	0	2					0	1	0	26					0	26	26
	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%					0%	100%	0%	100%					0%	100%	100%
East Midlands	37	91	75	99	0	3	0	62	84	100	22	13	1	3	5	9	11	116	2	6	99	68	112	190	302
	29%	71%	43%	57%	0%	100%	0%	100%	46%	54%	63%	37%	25%	75%	36%	64%	9%	91%	25%	75%	59%	41%	37%	63%	100%
East of England	61	137	111	80			25	92	109	96	32	19	0	2	6	8	29	127	13	14	130	76	172	217	389
	31%	69%	58%	42%			21%	79%	53%	47%	63%	37%	0%	100%	43%	57%	19%	81%	48%	52%	63%	37%	44%	56%	100%
East Scotland	2	19	2	9			1	20	1	5	0	1	1	1	1	1	2	24			2	4	4	28	32
	10%	91%	18%	82%			5%	95%	17%	83%	0%	100%	50%	50%	50%	50%	8%	92%			33%	67%	13%	88%	100%
Kent, Surrey, Sussex	61	135	147	95	3	2	22	95	111	90	58	22	1	4	13	17	19	128	11	13	178	89	208	230	438
	31%	69%	61%	39%	60%	40%	19%	81%	55%	45%	73%	28%	20%	80%	43%	57%	13%	87%	46%	54%	67%	33%	48%	53%	100%
London	20	246	34	75	0	7	8	150	29	112	12	15	2	11	3	26	15	300	9	3	30	18	54	321	375
	8%	93%	31%	69%	0%	100%	5%	95%	21%	79%	44%	56%	15%	85%	10%	90%	5%	95%	75%	25%	63%	38%	14%	86%	100%
Mersey	25	53	37	46	0	1	8	52	40	35	7	5	2	3	5	3	9	62	5	4	48	33	62	99	161
	32%	68%	45%	55%	0%	100%	13%	87%	53%	47%	58%	42%	40%	60%	63%	38%	13%	87%	56%	44%	59%	41%	39%	62%	100%
North Scotland	5	22	15	13			4	23	6	5	8	6			2	1	1	24	2	2	17	9	20	35	55
	19%	82%	54%	46%			15%	85%	55%	46%	57%	43%			67%	33%	4%	96%	50%	50%	65%	35%	36%	64%	100%
North Western	36	122	95	102			9	107	97	89	18	11	1	5	6	12	26	167	6	7	99	50	131	224	355
	23%	77%	48%	52%			8%	92%	52%	48%	62%	38%	17%	83%	33%	67%	14%	87%	46%	54%	66%	34%	37%	63%	100%
Northern	28	66	51	52	2	2	8	80	55	30	6	1	1	0	7	5	13	90	7	4	59	24	79	118	197
	30%	70%	50%	51%	50%	50%	9%	91%	65%	35%	86%	14%	100%	0%	58%	42%	13%	87%	64%	36%	71%	29%	40%	60%	100%
Northern Ireland	1	48	0	15	0	1	1	62									1	62	0	1			1	63	64
