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Cohort Profile: Institutional choice among medical applicants: a profile paper for The United Kingdom Medical Applicant Cohort Study (UKMACS) prospective longitudinal cohort study

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Abstract

Purpose:

To generate a large cohort of those in 2019 seriously considering applying to study Medicine, collecting data on a range of socio-economic and other demographic factors that influence choice of medical schools and to link to other datasets to form a longitudinal study of progress through medical school and careers in medicine.

Design:

Cross-sectional questionnaire studies, part of the longitudinal UK Medical Applicant Cohort Study (UKMACS).

Setting:

UK medical school admissions in 2020.

Participants:

UK residents aged 16+ and seriously considering applying to study Medicine. The cohort was primarily drawn from those registering in 2019 for the U(K)CAT with additional potential applicants responding to an open call. Participants consented to their data being linked within the UK Medical Education Database (UKMED).

Findings to date:

UKMACS Wave 1 questionnaire respondents consisted of 6391 consenting respondents from across the United Kingdom. In 2019, 14,980 of the 17,470 UK-domiciled medicine applicants were first-time applicants. The questionnaires show that many of these applicants have a need for more help and guidance to make informed choices, with less advantaged groups reporting themselves as being at a disadvantage when applying due to limited understanding of information and limited access to guidance to enable informed and effective decision-making.

Future Plans:

To link the cohort with successive UCAS and other datasets to analyse outcomes of applications and establish national longitudinal evidence to understand how medical choices are made and how they impact on educational, career and workforce outcomes.

Article Summary: Strengths and limitations of this study

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- Study constitutes the largest and most recent quantitative exploration of UK medical school applicant experiences as the baseline of an ongoing longitudinal study of the 2019 cohort.
- Relatively large nationwide sample linked to administrative data to track impact of choices on medical career outcomes.
- Includes a wide range of sociodemographic groups with data on various socio-demographic factors that predict medical school choice, attainment and progression.
- Potential for response bias as targeted at those seriously considering applying to medical school and administered online using multiple recruitment methods.
- Questionnaire provides a snapshot of applicant views (which may change throughout process), while the longitudinal study aspect allows for tracking to measure impact of pandemic on medical applicants.

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Introduction

Research consistently shows the lack of social mobility in medicine, which continues to be one of the most inaccessible professions (Social Mobility Commission 2016).[1] For example, in the United Kingdom (UK) only around 15% of the students accepted onto medical courses come from the most deprived areas compared to about 45% of the students come from the most affluent areas. [2, 3]

Doctor shortages, particularly in some geographic areas, affect the quality of service that patients receive .[4, 5] The absence of medical schools in many parts of the UK is thought to contribute to the lack of doctors in these areas,[6] as well as limiting access to medical careers for individuals from deprived backgrounds who are more likely to want to attend university locally.[7] Yet the UK government has repeatedly stated a commitment to supporting the NHS workforce:

> "As we look beyond the pandemic, it's incredibly important we safeguard the future of our NHS by ensuring there is a pipeline of high-quality staff to bolster the workforce in the years ahead." (Secretary of State for Health and Social Care, August 2021)

This pipeline is restricted though as the number of medical students is capped by the UK Government. In 2018, 5 new medical schools were created in under-doctored areas, which also had a specific remit to widen participation. In addition, further medical student places were allocated to existing medical schools, based partly on their WP strategies. This increased the number of universities in the UK offering medical degree programmes to 42, each with different admissions requirements.[8].

Little is known about how informed the applicants are about different medical schools, nor is it clear which criteria applicants use to narrow down to a choice of four medical schools (the maximum it is possible to apply to within the Universities and Colleges Admissions Service, UCAS), or how applicants who receive more than one offer choose between medical schools. Yet government policy focuses on enabling students to make *informed choices* about higher education:

> "We want to ensure that students from all backgrounds are able to enter and succeed in higher education. Students should be able to make informed choices about their studies, with access to a diverse range of provision which meets their needs."
>
> [Office for Students website, April 2021]

Research on the choices made by university applicants continues to show the impact of social background and context, e.g. [9, 10, 11]. In contrast, policy makers have largely followed the human-capital model that has dominated discussions of student choice in the United States [12] with students conceptualized as rational calculators primarily weighing the costs and benefits of HE and the relative quality of institutions and courses. There is little understanding of how student choices are shaped by several other factors such as psychological traits, cognitive strategies (e.g. heuristics and cognitive shortcuts), aspirations, socio-psychological identities, and emotional responses, and how these might vary by social background.

Specifically in the UK context, medical schools are heavily over-subscribed and competition for places is fierce, with applications to study Medicine continuing to rise. For example, in 2020 there was a record number of 18,500 UK applicants for the 9000 places.[13] As such, a substantial amount of the literature on medical school admissions examines the effectiveness of selection processes used by UK medical schools to choose between highly-qualified candidates.[14] Medical schools seek to widen participation, and there is a considerable literature on how applicants from diverse socio-economic and demographic backgrounds choose whether or not to study medicine.[15, 16, 17] This

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research focuses largely on the outcomes of selection, with relatively little research exploring how aspiring medical students, including those from under-represented groups, select which medical schools to apply to.

Medical school choice is important to study because it has considerable impact on applicants as well as on the medical workforce. Once at medical school, over 90% of medical students end up working as doctors in the National Health Service [18] but graduates of different UK medical schools differ significantly in their postgraduate academic and career outcomes, including whether they enter shortage specialties such as General Practice and Psychiatry.[19, 20, 21, 22] This may be due to variation in medical school admissions processes and differences in undergraduate and postgraduate training, but it may also be due to applicants with different characteristics and aspirations choosing different medical schools to apply to. There is therefore a considerable need for national longitudinal evidence to understand how medical choices are made and how they impact on educational, career and workforce outcomes.

We present this cohort profile as a foundational paper for future research. Here we describe the design and methodology of a prospective national longitudinal cohort study of aspiring medical students, started in 2019 as part of the UK Medical Applicant Cohort Study (UKMACS), a national mixed-methods programme of research into medical school choice funded by the National Institute for Health Research (NIHR). Using data from applicants to medical schools across the UK, UKMACS aimed to answer the research question: 'how do medical applicant characteristics influence choice of medical school and application success?'. Through linkage to administrative data on undergraduate and postgraduate medical education and training outcomes within the United Kingdom Medical Education Database (UKMED),[23] the study also aimed to enable longitudinal research on the outcomes of medical selection and causes of medium-and long-term academic and career outcomes in a cohort of medical students and doctors in the UK. Further papers will focus on analysis and interpretation of this data.

Our study is informed by the literature on institutional (university) choice within higher education more widely (see Hemsley-Brown & Oplatka [24] for a review). This literature emphasises the complexity of institutional choice, and covers decision-making processes (e.g. [25]), the acquisition and use of information and how it is constrained by social, academic, psychological, information and other contextual factors (e.g. [26, 10]), and the different experiences, values, and priorities of applicants from diverse socio-economic, cultural and educational backgrounds (e.g.[27]).

To examine applicant choice of medical schools, we followed Dawes and Brown's [28] model, which is based on consumer brand choice and Hossler and Gallagher's [29] three-phase model of college choice. In this model applicants filter out universities using relatively simple and broad criteria, often based on what is *not* wanted, before engaging in a more detailed analysis of a reduced set of options. Applicants initially define and consider universities on various attributes, assigning attributes to all the universities they are aware of (the *awareness set*). They then remove universities without the desired attributes to form a *consideration set*, from which they select a *choice set* of universities they want to apply to. Generating each set may be an iterative process, whereby applicants focus on different attributes with each phase, and return to evaluate already-considered options.[28]

An important part of Dawes and Brown's model involves the acquisition and use of information about different HEIs. Increasing information, support and guidance for university choice has also become a policy priority in England, where the English HE regulator Office for Students (OfS) has linked it directly to improved social mobility and student success. A review commissioned by the OfS

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concluded that the acquisition and use of information in HE choice is influenced by a wide variety of social, psychological, and environmental factors, and thus varies widely between individuals (CFE Research, 2018).[30] The review also identified a lack of research about how applicants from lower socio-economic groups engage with information, although noting that "they typically consultant fewer sources" (p67). In this study, we explore how applicant background factors and the availability of information sources influence the medical school choices of applicants. We call this applicant-focused process "medical school choice", while recognising that such "choices" are constrained and facilitated by individual and contextual social, economic, education and cultural factors (Diamond et al, 2012, 2014; Callender, 2018; Dougherty, 2018). [31, 32, 10, 11]

Cohort description

Patient and Public Involvement

Project Steering Group included a patient representative and members of the public (including medical student and medical school applicant members) who were involved in the design and development of the questionnaires.

Setting

Longitudinal cohort study of the United Kingdom medical school applications in the 2019/2020 application cycle. Uses questionnaire data from three waves of questionnaire linked to administrative data. Wave 1 of data collection between May and October 2019 with a first follow-up (Wave 2) between November 2019 and January 2020, and an additional COVID-19-specific (Wave 3) follow-up in April 2020.

Applying to study medicine in the UK

The deadline for applicants to Medicine for entry in October 2020 to submit their application to UCAS was 15th October 2019. This is October deadline is earlier than the January deadline for other university courses, with the exception of Veterinary Medicine, Dentistry, and any courses at the universities of Oxford and Cambridge. Further details on the process of applying to study medicine in the UK are detailed in supplementary file 1. See Figure.1 for an overview of the 2019/2020 medical school applications timeline.

Figure 1: The 2019/2020 medical school applications timeline

Population

Registrants to the UCAT within the 2019 test cycle and UK applicants to medicine by the October 2019 UCAS deadline.

Eligibility criteria

Inclusion criteria

- Considering applying to a medical degree course at a UK HEI by the 15th of October 2019 UCAS deadline, including registering for UCAT, BMAT or GAMSAT.
- Aged 16 or over.

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- Resident in the United Kingdom or Islands or eligible for home university tuition fee status.

Exclusion criteria

- Not considering applying to a medical degree course at a UK HEI by the 15th of October 2019 UCAS deadline.
- Aged under 16.
- Not resident in the United Kingdom or Islands or not eligible for Home university tuition fee status.

Questionnaire design and development

The UKMACS questionnaire was developed in the following way, which closely follows Artino et al[33]:

1. Conducted a literature review using relevant prior research to identify existing validated items that could be used or adapted.

2. Conducted interviews and focus groups [34] with medical school applicants and first year students to identify and define the priorities and strategies of potential applicants.

3. Synthesized the literature review and interviews/focus groups to ensure that the constructs and models underlying the questionnaires made theoretical sense and were accessible to participants.

4. Developed items that were clear, understandable, and written in accordance with current best practices in survey design.

5. Gained expert validation from expert members of the project Steering Group to assess how clear and relevant the items were and review the format and administration process of the surveys.

6. Conducted a cognitive interview with a medical student Steering Group member (similar to participants) to ensure that respondents would interpret items in the manner intended.

7. Conducted pilot testing with groups similar to participants to check for adequate item variance, reliability, and convergent/discriminant validity with respect to other measures.

See supplementary file 2 for an overview of questionnaire items and variables, and supplementary files 3, 4 and 5 for the questionnaires.

Recruitment, data collection methods, ethics, and external data sources

Data for all Waves were collected primarily via an online questionnaire hosted on the JISC Online Surveys platform <https:// www.onlinesurveys.ac.uk/>.

Wave 1 recruitment and data collection

During the UCAT registration process, all UCAT registrants in 2019 were presented with a binary yes/no question about whether they consented to UCAT sending their contact details (full name, address, email address, telephone number) to the UKMACS research team so they could receive a link to take part in the study. UCAT sent the contact details of consenting participants to the UKMACS team on a weekly basis throughout the UCAT registration period from 1st May 2019 to 2nd October 2019. Between 7th May 2019 to 14th October 2019 the research team emailed each week's

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consenting participants a study invitation, a study information sheet and a personalised weblink to the consent form and questionnaire with the name, email address and UCAT registration ID fields pre-populated.

An additional route to participation was via a non-personalised (general) weblink to the consent form and questionnaire without pre-populated fields. This weblink and the participant information sheet were hosted on the BMAT and GAMSAT registration webpages and the Medical Schools Council medical school application webpage. Flyers with the weblink were circulated by UK medical school widening participation schemes and at open days between May and October 2019. The aim was primarily to enable non-UCAT registrants to take part although it was possible for UCAT registrants to take part via this general link.

Two email reminders were sent at four and eight-day intervals, followed by two SMS text message reminders. A pilot study compared the effectiveness of three types of postal reminders to participants' homes: a paper version of the questionnaire with a stamped addressed return envelope, or two slightly different versions of a postcard reminder with the questionnaire weblink and QR code bringing participants to the same link. We randomly selected 900 consenting UCAT registrants who had not completed a questionnaire after email and SMS reminders to be randomly assigned to receive one of three types of postal reminders. One third (300) were randomly selected to receive the paper questionnaire, one third to receive one version of the postcard and a third the other version of the postcard. Response rates were 9% for the paper questionnaire, 16% for postcard 1, and 16% for postcard 2. As such, the remaining non-respondents were sent a postcard reminder in September after email and text message reminders. In early October 2019 all non-respondents received a final email reminder that mentioned the UCAS application deadline of the 15th of October 2019.

To improve response rates UKMACS employed the following methods[35]:

- Incentive: entry into a prize draw.
- Increases salience: the questionnaires were administered to those seriously considering applying.
- Pre-notification: UCAT registrants were asked for consent to be invited.
- Repeated contact using different modalities: reminders delivered as emails, SMS texts and postcards.
- Improved accessibility: reminders included direct links to the responsive design online questionnaire.

Wave 2 recruitment and data collection

All participants who had started the Wave 1 questionnaire were invited to complete an online Wave 2 questionnaire between 26th November 2019 and 15th January 2020, with two email and two text message remainders. Participants were not invited if they had previously requested their data be removed from the UKMACS database, had previously asked not to be contacted for further research, or had not consented to having their personal information retained by the research team or linked with other information for research purposes. Participants were asked to confirm their name, email, and telephone contact details to enable linking to other data.

Wave 3 (COVID-19) recruitment

In March 2020 UK schools were closed and A-level (and equivalent public examinations) were cancelled due to the COVID-19 outbreak in the UK. This was a major disruption for education and university admissions in the UK and particularly significant for the UKMACS cohort, as they were

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mostly in their final year of schooling and due to sit examinations in the summer of 2020. We therefore administered an additional unplanned UKMACS questionnaire to understand what medical applicants were experiencing in terms of education, their views on how grades would be awarded following examination cancellations and their views on how medical schools might respond with regard to admissions policies.

So, between 8th and 22nd April 2020, all UCAT 2019 registrants who had consented to be invited to take part in UKMACS (Wave 1 population), and any other UKMACS participants who had completed a Wave 1 and/or Wave 2 questionnaire were emailed an invitation to complete an online questionnaire, with two email and two text message reminders. Participants were not invited if they had previously requested their data be removed from the UKMACS database, had previously asked not to be contacted for further research, or had not consented to having their personal information retained by the research team or linked with other information for research purposes. See Woolf et al [36] for further details. Participants were asked to provide their name and contact details for potential follow-up and linking to other data.

Incentives

Participants who completed both Wave 1 and Wave 2 questionnaires were entered into a prize draw for Amazon vouchers, drawn in February 2020. There was no prize draw for the Wave 3 questionnaire.

Ethics and informed consent

Approval for the study was granted by the UCL Research Ethics Committee (Reference: 0511/014). For each Wave, all participants were given a study information sheet, completed a consent form, and confirmed that they met the study eligibility criteria before starting the questionnaire. The consent form included consent for their data to be linked with other information about them for the purposes of research. In addition, for Wave 1, participants were asked to consent to being invited to take part in in future research, to be entered into a prize draw and contacted if they won.

Data linkage and external datasources

Participants consented to linkage of their questionnaire data to administrative data for research purposes within the secure data environment UKMED. The flow of data and linkages are shown in Figure 2. This data included information on their education (e.g. aptitude test results, school examination grades and predicted grades, type of school attended, university applications, offers and acceptances) and their background (geographic area, parental education and job, eligibility for Free School Meals, information on student loans).

Figure 2: Data flow and linkage

Wave 1 and Wave 2 data on consenting participants were uploaded to the UKMED, and linked to UCAT and UCAS data using the following variables: participant UCAT registration ID, HESA ID, full name, date of birth, and gender. However, additional checks using email addresses and school postcode were required as a small number had registered with UCAT twice, some respondents had completed the questionnaire more than once, and many of those who responded through the open link did not provide a UCAT ID. Data linkage used a number of passes through the data to match individuals across datasets and eventually achieved a 98% linkage rate. This process involved matching the data in descending order of reliability: the first match required all relevant variables to

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match while the final match only required two variables to match and was manually reviewed. Overall, only 154 (2%) cases were unaccounted for within the data.

In addition to data routinely available within UKMED, we obtained information about participants' schools (average school achievement and school type) from the following publicly-available sources: Department for Education Schools, pupils and their characteristics [37]; Directorate for Education Analytical Services Performance & Attainment Statistics Team ad hoc data request [38]; Northern Ireland Department for Education and Northern Ireland Statistics and Research Agency data request [39]; Welsh Government ad hoc data request [40]. These data were imported into UKMED and linked to the questionnaire data.

We also obtained publicly available information about each UK medical school, imported it into UKMED and linked it to the questionnaire data, using it to calculate two measures of prestige for each of the medical schools applicants were aware of, considering, and had applied to. From *The Guardian* newspaper university rankings in 2020 we obtained the mean UCAS tariff points for entrants. We also obtained university rankings from the *Times Higher Education* University Rankings (accessed June 2021).

Anonymised linked data were made available for analysis within UKMED via the Safe Haven at Dundee to the research team in the first instance. After this initial period the data will be made available to approved researchers who complete the UKMED application process successfully.

Study participants

Table 1 reports the demographics for Waves 1,2, and 3 participants.

	Wave 1 **N (%)**	**Wave 2** **N (%)**	**Wave 3** **N (%)**
Female	4509 (71)	1747 (71)	1968 (68)
Male	1852 (29)	686 (28)	749 (26)
Other/Prefer not to say	30 (<1%)	15 (<1%)	20 (<1%)
Missing			140 (5)
White	3030 (48)	1333 (55)	670 (23)
Asian	1994 (31)	662 (27)	301 (11)
Black	675 (11)	203 (8)	79 (3)
Mixed	311 (5)	127 (5)	63 (2)
Other	310 (5)	98 (4)	41 (1)
Missing/Prefer not to say	71 (1)	25 (1)	1723 (60)
1+ parents in the highest socioeconomic group	4015 (63)	1575 (64)	1910 (66)
No parents in the highest socioeconomic group	2081 (33)	780 (32)	1742 (30)
Missing	295 (5)	93 (4)	116 (4)
No parent doctors	5635 (88)	2148 (88)	2408 (88)
1+ parents who are doctors	627 (10)	262 (11)	344 (13)
Missing	129 (4)	27 (1)	125 (4)
State school	3595 (56)	1698 (69)	783 (27)
Selective (grammar or Private)	1606 (25)	358 (15)	785 (27)
Missing	1190 (19)	392 (16)	1309 (46)

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IMD quintile 5 (most deprived – reverse scored)	1012 (16)	334 (16)	310 (11)
IMD quintile 4 (reverse scored)	1087 (17)	412 (19)	361 (13)
IMD quintile 3 (reverse scored)	1031 (16)	392 (18)	410 (14)
IMD quintile 2 (reverse scored)	1042 (16)	435 (20)	461 (16)
IMD quintile 1 (least deprived – reverse scored)	1331 (21)	584 (27)	704 (25)
Missing	886 (14)	291 (12)	631 (22)
In Year 13/S6	4160 (65)	1616 (66)	2212 (77)
One year post-Year 13	692 (11)	192 (8)	179 (6)
Have/studying for a degree	1282 (20)	449 (18)	340 (12)
Other	257 (4)	10 (<1)	146 (5)
Missing	11 (0)	181 (7)	0 (0)
England	2003 (70)	1864 (76)	2003 (70)
Scotland	(6)	186 (8)	170 (6)
Wales	(3)	76 (3)	78 (3)
Northern Ireland/ Forces/Islands	(2)	30 (1)	66 (2)
Other/missing	(20)	291 (12)	560 (20)
Total	(100)		(100)

Table 1: Descriptive statistics for Wave 1, Wave 2 and Wave 3 participants

Wave 1 participants

See Figure 3 for a flowchart of responses to Wave 1. 29,357 UCAT registrants in 2019 were asked to consent to be invited to take part. 18,480 (63%) consented and 18,359 were invited (121 were missing correct contact information). 6,465 participants started the Wave 1 questionnaire, comprising a 30% response rate for those invited via UCAT (n=5,449), plus an additional 1,016 respondents who accessed the questionnaire through the open weblink. This accounts for approximately 36% of the 17,540 UK domiciled applicants to Medicine in 2019[1]. (https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-releases/applicant-releases-2020/2020-cycle-applicant-figures-15-october-deadline). Overall, we consider this to compare favourably with generally accepted response rates of 30% for online surveys.

To assess "unit nonresponse" (an individual not participating in the survey) for any non-response bias, comparison was made between Wave 1 and respondents and those eligible and who consented to be invited but did not respond.[35] This was assessed via comparison of available demographic data. Gender data was available and showed that non-responders were approximately 60% female and 40% male, compared to 71% female respondents, indicating a small bias. Typically females are

[1] A small proportion of Wave 1 participants did not end up applying by the October 2019 deadline to study medicine, meaning the percentage of UK domiciled medical applicants who completed UKMACS is actually slightly lower than 36%. The exact proportion will be known once the questionnaire data are linked to UCAS application data, which is due to happen in 2022. True response rates are difficult to determine as is it only possible to find out how many people applied, not how many people were seriously considering applying (the denominator).

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less likely to respond to initial contact but more likely to respond to repeated reminders [35] so this may be a result of the reminder strategy.

In terms of those excluded, 19 participants who completed a consent form did not agree to have their data analysed or linked; after consenting 29 participants withdrew from the study, (citing as reasons: not in the UK so realised not eligible; were only applying to dentistry not medicine so not eligible); one participant completed the questionnaire and then later withdrew consent and requested their information be removed.

Figure 3: Flowchart of Wave 1 responses

Wave 2 participants

All Wave 1 participants with valid responses (n=6391) were invited to complete the Wave 2 questionnaire, and 2,483 (38%) responded. Four withdrew, without citing reasons. Linkage to Wave 1 respondents and UKMED data identified 2,448 participants. See Figure 4.

Figure 4: Flowchart of Wave 2 responses

Wave 3 participants

18,480 consenting UCAT registrants plus the 1016 additional Wave 1 respondents who accessed the Wave 1 questionnaire via the open link were eligible to be invited to complete the Wave 3 (COVID-19) questionnaire; 3,071 participants completed it, of whom 2,904 stated they were eligible to take part.

After removing 16 respondents who did not consent to have their data analysed and 11 duplicates, there were 2,877 valid cases for analysis, which is 15% of those invited. Of the 2,877 responses to the Wave 3 questionnaire, we were able to identify 2,704 in our database of those who had consented to the initial invitation to participate in the UKMACS study. 1,488 of these had also responded to the Wave 1 questionnaire and 949 participants had responded to all three questionnaires. See Figure 5 for the flowchart of the COVID Wave participants.

Figure 5: Flowchart of Wave 3 respondents

Variables

Variables from all three questionnaires are detailed in supplementary files 3, 4 and 5. For Wave 3, the questionnaire was suggested at the start of the first national lockdown in the UK due to the Covid-19 pandemic. It was therefore developed quickly and most items were designed specifically for this questionnaire to address unprecedented events meaning validated items were not available. Other items were adapted from Wave 1 and Wave 2. Amendments to items were made in response to feedback from piloting with two current applicants and from the Medical Schools Council.

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Preliminary findings

Wave 1

For the initial analysis, a restricted sample of 2,591 fully consenting respondents who were attending a UK school in their first year of post-compulsory education at the time of completing the questionnaire and were 18 years old by September 2020 were selected as this sample of respondents had the most complete data. Data was explored using descriptive statistics and univariate analyses in IBM SPSS for Windows v26.

Three key outcome measures were size of awareness set, size of consideration set, and prestige of consideration set. The key predictor variable was participant background, which we categorised into a 4-level variable (non-traditional, less traditional, more traditional, tradition) based on the number of the following binary indicators they had: individual-level indicator (at least one parent in the highest socioeconomic group=1 vs none=0), school-level indicator (privately funded school=1 vs state-funded=0) and area-level indicator (index of multiple deprivation quintiles 3 to 5=1 vs 1 or 2=0). The non-traditional group had no indicators, the less traditional group had one, the more traditional group had two, and the traditional group had all three.

Results [41] showed that participants from non-traditional backgrounds were aware of fewer medical schools than all other groups, even after considering other significant predictors including academic attainment, reasons for choosing a medical school, psychological capital, and information capital. There was no difference by background in the size of participants' consideration sets, but participants from traditional backgrounds were considering more prestigious medical schools on average.

Wave 2

Initial results [41] indicate that the majority (2,108, 85%) of respondents had applied to medical school by the UCAS deadline. Of the 375 who did not apply, only 59 (2.4% of the respondents) no longer wanted to be doctors. 90 had decided to apply to dentistry courses, other reasons for not applying were not achieving the admissions test scores (n=80) or A level grades (n=77) . Of those who did not apply, 116 were very likely and 72 quite likely to reapply in the future.

Most popular reasons for their first choice of medical school were: feeling confident they would meet the requirements, the medical school being close to home and offering the right teaching style for them. Interestingly, prestige was not in the four most common reasons for their first and second choices.

'Hot' sources of information [42] such as contact with other medical students (particularly via online) and up to date information from comparison websites such as the Medic Portal and Unifrog were considered by all groups to be the most helpful when it came to making choices about medical school.

Participants reported that the least challenging aspects of the medical school application process were meeting the early deadline for applications and getting support in their applications (very easy), and the most challenging aspects were getting the required grades, continuing to meet other commitments, obtaining work experience and preparing for interviews. Obtaining relevant work experience was seen as particularly different for 'non-traditional' applicants.

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Wave 3

We aimed to describe the experiences and views of medical applicants from diverse social backgrounds following the closure of schools and universities and the cancellation of public examinations in the UK due to the COVID-19/coronavirus pandemic. Key variables of interest were participant views on calculated grades (teacher-estimate grades that replaced A-level examination grades), views on medical school admissions and teaching in 2020 and 2021, and reported experiences of education during the national lockdown.

Results from Woolf et al [36] showed that participants, particularly female and ethnic minority participants, were concerned about calculated grades as these were generally not considered fair enough to be used by medical schools in the selection of offer-holders but were considered fair enough to use in combination with interview and aptitude test scores. Respondents from non-selective state schools also reported less access to educational resources compared to private/selective school pupils, less online teaching in real time, and less time studying during lockdown.