	2%	98%	0%	100%	0%	100%	2%	98%									2%	98%	0%	100%			2%	98%	100%
Oxford	8	46	5	28			2	40	7	28	2	2	0	1	2	3	3	62	2	2	8	10	13	74	87
	15%	85%	15%	85%			5%	95%	20%	80%	50%	50%	0%	100%	40%	60%	5%	95%	50%	50%	44%	56%	15%	85%	100%
Severn	0	74	7	38			4	92	3	14	0	2	0	1	0	3	4	99	0	5	3	8	7	112	119
	0%	100%	16%	84%			4%	96%	18%	82%	0%	100%	0%	100%	0%	100%	4%	96%	0%	100%	27%	73%	6%	94%	100%
South East Scotland	1	40	3	16	0	1	2	50	1	3	1	1	0	1			2	53			2	3	4	56	60
	2%	98%	16%	84%	0%	100%	4%	96%	25%	75%	50%	50%	0%	100%			4%	96%			40%	60%	7%	93%	100%
South West Peninsula	6	50	8	34	1	1	6	73	3	5	2	1	0	1	2	3	7	75	3	4	4	5	14	84	98
	11%	89%	19%	81%	50%	50%	8%	92%	38%	63%	67%	33%	0%	100%	40%	60%	9%	92%	43%	57%	44%	56%	14%	86%	100%
Wales	14	61	17	35	0	1	4	74	25	16	2	1	0	1	0	3	3	79	4	5	24	12	31	96	127
	19%	81%	33%	67%	0%	100%	5%	95%	61%	39%	67%	33%	0%	100%	0%	100%	4%	96%	44%	56%	67%	33%	24%	76%	100%
Wessex	14	78	31	37	0	1	9	75	28	25	5	7	1	1	2	6	5	80	4	8	36	27	45	115	160
	15%	85%	46%	54%	0%	100%	11%	89%	53%	47%	42%	58%	50%	50%	25%	75%	6%	94%	33%	67%	57%	43%	28%	72%	100%
West Midlands	37	156	105	128	1	3	9	102	112	147	11	12	1	5	8	15	22	185	10	14	110	85	142	284	426
	19%	81%	45%	55%	25%	75%	8%	92%	43%	57%	48%	52%	17%	83%	35%	65%	11%	89%	42%	58%	56%	44%	33%	67%	100%
West Scotland	19	75	43	41	0	1	7	80	46	32	9	1	0	2			5	95	5	4	52	17	62	116	178
	20%	80%	51%	49%	0%	100%	8%	92%	59%	41%	90%	10%	0%	100%			5%	95%	56%	44%	75%	25%	35%	65%	100%
Yorkshire & The Humber	43	167	85	110	2	3	10	143	87	105	8	11	1	3	20	12	15	191	2	7	111	79	128	277	405
	21%	80%	44%	56%	40%	60%	7%	94%	45%	55%	42%	58%	25%	75%	63%	38%	7%	93%	22%	78%	58%	42%	32%	68%	100%
TOTAL	418	1701	871	1064	9	28	139	1494	844	939	203	131	12	45	82	128	192	2045	85	103	1012	617	1289	2765	4054
	20%	80%	45%	55%	24%	76%	9%	92%	47%	53%	61%	39%	21%	79%	39%	61%	9%	91%	45%	55%	62%	38%	32%	68%	100%