Strengths and limitations

Strengths

These studies constitute the largest and most recent quantitative exploration of UK medical applicant views and experiences of applying to medical school, and form the baseline of an ongoing longitudinal study of the 2019 cohort, linked to prospective longitudinal administrative data within UKMED. Longitudinal cohort studies are well-placed to provide insights into how individual factors may influence choices, while also considering the influences of the institutional and social contexts of individuals. By including wide-ranging representation of different sociodemographic groups amongst these medical applicants and providing data on a range of academic, educational, psychological, social factors including those that predict medical school choice, admission and attainment and progression, UKMACS will allow for research on how medical selection shapes the medical workforce.

The value of large-scale longitudinal cohort studies to medical education was emphasised by the UK's 2014 Research Excellence Framework Education Panel who noted the "few medical education equivalents to the […] UK 1958 National Child Development Study or the 1970 British Cohort Study".[43] Those "few…equivalents" include the UK's two major longitudinal cohort studies of doctors: The UK Medical Careers Research Group studies and the McManus Cohort Studies.[44, 45, 46] Both have had a significant impact on workforce planning and on our understanding of doctors' behaviour and performance. However, they have not been able to answer questions about how current medical school selection and training impact on the medical workforce as they either do not study selection or, as with the McManus Cohort studies, have not studied selection since the early 1990s.

UKMACS addresses that gap by linking applicant data into UKMED allowing for longitudinal follow-up to study the impact of their choices on outcomes at medical school and beyond. Crucially, UKMACS includes data on unsuccessful as well as successful applicants the impact of selection on subsequent undergraduate and postgraduate outcomes of importance to be studied. It has also collected data from an understudied group – those who eventually decide not to apply to medical school,[47] potentially giving insights into those who could be doctors if only they had applied. Future analyses

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of the questionnaires and linking to UCAS data will allow us to explore those who do not apply, defer application, and do not enter medical school and compare them with other applicants.

Weaknesses

The study primarily focuses on the 16-18 age group, a group notoriously difficult to engage.[48] There is a potential response bias since only 30% of those invited directly responded, with a further 6% responding via an open link and therefore from a less well-defined population. The "true" denominator (those considering applying to medicine) is unmeasured, making it impossible at present to calculate the "true" response rate. The typical first-time medical school applicants is a 17-18 year old with a record of high academic achievement. In 2019, 14,980 of the 17,470 UK-domiciled medicine applicants were first-time applicants [13]. Until the questionnaire data is linked with UCAS data (unavailable at the time of writing), it is unknown how many of the Wave 1 respondents applied in 2019, though using the Wave 2 responses as a guide it is estimated that approximately 30% of UK medical applicants had responded to the Wave 1 questionnaire. Comparing our cohort with UCAS demographic data on 2019 medical applicants shows a very similar profile for UK first-time Medicine applicants aged 17-19 in terms of ethnicity and areas of deprivation[2].

Completing the questionnaire may have raised participants' awareness of particular information sources, medical schools and course options or prompted consideration of other criteria. Given that it was probably impossible to minimise any such influence, participant information sheets and advertising stated that one potential benefit of taking part in the study was the opportunity to reflect on the application process. Waves 1 and 2 questionnaires were each administered over several months, and during each period it is likely that participants' attitudes and resources changed. Date of questionnaire completion is available to be included as a confounder variable in analyses of Wave 1 and Wave 2 data. While the questionnaires inevitably can only provide a snapshot of applicant views (which may change due to experiences after survey completion), the longitudinal nature of the study allows for follow-up of participants throughout their university careers and also to discover how the pandemic has impacted on them.

In terms of generalisability of findings to wider university applicant populations, medical school applicants are generally not representative in educational or sociodemographic terms of the average university applicant as school-leaver applicants to medical courses are predominately drawn from the more affluent postcodes, have parents in the higher SES groups and have attended a selective school compared to only 6.5% of children having an independent sector education.[9] They also tend to have higher academic achievement. We are however able to make some cautious generalisations to other university applicants about factors influencing institutional choices, particularly in light of comparisons with other research in this area (see next section).

Additionally, it is inevitable that there are questions about how representative the cohort is of medical school applicants. Initial comparisons with UCAS 2019 data on medical school applicants shows considerable similarity, though perhaps shows a higher proportion of non-traditional applicants. It must also be observed that the surveys are of those showing a serious interest in applying to Medicine in 2019 (primarily through the commitment of registering for admissions tests). As such, the cohort includes successful and unsuccessful applicants, those who chose to defer application and those who eventually decided not to apply at this time.

[2] [see UCAS data releases www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-releases/applicant-releases-2019-cycle/2019-cycle-applicant-figures-15-october-deadline and www.ucat.ac.uk/media/1416/ucat-2019-technical-report-exec-summary_v1.pdf]

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Comparisons with other research

The findings show many similarities to other studies of UK HE applicants, and studies outside of the UK ,[e.g. 11] however medical applicants have to go through a different application process to most other university applicants having earlier application deadlines, use of admissions tests and other pre-admission requirements. Comparisons with more general HEI and subject choice research,[49, 10, 50] shows a similar focus on prestige or quality of university by more advantaged applicants and the greater priority given to location by more disadvantaged university applicants. Once UCAS data on successful applications to medical school has been linked in UKMED, the applicant profiles developed from Wave 1 and Wave 2 data can be used to extrapolate for the entire cohort and compared with previous cohorts.

Findings from the Wave 2 questionnaire on the usefulness of various information sources highlight the high importance all applicants give to 'hot' knowledge, and reflect the Wave 1 finding about the need for more help and guidance to make informed choices as opposed to requiring more information and findings from the wider literature that those from less advantaged groups report themselves as being at a disadvantage when applying [51, 52] due to limited understanding of information and limited access to guidance to enable informed and effective decision-making.[53, 54]

Collaborations

Data from all three questionnaires will be linked into the UK Medical Education Database to which researchers can apply for access once the research team has completed their primary analyses.

Further details

Contributor statement

KW developed the idea for the study. KW and DH developed the wave 1 and wave 2 questionnaires with input from ICM and ELR. The Wave 3 COVID-19 questionnaire was developed by KW, ICM and DH. DH was responsible for putting the questionnaires online, and for inviting applicants, as well as sending text and email reminders. DH and KW cleaned the data, and KW, DH, ELR and ICM were all involved in data analysis. The report was written jointly by all authors, and all authors have read and reviewed the final draft.

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Competing interests

All authors have completed the ICMJE uniform disclosure form at http://www.icmje.org/coi_disclosure.pdf: KW and DH report grants and non-financial support from the National Institute for Health Research during the conduct of the study; and KW reports personal fees from Transforming Student Access and Outcomes (TASO), outside the submitted work. All authors report no other relationships or activities that could appear to have influenced the submitted work.

Patient consent for publication

Not required.

Ethics approval

The study and ongoing UKMACS longitudinal questionnaire study (reference: 0511/014) was approved by the UCL Research Ethics Committee Chair.

Provenance and peer review

Not commissioned; externally peer reviewed.

Data availability statement

Data are available upon reasonable request. The data will be linked into the UK Medical Education Database www.ukmed.ac.uk to which researchers can apply for access.

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Supplementary material:

Supplementary file 1: Process of Applying to UK Medical Schools

Supplementary file 2: Questionnaire Variables

Supplementary file 3: UKMACS Wave 1 Questionnaire

Supplementary file 4: UKMACS Wave 2 Questionnaire

Supplementary file 5: UKMACS Wave 3 Questionnaire

Tables

	Wave 1	**Wave 2**	**Wave 3**
	N (%)	**N (%)**	**N (%)**
Female	4509 (71)	1747 (71)	1968 (68)
Male	1852 (29)	686 (28)	749 (26)
Other/Prefer not to say	30 (<1%)	15 (<1%)	20 (<1%)
Missing			140 (5)
White	3030 (48)	1333 (55)	670 (23)
Asian	1994 (31)	662 (27)	301 (11)
Black	675 (11)	203 (8)	79 (3)
Mixed	311 (5)	127 (5)	63 (2)
Other	310 (5)	98 (4)	41 (1)
Missing/Prefer not to say	71 (1)	25 (1)	1723 (60)
1+ parents in the highest socioeconomic group	4015 (63)	1575 (64)	1910 (66)
No parents in the highest socioeconomic group	2081 (33)	780 (32)	1742 (30)
Missing	295 (5)	93 (4)	116 (4)
No parent doctors	5635 (88)	2148 (88)	2408 (88)
1+ parents who are doctors	627 (10)	262 (11)	344 (13)
Missing	129 (4)	27 (1)	125 (4)
State school	3595 (56)	1698 (69)	783 (27)
Selective (grammar or Private)	1606 (25)	358 (15)	785 (27)
Missing	1190 (19)	392 (16)	1309 (46)
IMD quintile 5 (most deprived – reverse scored)	1012 (16)	334 (16)	310 (11)
IMD quintile 4 (reverse scored)	1087 (17)	412 (19)	361 (13)

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IMD quintile 3 (reverse scored)	1031 (16)	392 (18)	410 (14)
IMD quintile 2 (reverse scored)	1042 (16)	435 (20)	461 (16)
IMD quintile 1 (least deprived – reverse scored)	1331 (21)	584 (27)	704 (25)
Missing	886 (14)	291 (12)	631 (22)
In Year 13/S6	4160 (65)	1616 (66)	2212 (77)
One year post-Year 13	692 (11)	192 (8)	179 (6)
Have/studying for a degree	1282 (20)	449 (18)	340 (12)
Other	257 (4)	10 (<1)	146 (5)
Missing	11 (0)	181 (7)	0 (0)
England	2003 (70)	1864 (76)	2003 (70)
Scotland	(6)	186 (8)	170 (6)
Wales	(3)	76 (3)	78 (3)
Northern Ireland/ Forces/Islands	(2)	30 (1)	66 (2)
Other/missing	(20)	291 (12)	560 (20)
Total	(100)		(100)

Table 1: Descriptive statistics for Wave 1, Wave 2 and Wave 3 participants

Figures

Figure 1: The 2019/2020 medical school applications timeline

Figure 2: Data flow and linkage

Figure 3: Flowchart of Wave 1 responses

Figure 4: Flowchart of Wave 2 responses

Figure 5: Flowchart of Wave 3 respondents

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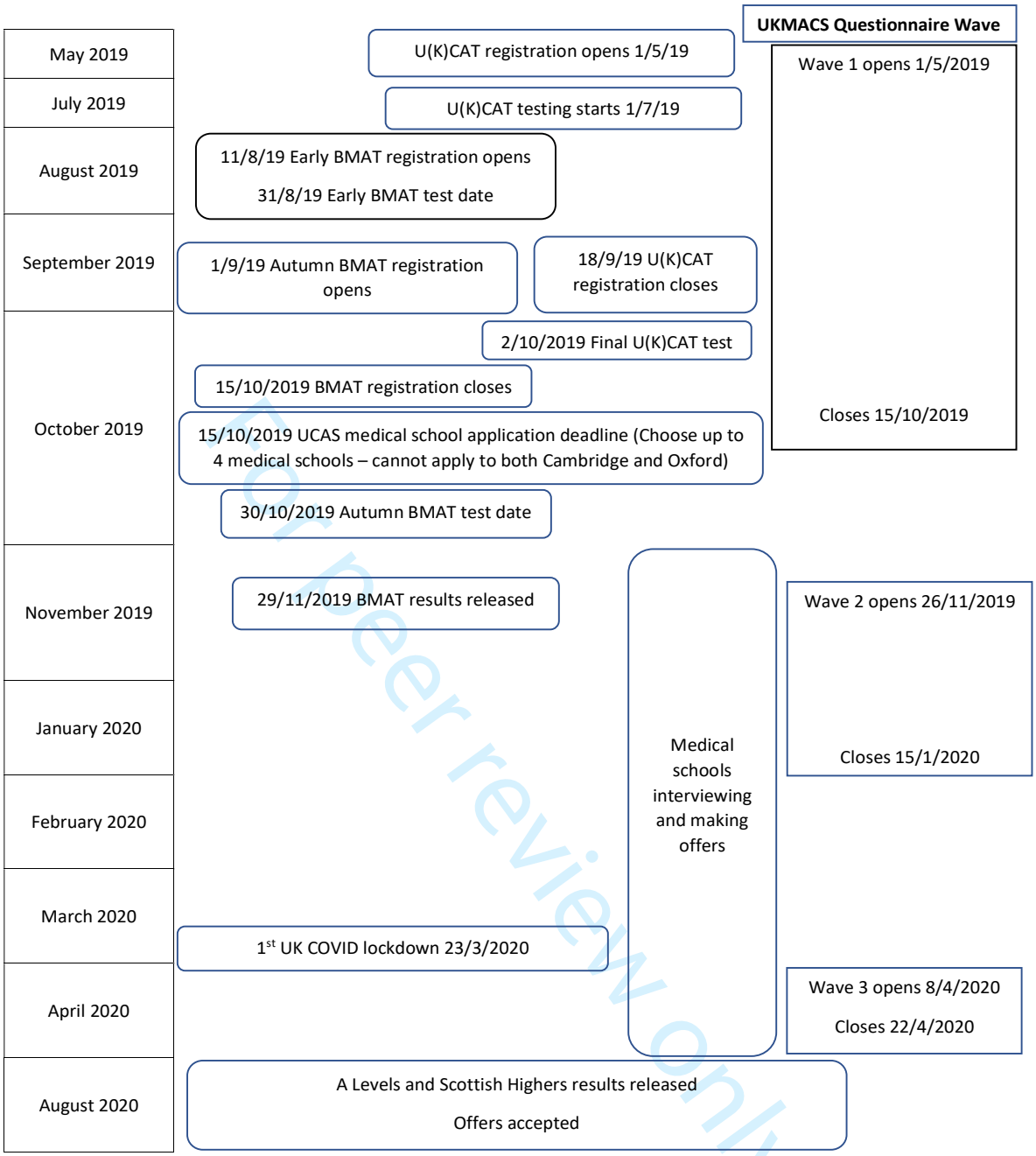

UKMACS = UK Medical Applicant Cohort Study

U(K)CAT = University Clinical Aptitude Test (formerly the UK Clinical Aptitude Test)

BMAT = BioMedical Admissions Test

UCAS = Universities and Colleges Admissions Service

Figure 1: The 2019/2020 medical school applications timeline

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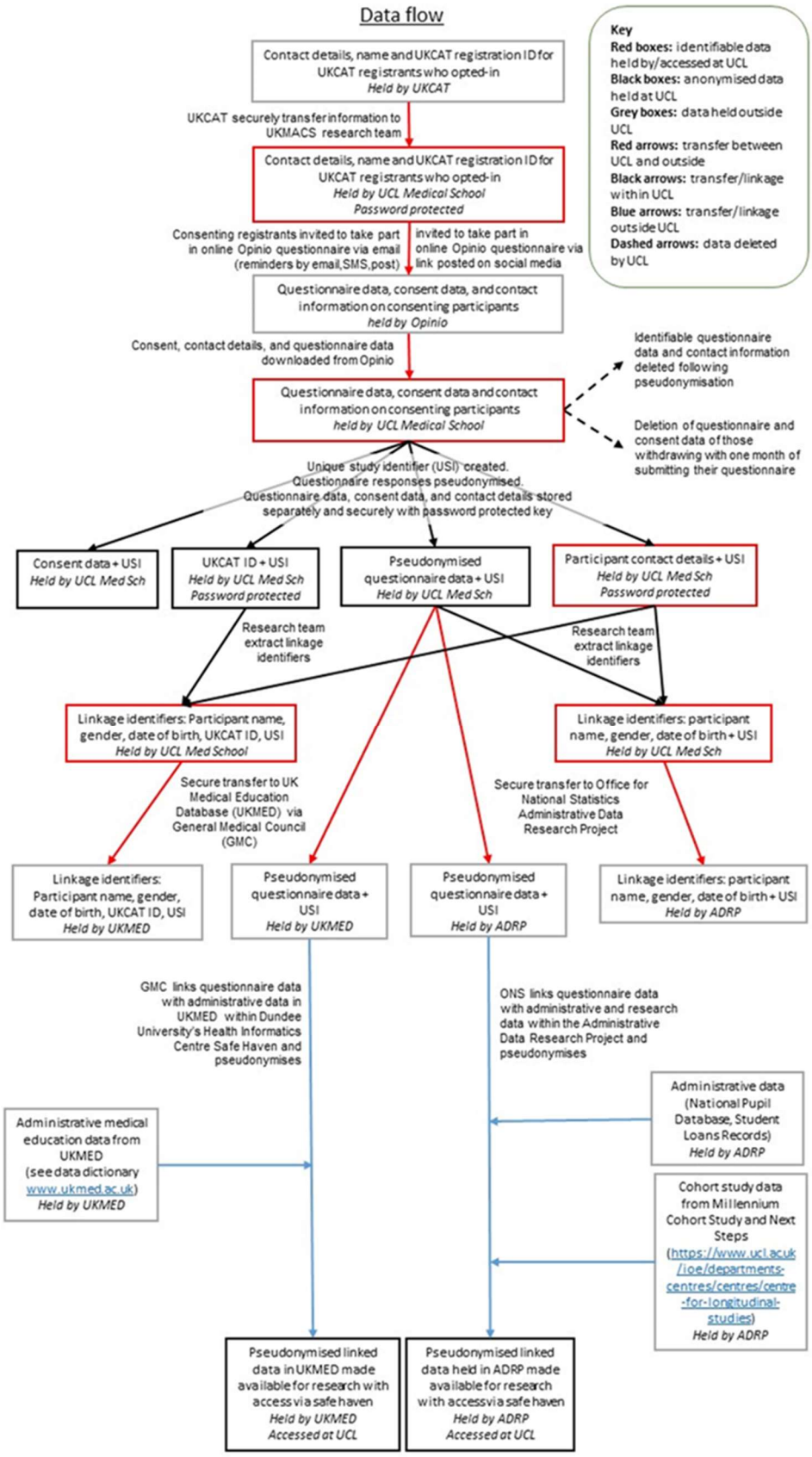

Figure 2: Data flow and linkage

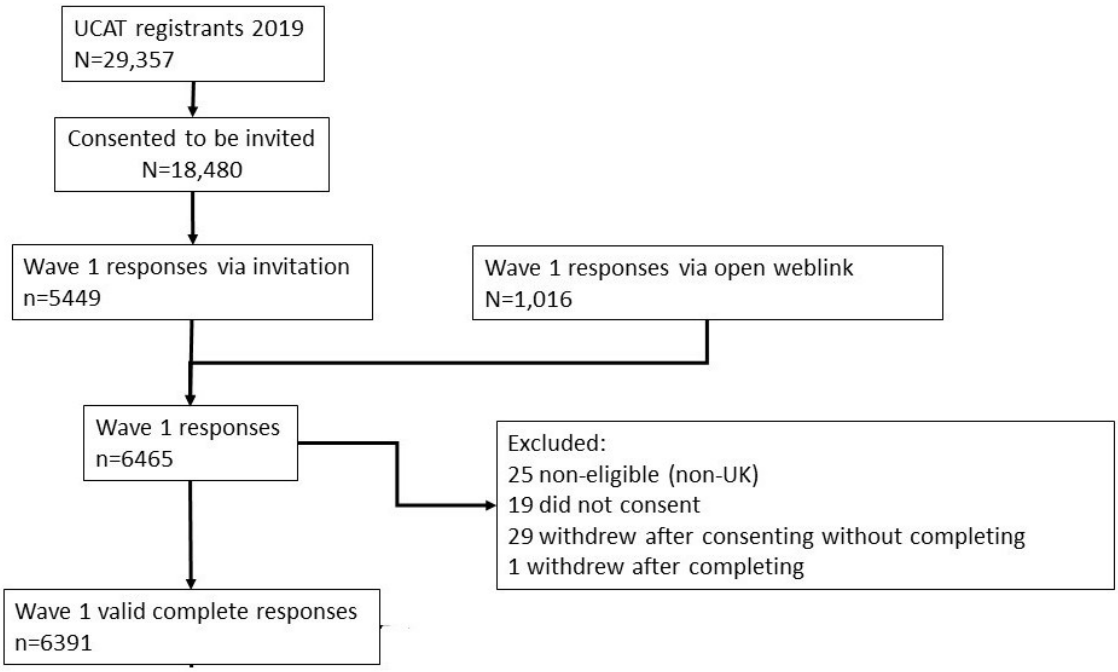

Figure 3: Flowchart of Wave 1 responses

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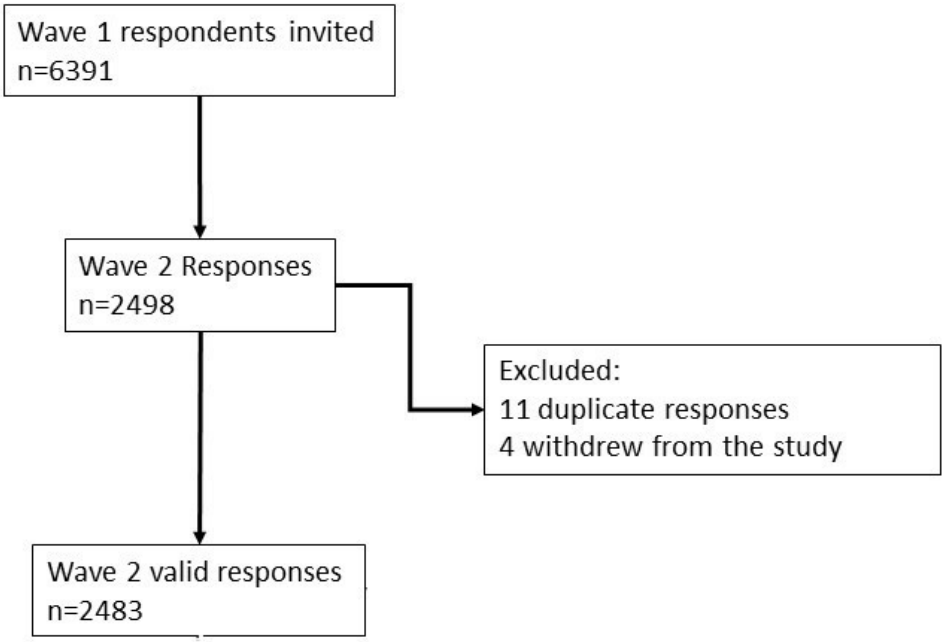

Figure 4: Flowchart of Wave 2 responses

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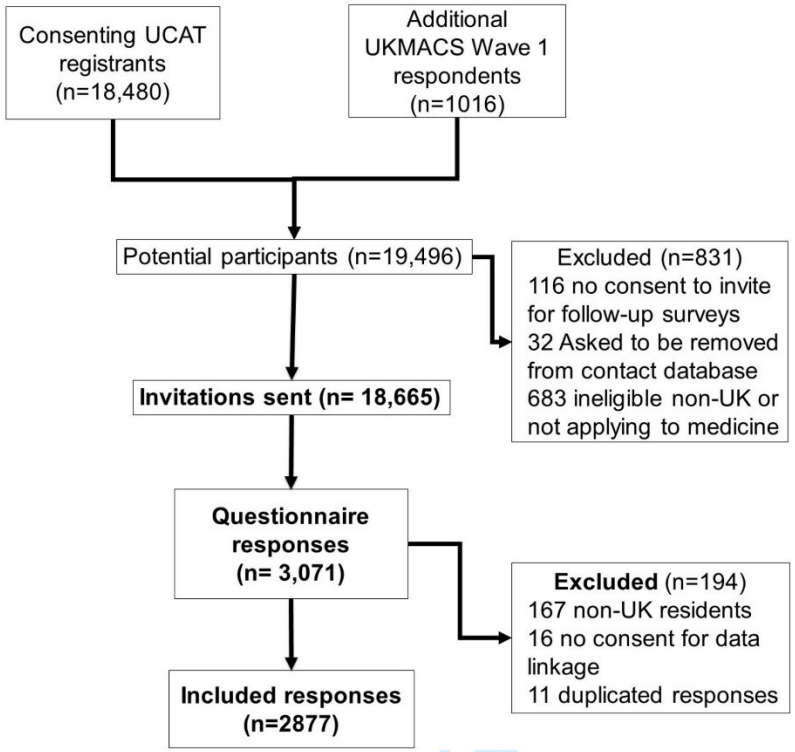

Figure 5: Flowchart of Wave 3 respondents

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Supplementary Information

Process of applying to UK Medical Schools

UCAS applicants could choose a maximum of five course/higher education institution (HEI) combinations to apply to, up to four of which can be Medicine. There were 42 UK HEIs (Medical Schools) offering at least one medical degree course to Home Fees paying students. In addition, the University of Bradford offered a Foundation course from which the top-performing first year students transfer to Medicine. Applicants could not apply to both Oxford and Cambridge within the same UCAS application. Outside of the UCAS system, they could also apply to the UK's only private medical school at the University of Buckingham.

In the UK there are four main types of medical degree courses, which vary in admissions eligibility criteria and processes: standard entry, graduate entry (shorter course for applicants who already have a university degree), course with a preliminary year (longer course for applicants with non-science qualifications), and gateway courses (longer course for applicants from non-traditional or disadvantaged backgrounds).[1] Several medical schools offer more than one type of medical degree course, and applicants are able to apply to more than one course type at the same HEI within the same application.

Each medical school sets its own admissions processes, but nearly all interview candidates before offering them a place. Medical schools select applicants for interview largely on the basis of teacher-predicted Advanced level (A-Level) examination grades (or equivalent), achieved examination grades and aptitude test results, with some also looking at personal statement and/or applicant references. The aptitude test used by most medical schools is the University Clinical Aptitude Test (UCAT, formerly the UK Clinical Aptitude Test (UKCAT)), with Oxford, Cambridge, UCL, Imperial, Leeds, Brighton & Sussex, and Lancaster using the BioMedical Admissions Test (BMAT), and several graduate entry courses using the Graduate Medical School Admission Test (GAMSAT). Interviews are generally held from December through to Spring, after which medical schools make offers that are conditional on their achieving specified A-level (or equivalent) grades. Applicants who meet their offers usually start medical school the September after they applied (although deferral is possible).

An increasing number of HEIs and medical schools are using contextualised admissions, in which applicants who meet certain socioeconomic and/or educational criteria are given a lower academic threshold for interview and/or acceptance, in recognition of the fact that academic performance is influenced by applicant context. The admissions criteria for each medical school are published annually by the Medical Schools Council [2] as well as on each HEI's website.

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Supplementary Information

Variables

Wave 1 questionnaire

Demographics

Date of birth, gender (male, female, other), ethnic group using the 18 Office for National Statistics categories from the National Census 2011. Ethnicity was collapsed into the five broad groupings also used in the Census: Asian, Black, Mixed, Other, White. [1]

Occupation of parent(s)/carer(s) using the NS-SEC Analytic classes.[2] Analysis collapsed into a binary variable of highest socioeconomic group: Classes 1, 3 and 4 as higher (2); Classes 2,5,6,7,8,9, 12 as lower (1).