2. Graphical Representation of Candidate Scores by Deanery, overall, and for first attempts by source of PMQ

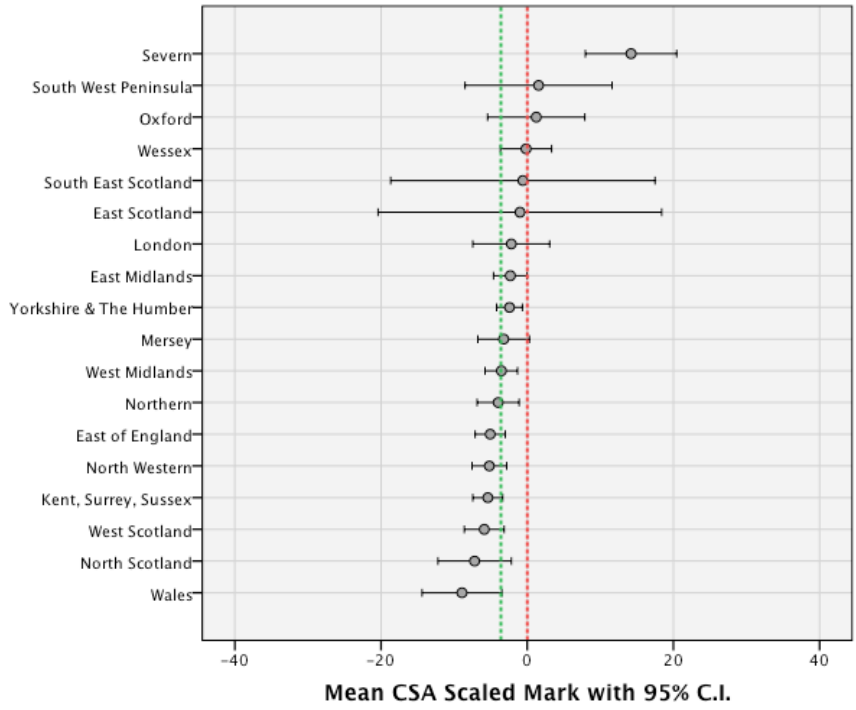
All Graduates, All Attempts



UK Graduates, First Attempt



Non-UK Graduates, First Attempt

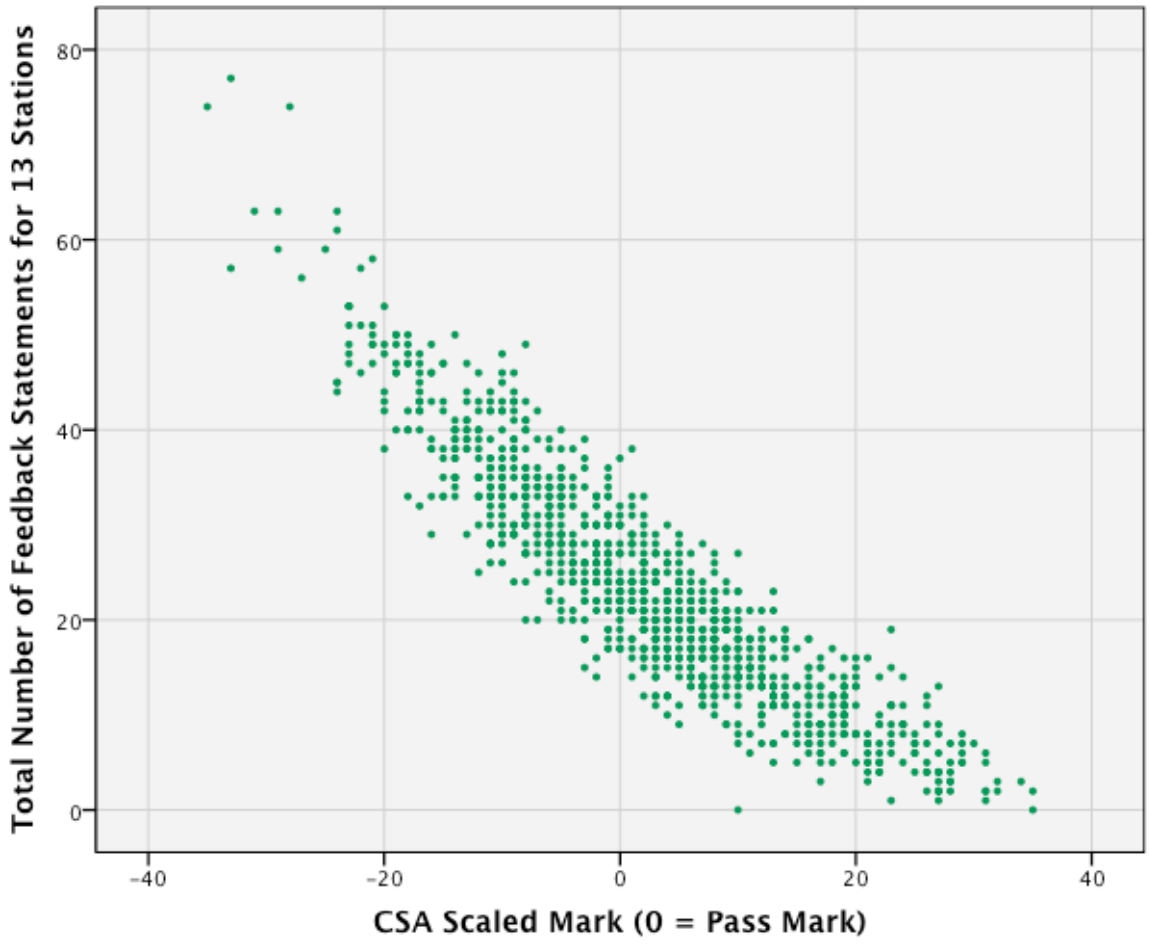


E: Summary of Feedback Statements

The table gives the prevalence of the numbered feedback statements given by examiners to individual candidates' case performances, by the main candidate PMQ groups. Figures represent the percentage of the total of all cases which attracted that feedback comment. These relate to the main two diets of the year (February and May 2013) only, for technical reasons

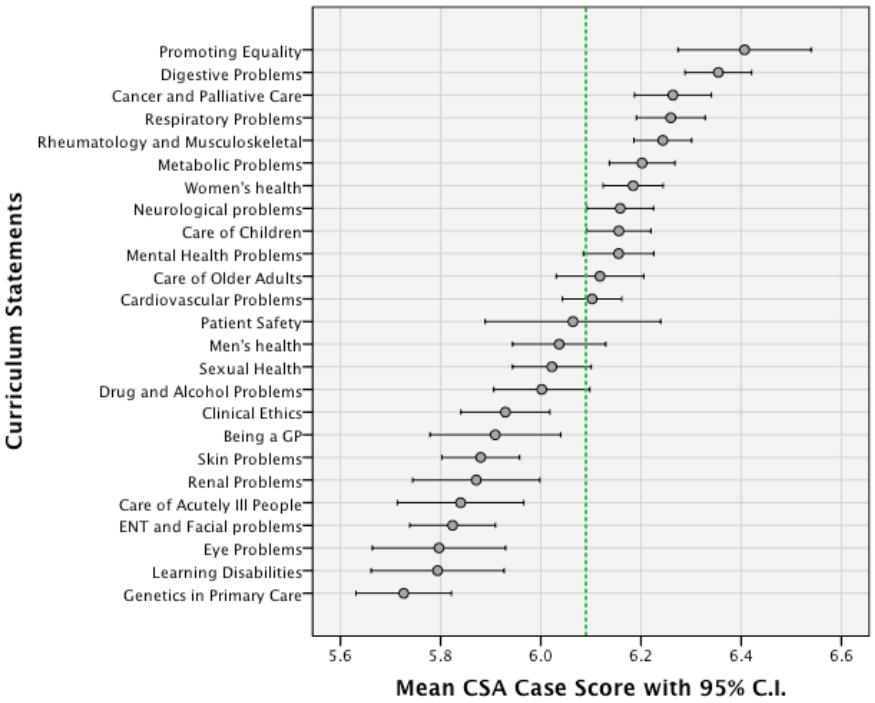
Feedback Statements in Order of Prevalence	% of Cases
UK Graduates (n = 24362 cases)	
07 Does not develop a management plan (including prescribing and referral) reflecting knowledge of current best practice.	14%
02 Does not recognise the issues or priorities in the consultation (for example, the patient's problem, ethical dilemma etc).	10%
10 Does not demonstrate an awareness of management of risk or make the patient aware of relative risks of different options	10%
03 Shows poor time management.	8%
04 Does not identify abnormal findings or results or fails to recognise their implications.	8%
15 Does not develop a shared management plan, demonstrating an ability to work in partnership with the patient	8%
06Does not make the correct working diagnosis or identify an appropriate range of differential possibilities.	7%
08 Does not show appropriate use of resources, including aspects of budgetary governance.	7%
09 Does not make adequate arrangements for follow-up and safety netting	6%
14 Does not identify or use appropriate psychological or social information to place the problem in context	6%
01 Disorganised / unstructured consultation.	5%
13 Poor active listening skills and use of cues. Consulting may appear formulaic (slavishly following a model and/or unresponsive to the patient), and lacks fluency.	5%
05 Does not undertake physical examination competently, or use instruments proficiently.	4%
12 Does not appear to develop rapport or show awareness of patient's agenda, health beliefs and preferences.	4%
16 Does not use language and/or explanations that are relevant and understandable to the patient	4%
11 Does not attempt to promote good health at opportune times in the consultation	2%
Non-UK Graduates (n = 17745 cases)	
07 Does not develop a management plan (including prescribing and referral) reflecting knowledge of current best practice.	24%
02 Does not recognise the issues or priorities in the consultation (for example, the patient's problem, ethical dilemma etc).	19%
15 Does not develop a shared management plan, demonstrating an ability to work in partnership with the patient	18%
13 Poor active listening skills and use of cues. Consulting may appear formulaic (slavishly following a model and/or unresponsive to the patient), and lacks fluency.	17%
10 Does not demonstrate an awareness of management of risk or make the patient aware of relative risks of different options	15%
16 Does not use language and/or explanations that are relevant and understandable to the patient	15%
01 Disorganised / unstructured consultation.	13%
03 Shows poor time management.	13%
04 Does not identify abnormal findings or results or fails to recognise their implications.	13%
08 Does not show appropriate use of resources, including aspects of budgetary governance.	13%