Whether parent(s)/carer(s) are medical doctor(s), collapsed into a binary variable: no doctors (0), at least one doctor (1).

Career aspirations and motivations

Items were adapted from McManus.[3, 4] Reasons for wanting to be a doctor (desire to work in a challenging role under pressure, being helpful to others and society, wanting an economically secure occupation, wishing to express own values and interests) each rated on a 5-point scale (Not At All Important to Very Important).

Preferred areas of practice as a doctor (In a city, In the countryside, outside of the UK, in an NHS practice, in private practice, in a deprived area, in an affluent area, in the armed forces) each rated on a 5-point scale from Very Appealing to Very Unappealing.

Applying to university/medical school

Number of people participants knew who were applying to medicine and the number they knew who were working or training as medical students or doctors, both measured on a logit scale [0, 1, 2-5, 6-10, 11-20, 20+]. Agreement on a 5-point Likert scale (Strongly disagree, Disagree, Neither, Agree, Strongly agree) with the statements: 'It does not matter which medical school I go to, so long as I get in', 'People like me don't go to medical school', 'Most of my friends are planning to go to university' .[5]

Freetext field asking about courses or activities undertaken relevant to applying to medicine. These responses are analysed for the impact of GP-related experiences.[6]

Choosing which medical schools to apply to and reasons for choice

Agreement on a 5-point scale (Strongly Disagree to Strongly Agree) to the following statements on choosing medical schools and use of information required about medical schools: I find it difficult to choose between medical schools, I need more help and advice in choosing medical schools, I have access to all the information I require about medical schools.

Availability and use of 20 sources of information and support regarding which medical schools to apply to, covering school-based information and support from schools and teachers, from personal contacts and family, online, and from medical schools.

Whether aware of and whether considering applying to each of the UK HEIs offering medical degree courses, and of the four main types of medical degree courses.

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Selection of up to four factors from a list of 25 factors within 6 categories (Admissions, Location, Personal, Reputation, Teaching, and Uni life) that would attract them to a medical school. Selection of up to four factors from a similar list of 21 factors within 5 categories that would put them off a medical school. Which medical school participants would choose if they knew they could get into any medical school in the country, and the main reason for their choice (from the same list as the 25 attractive factors).

Perseverance in applying to medical school

Likelihood on a 4-point scale (Definitely Not, Probably Not, Probably Yes, Definitely Yes) of each of the following actions participants would take if they were not accepted to study medicine this year: reapply next year, apply to study medicine outside the UK, apply for a different course, go travelling, find a job. This was used as a measure of perseverance in achieving long-term goals.[7]

Financial factors

Level of concern about financial aspects of higher education (tuition fees, living costs, borrowing money and debt, relying on family for money) rated on a 4-point scale (Very Concerned, Fairly Concerned, Slightly Concerned, Unconcerned).

Selection of up to 11 different sources planning to use to finance studies including working, bursaries, loans, gifts, and savings or inheritance.

Both items adapted from Thornby et al.[5]

Psychological factors

Based on the short General Self-Efficacy Scale (GSE).[8]

The 15-item 'Big Five' personality measure based on McCrae & Costa [39] as used in the national longitudinal cohort study *Understanding Society*.[10]

Education and attainment

Freetext fields requesting the name and postcode of current or most recent school attended. This was used to obtain further information about the school from open data sources (see Data Linkage, above).

Type of standardised examinations taken (General Certificate of Secondary Education, GCSE, or not). If participants had taken GCSEs, the number of GCSEs and grades awarded overall and in Mathematics and English Language.

Whether obtained or currently studying for a university degree. If applicable, subject, HEI, and degree classification obtained.

Open-ended freetext questions

Freetext fields asking "What do you think is the most challenging aspect of applying to medical school?" and "What do you think is the most rewarding aspect of applying to medical school?". Additional freetext field in which participants could make any additional comments.

Wave 2 questionnaire

Wave 2 adapted items from the Wave 1 questionnaire on usefulness of information sources and reasons for choosing medical schools to measure change over time.

Medical school and university applications

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Whether applied in 2019 to study medicine in the UK (yes or no).

As another measure of perseverance, if participants had not applied to medical school by the October deadline, they were asked to select as many reasons as they liked from the following list: no longer want to study medicine or be a doctor; admission test scores too low; actual or predicted grades too low; lacking required work experience; too expensive; family or other commitments; applied for medicine outside the UK). They were also asked whether they were likely to apply in the future. [Very Likely; Quite Likely; Neither Likely or Unlikely; Quite Unlikely; Very Unlikely]

Whether applied to university (medicine or not). If so, freetext fields indicated which universities and courses they had applied to (up to 5) and for each university/course, up to 4 reasons for that choice, using the list of 25 reasons from the Wave 1 questionnaire.

Information sources

Use of sources of information taken from the Wave 1 questionnaire and adapted to indicate for each source rated as Used. In addition participants were asked to rate how helpful the source was in making their choices, rated on a 5-point scale (Very Unhelpful to Very Helpful).

Challenges in the application process

How easy or difficult each of the following aspects of applying to medical school was: Preparing for admissions tests, Gaining work experience, Writing a personal statement, Keeping up with commitments, Preparing for interviews, Getting the required grades, Getting support, Finance, Choosing which medical schools to apply to, and Applying by the early deadline. Items were created based on a thematic analysis to the Wave 1 free text question about the challenges of the application process, and rated on a 5-point scale from Very Easy to Very Difficult plus Not Applicable.

Education and attainment

Current education status (currently studying at school/6th form college; on a 'gap' year after school/6th form; a university graduate or currently studying for a degree).

Attained and predicted (if applicable) grades for each A-level or other qualifications studied. Self-reported scores on admissions tests (UCAT, BMAT, GAMSAT), if taken in 2019.

If university undergraduate/graduate, name of course and HEI.

Open-ended freetext questions

Freetext field asking for additional comments about applying to study medicine or about the questionnaire.

Wave 3 questionnaire

This questionnaire was developed at the start of the first national lockdown in the UK due to the Covid-19 pandemic. It was therefore developed quickly and most items were designed specifically for this questionnaire to address unprecedented events meaning validated items were not available. Other items were adapted from Wave 1 and Wave 2. Amendments to items were made in response to feedback from piloting with two current applicants and from the Medical Schools Council.

Views on selection and admissions

Perceptions of the fairness of how calculated grades (the grades that were being proposed to replace examinations due to the COVID-19 pandemic - see [11]) should be awarded and used, and of other possible methods medical schools could use to select or reject offer holders. Rated on a 5-point scale (Unfair and should not be used, Quite unfair and to be avoided, Quite fair when used in combination with other measures, Very fair and could be used alone, and Uncertain).

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Participant views on the acceptability (Completely unacceptable, Slightly unacceptable, Neutral, Slightly acceptable and Completely acceptable) of possible medical school responses to higher student numbers than planned due to the pandemic e.g. requesting or requiring students to defer entry.

Should medical schools start the academic year as normal using distance learning for as long as necessary or delay until face-to-face teaching is possible, and agreement (Strongly disagree, Disagree, Neutral, Agree, Strongly agree) on the potential knock-on effects that calculated grades might have on the 2021 application cycle and how those reapplying should be treated .

Medical school applications

Whether applied to medical school/university and, where relevant, reasons for not applying (same items as used in Wave 2). Those who had applied were asked to list up to five UCAS choices by institution, course (same items as Wave 2). They were also asked for each whether they had received any response from HEI (e.g. invitation to interview, offer) and what the conditional offer was that they had received (if applicable). They were asked whether each HEI had communicated any changes to the selection process due to the pandemic.

Education and achievement

Current education status (as per Wave 2) and current/last school (as per Wave 1). Those currently attending school/6th form college were asked how much they agreed [5 point Likert scale Strongly Disagree to Strongly Agree] with statements on the fairness and accuracy of the proposed process of determining calculated grades in the absence of examinations, and if their school/college/uni was formally assessing work done since schools/unis closed or during the pandemic. Statements covered:

- I am confident in my teachers' abilities at grading and ranking students.
- My teachers do not know enough about me to grade and rank me accurately.
- In large schools/colleges, it is difficult to see how teachers can rank so many students.
- Teachers judging grades should take into account the fact that many students do not do well in mocks but then work hard and do well in exams.
- Teachers should find it easy to account for any special needs and reasonable adjustments a student has when judging grades.
- Teachers will find it difficult to provide objective unbiased judgements of their students' performance.
- Appeals against calculated grades are unlikely to be successful as they will only be my opinion against my teachers'.
- Employers and universities in the future will treat grades from 2020 differently compared to exam grades taken from other years.

Resources available and activity

Availability and use made of educational resources [Online teaching in real time using video; Online resources for home learning; Paper resources for home learning; Online exams/assessments that count toward your calculated grades/degree award; Online assessments that don't count towards your calculated grades/degree award; Pastoral support; Support with your university application], , preparations for university/medical school applications [Watching online lectures; Online private tutoring; Reading textbooks; Reading other books; Volunteering in a clinical environment; Volunteering in a non-clinical environment; Exam preparation; Talking to friends; Other; Not doing any preparation], and the amount of time they had spent on various activities [Reading about coronavirus/COVID-19; Phoning/texting/video calling your friends; Watching TV or videos; Gaming online with friends; Gaming alone; Reading for pleasure; Exercising; Other hobbies; Studying;

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Household chores/shopping for necessities; Caring for members of your household; Volunteering] on a typical day [Zero; 1- 10 mins; 11-30 mins; 31-60 mins; 1 to 2 hours; 2 to 4 hours; 4+ hours].

Self-reported measures of academic attainment (repeated from Wave 1) and admissions tests (repeated from Wave 2).

Psychological Factors

From Wave 1, the 15-item Big Five personality measure from *Understanding Society*.[12]

Socioeconomic factors

Self-reported occupation and education level of parent(s)/main carer(s) using the NS-SEC Analytic classes [2] as used in Wave 1.

Freetext

Free text responses to "any additional comments you wish to make about the questionnaire or selection of medical students: " and "These are unprecedented times. Please tell us about your hopes for now and the future, and tell us what inspires you."

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UK Medical Applicant Cohort Study

UK Medical Applicant Cohort Study: Questionnaire 1

Welcome to the UK Medical Applicant Cohort Study (UKMACS)

The UK Medical Applicant Cohort Study (UKMACS) is an academic research study about applying to medical school. In brief, we are inviting you to complete two questionnaires (one now, one in October) about applying to medical school. This questionnaire takes about 20 minutes to fill in. Everyone who completes both questionnaires will be entered into a prize draw to win an Amazon voucher.

The study findings will be used to help future students apply to medical school, and ultimately to ensure the NHS benefits from having the best doctors.

This study is NOT part of any medical school application process.

The information you give us will NOT be used to make any decisions about you that will affect your education or career.

Your information will ONLY be used for academic research.

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For more information, please click here to download the study Information Sheet. Please read it and talk about it with others if you want.
Contact study lead Dr Katherine Woolf and the UKMACS research team on medsch.choice@ucl.ac.uk if you have any questions.

The study is led by Dr Katherine Woolf at University College London (UCL), and funded by the National Institute for Health Research (NIHR) Career Development Fellowship (Grant Reference Number CDF-2017-10-008). The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care. The NIHR is the research arm of the National Health Service (NHS).

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Eligibility to take part in this study

This study is for people aged 16 or over, resident in the UK or Crown Dependencies, who are considering applying this year to study medicine in the UK.

1. Please select "Yes" to indicate you are aged 16 or older, resident in the UK (or Channel Islands/Isle of Man), and considering applying this year to study medicine in the UK. If you select "No" you cannot take part in this study. ✱ *Required*

- (•) Yes
- ( ) No

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Consent to take part in this study

Please answer these consent questions to confirm that you understand what the study is about, and agree to take part in it.

2. Please select “I consent” to each statement to show you understand and agree to taking part in the study. If you select "I do NOT consent" you may not be able to take part in the study.

	I consent	I do NOT consent
I understand my personal information will be kept private by the research team on password-protected computers or encrypted files at UCL, and will not be passed on to any commercial organisations. [‘Personal information’ means: name, contact details, UCAT or other test registration ID number, questionnaire answers.]	◉	○
I agree my questionnaire answers can be linked with other personal information about me and used only for academic research, as explained in the Information Sheet.	◉	○
I understand that taking part in this study is voluntary, and I can withdraw by contacting the research team within 1 month of submitting my questionnaire.	◉	○
I understand the benefits of taking part in the study. I understand that I will not benefit financially from taking part, aside from entering the prize draw.	◉	○
I understand the potential risks of taking part in the study and the support I can get if needed, including who to contact with questions or to make a complaint (see Information Sheet).	◉	○

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Contacting you

3. Are you happy to be invited to take part in further research? We will never pass on your contact details to commercial organisations.

- YES, I am happy to be contacted for future research.
- NO, do not contact me.

4. Would you like to be entered into the prize draw? More information on the prize draw here.

- YES, enter me for the prize draw and contact me if I win
- NO, do not enter me into the prize draw.

Please check that your contact details are correct, so we can let you know if you win the prize draw, and/or to invite you to take part in other research (if you agree). We will never pass on your details to commercial organisations.

5. Please check your contact email address is correct. If it is incorrect or if this box is empty, please type in your correct email address:

6. Please type in your mobile (cell) phone number:

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Your identification details

Please complete this section to enable the research team to use your survey responses as described in the Information Sheet. Remember, your information is kept confidential and stored securely.