12 Does not appear to develop rapport or show awareness of patient's agenda, health beliefs and preferences.	12%
06Does not make the correct working diagnosis or identify an appropriate range of differential possibilities.	11%
14 Does not identify or use appropriate psychological or social information to place the problem in context	11%
09 Does not make adequate arrangements for follow-up and safety netting	10%
05 Does not undertake physical examination competently, or use instruments proficiently.	7%
11 Does not attempt to promote good health at opportune times in the consultation	3%
All Graduates (n = 42107 cases)	
07 Does not develop a management plan (including prescribing and referral) reflecting knowledge of current best practice.	18%
02 Does not recognise the issues or priorities in the consultation (for example, the patient's problem, ethical dilemma etc).	14%
15 Does not develop a shared management plan, demonstrating an ability to work in partnership with the patient	12%
10 Does not demonstrate an awareness of management of risk or make the patient aware of relative risks of different options	12%
12 Does not appear to develop rapport or show awareness of patient's agenda, health beliefs and preferences.	10%
13 Poor active listening skills and use of cues. Consulting may appear formulaic (slavishly following a model and/or unresponsive to the patient), and lacks fluency.	10%
04 Does not identify abnormal findings or results or fails to recognise their implications.	10%
03 Shows poor time management.	10%
08 Does not show appropriate use of resources, including aspects of budgetary governance.	10%
16 Does not use language and/or explanations that are relevant and understandable to the patient	9%
06Does not make the correct working diagnosis or identify an appropriate range of differential possibilities.	9%
01 Disorganised / unstructured consultation.	8%
14 Does not identify or use appropriate psychological or social information to place the problem in context	8%
09 Does not make adequate arrangements for follow-up and safety netting	7%
05 Does not undertake physical examination competently, or use instruments proficiently.	5%
11 Does not attempt to promote good health at opportune times in the consultation	2%

Correlation between overall CSA Scaled mark and Number of Feedback Statements (Example: May 2013)



F: Candidate Performance on Cases by Curriculum Statement (i.e. syllabus area)

Each of the cases assessed in the CSA is linked to a main 'curriculum statement' (or syllabus area) – see the MRCGP curriculum website for further information. Comparative performance by all candidates on the cases by curriculum statement is shown in the chart below. 52,559 candidate-cases are represented (143 = missing).



G: Information on Role Players: demographics overall and by day

Overall for the Year as a Whole

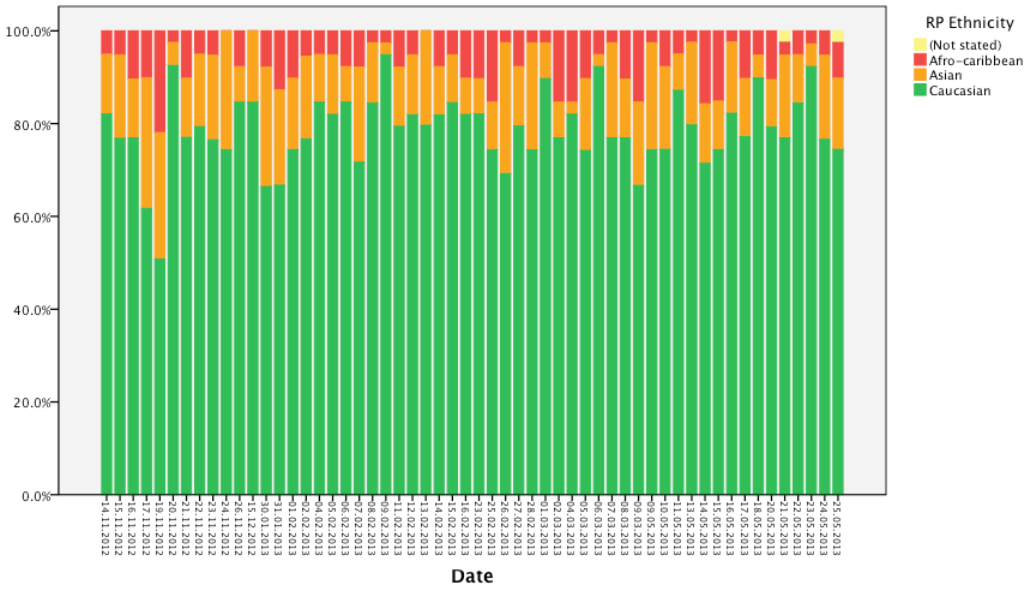
RolePlayer Ethnicity

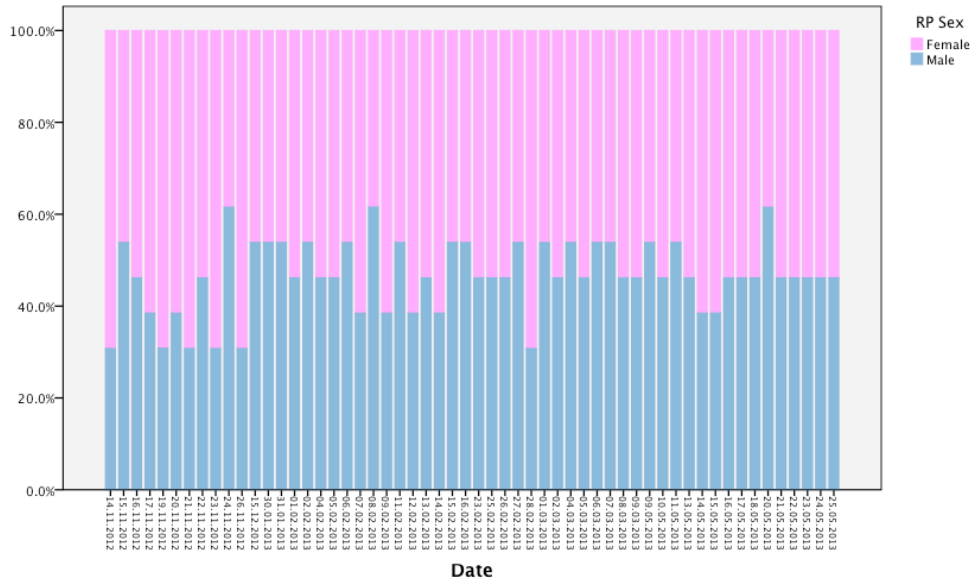
	Frequency	Percent
(Not stated)	46	.1
Afro-caribbean	3822	7.3
Asian	7437	14.1
Caucasian	41398	78.5
Total	52703	100.0