Please check that your FULL NAME [first name(s) and surname] is in the boxes below. If it is incorrect or there is no name, please type in your FULL NAME.

7. First name: ✱ *Required*

8. Surname: ✱ *Required*

9. Please check your UCAT ID. If it is incorrect, please type in the correct ID number. If you have not registered with UCAT, please type 'none' in the box.

10. Please type your **date of birth** using the format DD (day) MM (month) YYYY (year). ✱ *Required*

(dd/mm/yyyy)

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Your identity

11. Which of the following best describes the gender you identify as? ✱ *Required*

11.a. If you selected Other, please specify:

12. Which of the following best describes your ethnic group? These categories are from the UK Census 2011.

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Choosing to study medicine and become a doctor.

13. The following list shows a number of reasons why a person might wish to become a doctor. Indicate for each one, how important it is to you:

	Not at all important	Not very important	Neither important or unimportant	Quite important	Very important
Desire to work in a challenging role under pressure	○	○	○	○	○
Being helpful to others and useful to society	○	○	○	○	○
Wanting an economically secure occupation	○	○	○	○	○
Wishing to express own values and interests	○	○	○	○	○
Opportunities to travel	○	○	○	○	○

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Your thoughts about a future medical career

14. Even if you have not decided on a medical career, please rate how much each of the following specialities appeals to you.

Anaesthetics	Please select
Emergency medicine	Please select
General Practice	Please select
Internal medicine (e.g. Cardiology, Neurology, etc.)	Please select
Laboratory medicine (e.g. microbiology, pathology)	Please select
Medical administration	Please select
Obstetrics / Gynaecology	Please select
Paediatrics and Child Health	Please select
Psychiatry and Mental Health	Please select
Public health/Community Medicine	Please select
Radiology/Radiotherapy	Please select
Research	Please select
Surgery (incl. Opthalmology)	Please select

15. Here is a list of places that people can work as a doctor. Please indicate how appealing or unappealing you find each one.

	Very appealing	Quite appealing	Neutral	Quite UNappealing	Very UNappealing
Where I live or grew up	○	○	○	○	○
In a city	○	○	○	○	○
In the countryside	○	○	○	○	○
Outside of the UK	○	○	○	○	○

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In an NHS practice	○	○	○	○	○
In a private practice	○	○	○	○	○
In a deprived area	○	○	○	○	○
In an affluent area	○	○	○	○	○
In the armed forces	○	○	○	○	○

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Applying to study medicine

16. Approximately how many people do you know who are considering applying to medical school this year? If you do not know anyone else applying to medical school please select 0.

17. Approximately how many people do you know who are working or training as doctors or medical students? If you do not know anyone working or training as a doctor or medical student please select 0.

18. Please tell us about all the courses or activities you have done that are relevant to applying to medicine (e.g. access to university programmes, widening participation/outreach programmes, summer schools, taster days, or work experience).
Please provide the name of the institution or organisation providing the activity. If you have not taken part in any such activities, please type 'none'.

19. How much do you agree or disagree with the following statements?

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
It does not matter which medical school I go to, so long as I get in.					

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People like me don't go to medical school.					
I find it difficult to choose between medical schools.					
I need more help and advice in choosing medical schools.					
I have access to all the information I require about medical schools.					
Most of my friends are planning to go to university.					

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Awareness of medical schools: A to C

There are over 40 UK universities offering medical degree courses. They are listed below.

We know this is a long list, but we would be very grateful if you could indicate for each medical school:

- Whether you are **aware it is possible** to study medicine there.
- If so, whether you are **considering applying** to study medicine there.

20.

	Not aware of	Aware of but not considering	Considering
Aberdeen	○	○	○
Anglia Ruskin	○	○	○
Aston	○	○	○
Barts and the London (Queen Mary, University of London)	○	○	○
Birmingham	○	○	○
Bradford	○	○	○
Brighton & Sussex	○	○	○
Bristol	○	○	○
Buckingham	○	○	○
Cambridge	○	○	○
Cardiff	○	○	○

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Awareness of medical schools: D to L

21. We would be grateful if you could indicate for each medical school whether you are **aware it is possible** to study medicine there, and if so, whether you are **considering applying** to study medicine there.

	Not aware of	Aware of but not considering	Considering
Dundee	○	○	○
Edge Hill	○	○	○
Edinburgh	○	○	○
Exeter	○	○	○
Glasgow	○	○	○
Hull York	○	○	○
Imperial	○	○	○
Keele	○	○	○
Kent and Medway (Canterbury Christ Church University)	○	○	○
King's College London	○	○	○
Lancaster	○	○	○
Leeds	○	○	○

Only

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Awareness of medical schools: L to Q

22. We would be grateful if you could indicate for each medical school whether you are **aware it is possible** to study medicine there, and if so, whether you are **considering applying** to study medicine there.

	Not aware of	Aware but not considering	Considering
Leicester	○	○	○
Liverpool	○	○	○
Manchester	○	○	○
Newcastle	○	○	○
Norwich (University of East Anglia)	○	○	○
Nottingham	○	○	○
Nottingham Lincoln	○	○	○
Oxford	○	○	○
Plymouth	○	○	○
Queen's, Belfast	○	○	○

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Awareness of medical schools: S to W

23. We would be grateful if you could indicate for each medical school whether you are **aware it is possible** to study medicine there, and if so, whether you are **considering applying** to study medicine there.

	Not aware of	Aware of but not considering	Considering
Sheffield	○	○	○
Southampton	○	○	○
St Andrews	○	○	○
St George's	○	○	○
Sunderland	○	○	○
Swansea	○	○	○
University College London (UCL)	○	○	○
University of Central Lancashire (UCLan)	○	○	○
Warwick	○	○	○

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Awareness of different medical degree types

The UK's medical schools offer four main types of medical degree course:

- Nearly all medical schools offer **Standard Entry** medical degree courses.
- Many medical schools offer **Graduate Entry** courses, for applicants with a university degree.
- Some medical schools offer courses with a **Preliminary or Foundation Year**, with an extra year for applicants with high grades who did not take the required science subjects.
- Some medical schools offer **Gateway** courses, with an extra year for applicants from groups who are under-represented in medicine.

24. Before filling in this questionnaire, were you aware of **Graduate Entry** medical degree courses (for applicants with a university degree)?

24.a. Are you considering applying for a **Graduate Entry** course (for applicants with a university degree)?

25. Before filling in this questionnaire, were you aware of medical degree courses with a **Preliminary or Foundation Year** (with an extra year for applicants with high grades who did not take the required science subjects)?

25.a. Are you considering applying to a medical degree course with a **Preliminary or Foundation Year** (with an extra year for applicants with high grades who did not take the required science subjects)?

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26. Before filling in this questionnaire, were you aware of **Gateway** medical degree courses (with an extra year for applicants from groups that are under-represented in medicine)?

26.a. Are you considering applying for a **Gateway** course (with an extra year for applicants from groups who are under-represented in medicine)?

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What are you looking for in a medical school?

27. People vary in what they are looking for in a medical school. Please choose UP TO FOUR reasons that might **attract** you to apply for a medical school. The reasons you select can relate to different schools and may be about the admissions process, the medical school location, reputation, or teaching, the university life offered, personal reasons, or something else. If you have more than four reasons, please select the most important four.

Please select no more than 4 answer(s).

- ☐ Admissions: I meet/am likely to meet the grade requirements
- ☐ Admissions: Right interview type for me (e.g. MMI, panel, group)
- ☐ Admissions: I have been guaranteed an interview
- ☐ Admissions: Takes student background into account in admissions
- ☐ Admissions: Uses BMAT
- ☐ Admissions: Uses UCAT
- ☐ Location: Close to home
- ☐ Location: Far from home
- ☐ Location: Like the local area
- ☐ Location: Affordable cost of living
- ☐ Personal: Recommended to go there
- ☐ Personal: Took part in widening participation/outreach activities there
- ☐ Reputation: High position in league tables
- ☐ Teaching: Has extra Gateway/Foundation Year
- ☐ Teaching: Right balance between science and patient contact
- ☐ Teaching: Right teaching style for me (e.g. PBL, tutorial)
- ☐ Teaching: Offers full body dissection
- ☐ Uni life: Ethnically and culturally diverse
- ☐ Uni life: Feel I would fit in
- ☐ Uni life: Good extra-curricular activities
- ☐ Uni life: Good night life
- ☐ Uni life: Good student satisfaction
- ☐ Uni life: Good student support
- ☐ Uni life: Liked it when I visited
- ☐ Uni life: Liked the prospectus/website

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- [ ] Uncertain
- [ ] Other

27.a. If you selected Other, please specify:

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What would put you off a medical school?

28. Please select UP TO FOUR reasons that would make a medical school UNATTRACTIVE to you (put you off applying to a school). The reasons you select can relate to different schools, and may be about the admissions process, the medical school location, reputation, or teaching, the university life offered, personal reasons, or something else. If you have more than four reasons, please select the most important four.

Please select no more than 4 answer(s).

- ☐ Admissions: I do not meet/am unlikely to meet the grade requirements
- ☐ Admissions: Wrong interview type for me (e.g. MMI, panel, group)
- ☐ Admissions: Does not take student background into account in admissions
- ☐ Admissions: Uses BMAT
- ☐ Admissions: Uses UCAT
- ☐ Location: Too close to home
- ☐ Location: Too far from home
- ☐ Location: Do not like the local area
- ☐ Location: Too expensive to live there
- ☐ Reputation: Too low in league tables
- ☐ Teaching: Wrong balance between science and patient contact
- ☐ Teaching: Wrong teaching style for me (e.g. PBL, tutorial)
- ☐ Teaching: Does not offer full body dissection
- ☐ Uni life: Not ethnically and culturally diverse enough
- ☐ Uni life: Think I would find it hard to fit in
- ☐ Uni life: Poor extra-curricular activities
- ☐ Uni life: Poor night life
- ☐ Uni life: Poor student satisfaction
- ☐ Uni life: Poor student support
- ☐ Uni life: Did not like it when I visited
- ☐ Uni life: Did not like the prospectus/website
- ☐ Uncertain
- ☐ Other

28.a. If you selected Other, please specify:

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If you could get in to any medical school

29. If you knew you could get into any medical school in the UK, which one would you choose?

29.a. What is your main reason for choosing that medical school? (please select one)

29.a.i. If you selected Other, please specify:

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Information and advice on choosing a medical school

People differ in how much information they look for before choosing a medical school. Some decide quickly, others want as much information as possible before deciding.

30. Below is a list of sources of information and advice that you might use to help you choose a medical school. For each source, please indicate whether you have used it or are planning to use it. If you are uncertain how to access a source, or know that you cannot access it, please select 'unavailable'.

	Unavailable	Have used	Planning to use	Not planning to use
Teacher(s) at my school/college.	○	○	○	○
Careers advisor(s) at my school/college.	○	○	○	○
Visitor(s) to my school/college (e.g. from a university).	○	○	○	○
People I know who are applying, or who recently applied.	○	○	○	○
Medical student(s) I know.	○	○	○	○
Non-medical university student(s) I know.	○	○	○	○
Online information or advice from current medical student(s).	○	○	○	○
My parent(s) or carer(s).	○	○	○	○
My sibling(s).	○	○	○	○
Family who are healthcare workers (e.g. doctors, nurses).	○	○	○	○
Other doctor(s) I know.	○	○	○	○
Advice from medical school admissions staff.	○	○	○	○
Conference or event about medicine.	○	○	○	○
Involvement with medical school outreach programme (e.g. attended summer school).	○	○	○	○

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University or Medical School social media account (Instagram, Facebook, twitter etc).				
University ranking/league table(s) (e.g. Times Higher Education Rankings).				
University comparison website(s) (e.g. Unifrog, Unistats, Medic Portal).				
University/medical school website and/or prospectus.				
Visit to the medical school.				
Work experience or voluntary work.				

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Alternative plans

31. If you apply but are not accepted for medical school this year, how likely are you to do each of the following?

	Definitely no	Probably no	Probably yes	Definitely yes
Apply to medical school in the UK again next year	○	○	○	○
Apply to medical school outside the UK	○	○	○	○
Apply to study dentistry	○	○	○	○
Apply to study another healthcare course	○	○	○	○
Apply to university to study a different science	○	○	○	○
Apply to university to study a non-science subject	○	○	○	○
Go travelling	○	○	○	○
Find a job	○	○	○	○

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Funding a medical degree

This section includes two questions about funding a medical degree. If you do not feel comfortable answering a question, please select "Rather not say".

32. Please rate how concerned are you that the following financial factors will be a problem for you if you go to medical school:

	Very concerned	Fairly concerned	Slightly concerned	Not concerned	Rather not say
Cost of tuition fees	○	○	○	○	○
Living costs such as rent, food travel etc.	○	○	○	○	○
Having to borrow money or getting into debt	○	○	○	○	○
Having to rely on family for money	○	○	○	○	○

33. How do you plan to fund your medical degree? Tick all that apply

- ☐ Working during holidays
- ☐ Working during study
- ☐ Sponsorship/bursary from current/prospective employer
- ☐ University or Medical School access funds/bursary/hardship funds
- ☐ Local funding (e.g. from Scotland, Wales)
- ☐ Student Loan
- ☐ Non-repayable contributions from parents/family/other
- ☐ Repayable loan from others
- ☐ Other forms of borrowing
- ☐ Personal savings/inheritance
- ☐ Rather not say
- ☐ Other

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33.a. If you selected Other, please specify:

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Your general approach to life

Below are some questions about your general approach to life. These questions are often used in surveys. Some questions may seem a little strange or repetitive, but please try to answer them. Don't think too hard before answering, just give the first answer that comes to mind.