RolePlayer Sex

	Frequency	Percent
Female	28178	53.5
Male	24525	46.5
Total	52703	100.0

By Day of the CSA

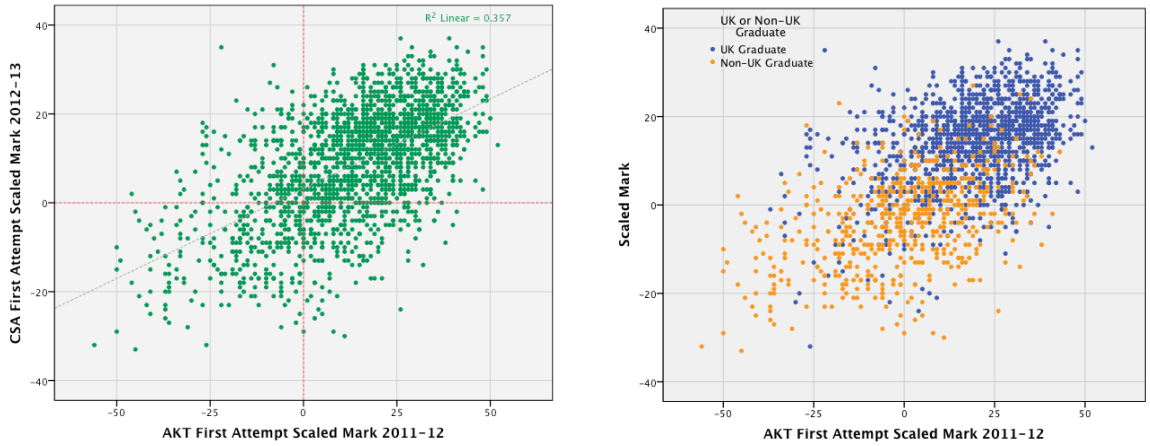




5: Inter-component Statistics and Analytical Statistics of Test Quality

Inter-component Statistics

Currently it is only possible to make comparisons between the performance of candidates between the AKT and the CSA, as the Workplace-Based Assessment data are not readily accessible for comparative analysis. Even this comparison is not straightforward: until 2010, candidates were able to take the AKT at any time in their training, and the CSA at any time in their final year; thus one candidate might take both tests at about the same time in their training, another might take them nearly two years apart; and of course candidates can have more than one attempt at either test. The rules have now changed such that most candidates make their fist attempt at the AKT in ST2 and at the CSA in the middle of ST3.



The accompanying green scatterplot is the most recent analysis from these datasets showing the relationship between the AKT and CSA scores of 1860 candidates taking each component for the first time, the AKT in 2011-12 and the CSA in 2012-2013. The blue/orange version contrasts UK and non-UK graduates' performance.

The correlation between this sample's AKT scores and the CSA scores is 0.60, suggesting 36% of 'shared variance' between the two assessments. This level of correlation indicates a highly significant relationship between the two assessments (in terms of individual candidates' performance) but also that, although there is not unexpected overlap, the two tests are measuring substantially different skills or constructs.

Test Quality Information: AKT

Coefficient alpha (and the measurement error estimate, SEm) of the three diets of the AKT is straightforwardly calculated. Occasionally, underperforming items need to be removed from the calculated scores. Current and recent quality statistics appear in the table below. These psychometric quality indicators continue to describe a multi-choice assessment which is performing to an excellent standard.

AKT Diet	No of Items removed	Alpha Coefficient	SEm
2011: October	0	0.91	2.8 %
2012: February	0	0.89	2.8 %
2012: April	1	0.92	2.9 %
2012: October	1	0.89	2.8 %
2013: January	0	0.92	2.9 %
2013: May	0	0.90	2.9 %

Test Quality Information: CSA

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 true comparability 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 consistency *vs* test security and fairness. The number taking the CSA moreover varies considerably between diets.

Thus the quality of the CSA is monitored both qualitatively and quantitatively, the latter 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 also very dependent on the variance in candidate ability. And analyses show that the range and variance in ability of candidate groups varies greatly day on day, despite cessation of complete reliance on self-selection of examination dates by candidates: 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 scores which have relatively limited variance (0-9 on a case), tending to minimise the values. As a result, the test measurement error, indicated by the standard error of measurement, may be a more appropriate overall indicator of quality.

That all said, current and recent quality statistics appear in the table below.

Year	No of Cases (stations) in CSA	Alpha: range across days	Average alpha across days	SEm: range across days	Average SEm across days
2008	12	n/a	0.70	n/c	n/c
2009	12	n/a	0.72	n/c	n/c
2010	13	0.56 0.85	0.73	n/c	n/c
2010 2011	13	0.64 – 0.86	0.77	5.1 % - 5.4 %	5.2 %
2011 2012	13	0.64 0.86	0.77	4.5 % 5.6 %	5.1 %
2012 2013	13	0.64 0.87	0.78	4.3 % 5.4 %	5.0 %

* * *

Annex Which Training Deaneries do the graduates of different UK medical schools go to?

(Calculated from CSA Deanery data)

UK Medical School	Training Deanery																		
	Armed Forces (Defence)	East Midlands	East of England	East Scotland	Kent, Surrey, Sussex	London	Mersey	North Scotland	North Western	Northern	Northern Ireland	Oxford	Severn	South East Scotland	South West Peninsula	Wales	Wessex	West Midlands	West Scotland	Yorkshire & The Humber
Aberdeen	1	1	2	2	1	1	2	17	2		3			11	1		1		11	1
Belfast									3	2	50				1			1		
Birmingham	1	4	3		3	11			3	1		3	3		2	4	1	76	1	2
Brighton and Sussex		1	2		10	4				1		2	1				1	2		
Bristol	1		1		4	9	1					2	25		6		3	1		
Cambridge	1	3	8		1	4	1		2	2								2	1	4
Dundee				13		1	1	1	4	1	3			4	1			1	8	4
Edinburgh		2	1	5	2	6		1	1	1	1	1	3	20	2	1	1		12	2
Glasgow	2	1		2	2	2		2		3	1		2	3			1	1	49	2
Hull York			1		1		1		3	2			2					3		18
Leeds	1	2	3		2	10	5		6	2	1	3	1		1	1		2		56
Leicester	1	35	7		1	8			4			2	4	1	2		1	8		7
Liverpool	1	2		1	1	3	38	1	16	2	2	1	2	2		2		4	1	4
London - Barts and the London		2	24		11	28	2		3	2		2	3		3	1	6	7		2
London - Imperial College		5	6		6	39				1		4	6		5	3	2	4		5
London - King's College	2	7	9		23	40	1		2	1	1	7	7		6	1	3	4	1	4
London - St George's		2	2		17	17			2			3	3		5		4	6		
London - University College	1	2	11		14	44			4	2		4	3	1	4		3	2		1
London (school unknown)						1														
Manchester		2	4	1	3	14	5		84	1		6	2	4	1	3	1	14	8	16
Newcastle	1	1			2	8	2		4	61	1		1	2	1		2	1	1	12
Norwich (UEA)		1	22			1	2		1			1	1					1		1
Nottingham	4	28	4		6	13		1	5	2		5	6	2	8	1	3	6		4
Oxford		1	1			5			1			7			2		2	1		1
Peninsula	1		1		1	2			2			2	5		15	1	2	1		1
Sheffield	4	6	4		3	1	1		5	3		2	5	1	1		3	6	1	37
Southampton	2	3	5		5	5						1	5		6	2	31	3		1
Wales (incl Cardiff & Swansea)	2	4			1	8			2	1			7		4	57	4	3		1
Warwick		1	5		6	10	1	1	6	2		5	2		1		3	25		4