34. For each of these four statements, please say how true they are of you:

	Not at all true	Hardly true	Moderately true	Exactly true
When I am confronted with a problem, I can usually find several solutions.	○	○	○	○
I can solve most problems if I invest the necessary effort.	○	○	○	○
I can remain calm when facing difficulties because I can rely on my coping abilities.	○	○	○	○
I can usually handle whatever comes my way.	○	○	○	○

The following questions are about how you see yourself as a person. Please select the number which best describes how you see yourself, where 1 means does not apply to me at all and 7 means applies to me perfectly.

35. I see myself as someone who...

	1=Does not apply to me at all. 7=Applies to me perfectly.						
	1	2	3	4	5	6	7
is sometimes rude to others	○	○	○	○	○	○	○
does a thorough job	○	○	○	○	○	○	○
is talkative	○	○	○	○	○	○	○
worries a lot	○	○	○	○	○	○	○
is original, comes up with new ideas	○	○	○	○	○	○	○

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has a forgiving nature	○	○	○	○	○	○	○
tends to be lazy	○	○	○	○	○	○	○
is outgoing, sociable	○	○	○	○	○	○	○
gets nervous easily	○	○	○	○	○	○	○
values artistic, aesthetic experiences	○	○	○	○	○	○	○
is considerate and kind to almost everyone	○	○	○	○	○	○	○
does things efficiently	○	○	○	○	○	○	○
is reserved	○	○	○	○	○	○	○
is relaxed, handles stress well	○	○	○	○	○	○	○
has an active imagination	○	○	○	○	○	○	○

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Your education

Please type in the full name and first part of the postcode of the school or college you are currently attending. If you are not at school or college, please type in the details of your last school/college.

36. Name of school/college (e.g. St Mary's C of E School, Kilburn):

36.a. First part of postcode of school/college (e.g. NW6):

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Your qualifications: GCSEs

37. Have you taken GCSEs (if you have taken iGSCEs, please select "no")?

- Yes
- No

38. Which grade did you get in GCSE Mathematics or equivalent? If you did not take GCSE Mathematics, please select n/a.

38.a. If you selected Other, please specify:

39. Which grade did you get in GCSE English Language or equivalent? If you did not take GCSE English Language, please select n/a.

39.a. If you selected Other, please specify:

40. How many GCSEs do you have at the following grades?

Grade 9	

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Grade 8	
Grade 7	
Grade 6	
Grade 5	
Grade 4	
Grade 3	
Grade 2	
Grade 1	
Grade A*	
Grade A	
Grade B	
Grade C	
Grade D	
Grade E	

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Your qualifications: University degree

41. Do you have or are you currently studying for a university degree?

- Yes
- No

41.a. If yes, please type in the degree type (e.g. BSc, MA), subject (e.g. Biomedical Science), institution (e.g. University of Portsmouth) and degree class (e.g. 2.1, pass). If you have more than one university degree, please provide details of each one.

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Your parent/carers occupations

This section has three questions about your parents' or carers' occupation(s). Your answers will help us understand whether family background affects medical school choices.

Please select the option(s) that best describes the occupation(s) of your parent(s)/carer(s).

If your parent(s)/carer(s) are not now working please choose what they were employed as.

If you are no longer living with your parent(s) or carer(s), or are unsure what their occupation is, please still answer these questions as best you can.

42. Occupation of Parent/Carer 1:

42.a. If you selected Other, please specify:

43. Occupation of Parent/Carer 2:

43.a. If you selected Other, please specify:

44. Is one or more of your parent(s)/carer(s) a medical doctor?

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Additional comments

45. What do you think is the most challenging aspect of applying to medical school?

46. What do you think is the most rewarding aspect of applying to medical school?

47. Please use this space for any additional comments you wish to make about the questionnaire:

Thank you for completing this questionnaire.

If you wish to go back and review your answers then please do so now.

When you click on the finish button below, your responses will be submitted to the UKMACS research team.

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Thank You

Thank you for completing the UKMACS questionnaire. Your responses will be used to help future students apply to medical school and ultimately to ensure the NHS benefits from having the best doctors.

You can tell other medical applicants about UKMACS by sharing this link to the website, where more information on the study can also be found:

https://ukmacs.wordpress.com/

If you have any questions about the study or this questionnaire, please contact the UKMACS Research Team medsch.choice@ucl.ac.uk

---

Key for selection options

11 - Which of the following best describes the gender you identify as?

Male
Female
Prefer not to answer
Other

12 - Which of the following best describes your ethnic group? These categories are from the UK Census 2011.

White - British
White - Irish
White - Gypsy or Irish Traveller
White - Other
Mixed/Multiple ethnic groups - White and Black African
Mixed/Multiple ethnic groups - White and Black Caribbean
Mixed/Multiple ethnic groups - White and Asian
Mixed/Multiple ethnic groups - Other
Asian/Asian British - Bangladeshi
Asian/Asian British - Indian
Asian/Asian British - Pakistani
Asian/Asian British - Chinese
Asian/Asian British - Other
Black/Black British - African
Black/Black British - Caribbean
Black/Black British - Other

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Arab
Any other ethnic group
Prefer not to say

14.1.a -

Very UNappealing
Moderately UNappealing
Moderately appealing
Very appealing
Uncertain

14.2.a -

Very UNappealing
Moderately UNappealing
Moderately appealing
Very appealing
Uncertain

14.3.a -

Very UNappealing
Moderately UNappealing
Moderately appealing
Very appealing
Uncertain

14.4.a -

Very UNappealing
Moderately UNappealing
Moderately appealing
Very appealing
Uncertain

14.5.a -

Very UNappealing
Moderately UNappealing
Moderately appealing
Very appealing
Uncertain

14.6.a -

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Very UNappealing
Moderately UNappealing
Moderately appealing
Very appealing
Uncertain

14.7.a -

Very UNappealing
Moderately UNappealing
Moderately appealing
Very appealing
Uncertain

14.8.a -

Very UNappealing
Moderately UNappealing
Moderately appealing
Very appealing
Uncertain

14.9.a -

Very UNappealing
Moderately UNappealing
Moderately appealing
Very appealing
Uncertain

14.10.a -

Very UNappealing
Moderately UNappealing
Moderately appealing
Very appealing
Uncertain

14.11.a -

Very UNappealing
Moderately UNappealing
Moderately appealing
Very appealing
Uncertain

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14.12.a -

Very UNappealing
Moderately UNappealing
Moderately appealing
Very appealing
Uncertain

14.13.a -

Very UNappealing
Moderately UNappealing
Moderately appealing
Very appealing
Uncertain

16 - Approximately how many people do you know who are considering applying to medical school this year? If you do not know anyone else applying to medical school please select 0.

0
1
2-5
6-10
11-20
20+

17 - Approximately how many people do you know who are working or training as doctors or medical students? If you do not know anyone working or training as a doctor or medical student please select 0.

0
1
2-5
6-10
11-20
20+

24 - Before filling in this questionnaire, were you aware of Graduate Entry medical degree courses (for applicants with a university degree)?

Yes
No
Uncertain

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25 - Before filling in this questionnaire, were you aware of medical degree courses with a Preliminary or Foundation Year (with an extra year for applicants with high grades who did not take the required science subjects)?

Yes
No
Uncertain

26 - Before filling in this questionnaire, were you aware of Gateway medical degree courses (with an extra year for applicants from groups that are under-represented in medicine)?

Yes
No
Uncertain

29 - If you knew you could get into any medical school in the UK, which one would you choose?

Aberdeen
Anglia Ruskin
Aston
Barts and the London School of Medicine (Queen Mary University of London)
Birmingham
Bradford
Brighton & Sussex
Bristol
Buckingham
Cambridge
Cardiff
Dundee
Edge Hill
Edinburgh
Exeter
Glasgow
Hull York
Imperial College London
Keele
Kent and Medway (Canterbury Christ Church University)
King's College London
Lancaster
Leeds
Leicester
Liverpool

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Manchester
Newcastle
Norwich (University of East Anglia)
Nottingham
Nottingham Lincoln
Oxford
Plymouth Peninsula
Queen's University, Belfast
ScotGEM (Dundee and St Andrews graduate entry course)
Sheffield
Southampton
St Andrews
St George's
Swansea
Sunderland
University College London
University of Central Lancashire
Warwick
Don't know

38 - Which grade did you get in GCSE Mathematics or equivalent? If you did not take GCSE Mathematics, please select n/a.

N/A
9
8
7
6
5
4
3
2
1
A*
A
B
C
D
E
Other

39 - Which grade did you get in GCSE English Language or equivalent? If you did not

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take GCSE English Language, please select n/a.

N/A
9
8
7
6
5
4
3
2
1
A*
A
B
C
D
E
Other

42 - Occupation of Parent/Carer 1:

Modern Professional (e.g. teacher, nurse, social worker, artist, police officer (sergeant or above))
Clerical & intermediate (e.g. secretary, call centre agent, nursing auxiliary, nursery nurse)
Senior managers or administrators (e.g. finance manager, chief executive)
Technical & craft (e.g. motor mechanic, plumber, printer, tool maker, gardener, train driver, fitter)
Semi-routine manual & service (e.g. postal / farm worker, security guard, catering/sales assistant)
Routine manual & service (e.g. HGV driver, cleaner, porter, sewing machinist, bar staff, labourer)
Middle or junior managers (e.g. office / retail / bank / restaurant / warehouse manager, publican)
Traditional professional (e.g. accountant, solicitor, medical practitioner, scientist, civil servant)
Never worked
Do not know
Information withheld
Other

43 - Occupation of Parent/Carer 2:

Modern Professional (e.g. teacher, nurse, social worker, artist, police officer (sergeant or

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above))
Clerical & intermediate (e.g. secretary, call centre agent, nursing auxiliary, nursery nurse)
Senior managers or administrators (e.g. finance manager, chief executive)
Technical & craft (e.g. motor mechanic, plumber, printer, tool maker, gardener, train driver, fitter)
Semi-routine manual & service (e.g. postal / farm worker, security guard, catering/sales assistant)
Routine manual & service (e.g. HGV driver, cleaner, porter, sewing machinist, bar staff, labourer)
Middle or junior managers (e.g. office / retail / bank / restaurant / warehouse manager, publican)
Traditional professional (e.g. accountant, solicitor, medical practitioner, scientist, civil servant)
Never worked
Do not know
Information withheld
Not applicable
Other

44 - Is one or more of your parent(s)/carer(s) a medical doctor?

Yes, one is a medical doctor
Yes, both are medical doctors
No
Rather not say

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UK Medical Applicant Cohort Study: First Follow-up Questionnaire

Welcome to the UK Medical Applicant Cohort Study First Follow-up Questionnaire

Thank you for continuing to participate in The UK Medical Applicant Cohort Study (UKMACS), an academic research study about applying to medical school. Your help in answering this first follow-up questionnaire is essential to the research. After completing this questionnaire you will be entered into a prize draw to win an Amazon voucher (one of either 2 prizes of £500, 50 prizes of £50, or 250 prizes of £5).

The study findings will be used to help future students apply to medical school, and ultimately to ensure the NHS benefits from having the best doctors.

This study is NOT part of any medical school application process.

The information you give us will NOT be used to make any decisions about you that will affect your education or career.

Your information will ONLY be used for academic research.

For more information, please click here to download the study Information Sheet. Please read it and talk about it with others if you want. Contact study lead Dr Katherine Woolf and the UKMACS research team on medsch.choice@ucl.ac.uk if you have any questions.

The study is led by Dr Katherine Woolf at University College London (UCL), and funded by the National Institute for Health Research (NIHR) Career Development Fellowship (Grant Reference Number CDF-2017-10-008). The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care. The NIHR is the research arm of the National Health Service (NHS).

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Contacting you

Please check your FULL NAME is correct. Type in the box to correct any errors: ✱ *Required*

Please check your email address is correct (type in the box to correct any errors): ✱ *Required*

Please enter a valid email address.

Please check your mobile (cell) phone number is correct. If it is incorrect or if this box is empty, please type in your correct number:

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Applying to medical school

Did you apply in 2019 to study medicine in the UK? * *Required*

- Yes
- No

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Reasons for not applying to medical school in 2019

Please tell us why did you not apply in 2019 to study medicine in the UK? *Please select all that apply*

- ☐ No longer want to study medicine or be a doctor
- ☐ Admission test scores too low (UCAT/BMAT/GAMSAT)
- ☐ Actual or predicted grades too low (e.g. A-levels/equivalent)
- ☐ Lacking work experience required
- ☐ Too expensive
- ☐ Family or other commitments
- ☐ Applied for medicine outside the UK
- ☐ Other

If you selected Other, please specify:

How likely are you to apply to study medicine in the UK in the future?

- ○ Very likely
- ○ Quite likely
- ○ Neither likely or unlikely
- ○ Quite unlikely
- ○ Very unlikely

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Future plans

Have you applied to university this academic year?

- Yes, I applied by the Oct 2019 UCAS deadline
- Yes, I applied by the Jan 2020 UCAS deadline
- No, but I plan to apply by the Jan 2020 UCAS deadline
- No, but I plan to apply by July 2020
- No, I am not applying this academic year
- Other

If you selected Other, please specify:

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Your university choices

Please indicate which universities and courses you have applied to or are planning to apply to, in order of preference where possible. For the course, please type in either the UCAS course code (e.g. A100, B900) or the course name (e.g. Standard Entry Medicine, Biomedical Science).

	University name	Course
1st Choice		
2nd Choice		
3rd Choice		
4th Choice		
5th Choice		

Have you applied directly (outside of UCAS) to study medicine at the University of Buckingham for entry in 2020?

- ○ No
- ○ Yes, I have applied
- ○ Yes, I am planning to apply

Have you applied, or are you planning to apply to study medicine outside of the UK for entry in 2020?

- ○ No
- ○ Yes, I have applied
- ○ Yes, I am planning to apply

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Reasons for your university choices

Think about your 1st and 2nd preference UCAS choices. For each one, please select up to four reasons that you chose it.

	1st choice	2nd choice
Reason 1	Please select	Please select
Reason 2	Please select	Please select
Reason 3	Please select	Please select
Reason 4	Please select	Please select

Think about your 3rd, 4th preference UCAS choices. For each one, please select up to four reasons that you chose it.

	3rd choice	4th choice
Reason 1	Please select	Please select
Reason 2	Please select	Please select
Reason 3	Please select	Please select
Reason 4	Please select	Please select

Think about your 5th preference UCAS choice. Please select up to four reasons that you chose it.

	5th choice
Reason 1	Please select
Reason 2	Please select
Reason 3	Please select
Reason 4	Please select

If you selected Other for any of your preferences, please type the reason(s) in the box, specifying which preference you are referring to:

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Using information to choose which medical school(s) to apply to

People differ in how much information they look for before choosing a medical school. Some decide quickly, others want as much information as possible before deciding.

Below is a list of sources of information and advice that you might use to help you choose a medical school. For each source, please indicate whether you used it, and if so how helpful or unhelpful it was in making your choices. Even if you have not applied to medicine this year, please try to answer this question.

	Did not use	Used: Very unhelpful	Used: Slightly unhelpful	Used: Neutral	Used: Slightly helpful	Used: Very helpful
Teacher(s) at school/college.	☐	☐	☐	☐	☐	☐
Careers advisor(s) at my school/college/uni.	☐	☐	☐	☐	☐	☐
Visitor(s) to school/college (e.g. from a university).	☐	☐	☐	☐	☐	☐
People I know who are applying, or who recently applied.	☐	☐	☐	☐	☐	☐
Medical student(s) I know.	☐	☐	☐	☐	☐	☐
Non-medical university student(s) I know.	☐	☐	☐	☐	☐	☐
Online information or advice from current medical student(s).	☐	☐	☐	☐	☐	☐
My parent(s) or carer(s).	☐	☐	☐	☐	☐	☐
My sibling(s).	☐	☐	☐	☐	☐	☐
Family who are healthcare workers (e.g. doctors, nurses).	☐	☐	☐	☐	☐	☐
Other doctor(s) I know.	☐	☐	☐	☐	☐	☐
Advice from medical school admissions staff.	☐	☐	☐	☐	☐	☐
Conference or event about medicine.	☐	☐	☐	☐	☐	☐
Involvement with medical school outreach programme (e.g. attended summer school).	☐	☐	☐	☐	☐	☐
University or Medical School social media account (Instagram, Facebook, twitter, etc).	☐	☐	☐	☐	☐	☐
University ranking/league table(s) (e.g. Times Higher Education Rankings).	☐	☐	☐	☐	☐	☐
University comparison website(s) (e.g. Unifrog, Unistats, Medic Portal).	☐	☐	☐	☐	☐	☐
University/medical school website and/or prospectus.	☐	☐	☐	☐	☐	☐
Visit to the medical school.	☐	☐	☐	☐	☐	☐
Work experience or voluntary work.	☐	☐	☐	☐	☐	☐

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Challenges of the medical school application process

The following is a list of aspects of the medical school application process that people often find challenging. Please rate how easy or difficult you found each one. Even if you have not applied to medicine this year, please try to answer this question.

Please don't select more than 1 answer(s) per row.

	Very easy	Quite easy	Neither easy nor difficult	Quite difficult	Very difficult	Not applicable
Preparing for admissions tests	☐	☐	☐	☐	☐	☐
Gaining work experience	☐	☐	☐	☐	☐	☐
Writing a personal statement	☐	☐	☐	☐	☐	☐
Keeping up with commitments (e.g studies, family)	☐	☐	☐	☐	☐	☐
Preparing for interviews	☐	☐	☐	☐	☐	☐
Getting the required grades	☐	☐	☐	☐	☐	☐
Getting support (e.g. from family, teachers)	☐	☐	☐	☐	☐	☐
Finance (e.g. for open days, tests, conferences)	☐	☐	☐	☐	☐	☐
Choosing which medical schools to apply to	☐	☐	☐	☐	☐	☐
Applying by the early deadline	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐

If you selected Other, please specify:

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Your educational qualifications

Please tell us about the A levels, Scottish Highers or equivalant qualifications you are currently taking and/or have already taken. For each qualification, please indicate the qualification type, subject, grade (predicted or achieved), and the year in which you are expected to achieve/achieved the qualification.

	Qualification type	Subject	Predicted grade	Achieved grade	Year
1	Please select				
2	Please select				
3	Please select				
4	Please select				
5	Please select				
6	Please select				
7	Please select				
8	Please select				

Are you ...? (please select one) ✱ *Required*

- ○ currently studying at school/6th form college
- ○ on a 'gap' year after school/6th form
- ○ a university graduate
- ○ currently studying for a degree
- ○ Other

If you selected Other, please specify:

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Your degree(s)

Please type in the degree(s) you are studying for and/or have achieved. For each, please include the degree type, university, course, and year achieved/expected (e.g. "BSc Biological Sciences Durham expected 2020").

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Admission tests: UCAT

Did you take the UCAT (University Clinical Aptitude Test) in 2019? * *Required*

- Yes
- No

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UCAT scores

Please check your UCAT ID number is correct. If it is incorrect or the box is blank, please type in the correct UCAT ID number.

What was your total UCAT score and your score on each UCAT subsection (please type)? *If unsure, type "unsure". If you have taken UCAT more than once, please give your most recent scores.*

	Score
Total UCAT score	
Verbal Reasoning	
Decision Making	
Quantitative Reasoning	
Abstract Reasoning	
Situational Judgement	

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Admissions tests: BMAT

Did you take the BMAT (BioMedical Admissions Test) in 2019?

- Yes
- No

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BMAT scores

Please type in your BMAT ID number.

What was your score on each BMAT subsection (please type)? If you have taken BMAT more than once, please give your most recent scores. If you did not take the test, please type "na". *If unsure or unknown please type "unsure".*

	Score
Section 1	
Section 2	
Section 3	

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Admissions test: GAMSAT

Did you take the GAMSAT (Graduate Medical School Admissions Test) in 2018 or 2019?

- Yes
- No

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GAMSAT scores

Please type in your GAMSAT ID number.

What was your overall GAMSAT score and your score on each GAMSAT section (please type)? If you have taken GAMSAT more than once, please give your most recent scores. *If you are unsure what your scores were, type "unsure"*

	Score
Overall score	
Section I	
Section II	
Section III	

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Additional Comments

Please use this space for any additional comments you wish to make about applying to study medicine or about this questionnaire:

Thank you for completing this questionnaire.

If you wish to go back and review your answers then please do so now.

When you click on the finish button below, your responses will be submitted to the UKMACS research team.

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Final page

Thank you for completing the UKMACS first follow-up questionnaire. Your responses will be used to help future students apply to medical school and ultimately to ensure the NHS benefits from having the best doctors.

More information on the study can also be found here: https://ukmacs.wordpress.com/

If you have any questions about the study or this questionnaire, please contact the UKMACS Research Team medsch.choice@ucl.ac.uk

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Key for selection options

11.1.a - 1st choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

11.1.b - 2nd choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction

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Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

11.2.a - 1st choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

11.2.b - 2nd choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

11.3.a - 1st choice

Admissions: I meet/am likely to meet the grade requirements

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Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

11.3.b - 2nd choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

11.4.a - 1st choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home

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Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

11.4.b - 2nd choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

12.1.a - 3rd choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact

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Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

12.1.b - 4th choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

12.2.a - 3rd choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction

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Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

12.2.b - 4th choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

12.3.a - 3rd choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

12.3.b - 4th choice

Admissions: I meet/am likely to meet the grade requirements

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Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

12.4.a - 3rd choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

12.4.b - 4th choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home

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Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

13.1.a - 5th choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

13.2.a - 5th choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact

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Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

13.3.a - 5th choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction
Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

13.4.a - 5th choice

Admissions: I meet/am likely to meet the grade requirements
Admissions: Right interview type for me (e.g. MMI, panel, group)
Admissions: I have been guaranteed an interview
Admissions: Takes student background into account in admissions
Admissions: Uses BMAT
Admissions: Uses UCAT
Location: Close to home
Location: Far from home
Location: Like the local area
Location: Affordable cost of living
Personal: Recommended to go there
Personal: Took part in widening participation/outreach activities there
Reputation: High position in league tables
Teaching: Has extra Gateway/Foundation Year
Teaching: Right balance between science and patient contact
Teaching: Right teaching style for me (e.g. PBL, tutorial)
Teaching: Offers full body dissection
Uni life: Ethnically and culturally diverse
Uni life: Feel I would fit in
Uni life: Good extra-curricular activities
Uni life: Good night life
Uni life: Good student satisfaction

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Uni life: Good student support
Uni life: Liked it when I visited
Uni life: Liked the prospectus/website
Uncertain

17.1.a - Qualification type
A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Other

17.2.a - Qualification type
A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Other

17.3.a - Qualification type
A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Other

17.4.a - Qualification type
A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma

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Extended Project Qualification
Other

17.5.a - Qualification type

A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Other

17.6.a - Qualification type

A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Other

17.7.a - Qualification type

A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Other

17.8.a - Qualification type

A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Other

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the NHS needs YOU
UK Medical Applicant Cohort Study

UKMACS-COVID19

UKMACS COVID-19 questionnaire

Due to the coronavirus/COVID-19 outbreak, UK school examinations have been cancelled and alternatives for selecting medical students are being considered.

The UK Medical Applicant Cohort Study (UKMACS) is an academic research study about applying to medical school. We want to find out how you, the applicants, are reacting to these changes and what you think medical schools should do to select applicants fairly.

This questionnaire needs to be answered by **20th April 2020**.
The turnaround is very tight as we want the questionnaire to assist medical schools in making decisions on selection.

We keep your information private and confidential.

No medical school, school or university will be able to identify you from the information you give us.

The information you give us will NOT be used to make any decisions about you personally that will affect your education or career.

You are being invited to complete this questionnaire because you agreed to be contacted by us when you registered to take UCAT in 2019 and/or because you have already responded to one or more of our questionnaires.

Please note that we are interested in responses from ALL applicants to medical school, whether or not you completed any of our previous questionnaires, whether or not you have been offered a place, and whether or not you were due to take A levels/Highers/equivalents this year.

Before you proceed to the questionnaire, please download the study Information Sheet and read it so you understand what the study is about and what taking part entails.

Contact study lead Dr Katherine Woolf and the UKMACS research team on medsch.choice@ucl.ac.uk if you have any questions.

The study is led by Dr Katherine Woolf at University College London (UCL), and funded by the National Institute for Health Research (NIHR) Career Development Fellowship (Grant Reference Number CDF-2017-10-008). The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.

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Eligibility to take part in this study

This study is for people aged 16 or over, resident in the UK or Crown Dependencies, who applied or were considering applying to study medicine in the UK for entry in 2020.

1. Please select "Yes" to indicate you are aged 16 or older, resident in the UK (or Channel Islands/Isle of Man). If you select "No" you cannot take part in this study. ✱ *Required*

- (•) Yes
- ( ) No

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Consent to take part in this study

2. Please select “I consent” to each statement to show you understand and agree to taking part in the study. If you select "I do NOT consent" you may not be able to take part in the study.

	I consent	I do NOT consent
I understand my personal information will be kept private by the research team on password-protected computers or encrypted files at UCL, and will not be passed on to any commercial organisations. [‘Personal information’ means: name, questionnaire answers, or any other information of yours we have such as contact details, UCAT or other test registration ID number.]	◉	○
I agree my questionnaire answers can be linked with other personal information about me and used only for academic research, as explained in the Information Sheet.	◉	○
I understand that taking part in this study is voluntary, and I can withdraw by contacting the research team by the 22nd April 2020.	◉	○
I understand the potential risks of taking part in the study and the support I can get if needed, including who to contact with questions or to make a complaint (see Information Sheet).	◉	○

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How medical schools should select applicants in the absence of exam grades

Medical schools are currently discussing how to select applicants without examination grades. The following questions ask about a range of ways being discussed as possibilities. Please let us know how fair or unfair you think each option is. None of these options has yet been decided upon. Your responses may have an influence upon what medical schools decide to do.

Some of these questions are specific to applicants still at secondary school and others are more relevant to mature/graduate entrants. Please answer all questions as far as possible. Later on in the questionnaire we will ask about your educational background so we can factor that into our analyses.

3. Here is a list of different measures that medical schools could use to decide whether or not to accept **applicants who currently hold an offer**. For each method, please indicate how fair it is to use to accept or reject current offer holders now that exams have been cancelled. ["Calculated grades' are grades produced by examination boards based on estimated grades and rankings produced teachers using information on a student's progress. The method has been described by Ofqual for England and is likely to be broadly similar elsewhere].

More info

	Unfair: should not be used	Quite unfair: avoid if possible	Quite fair: could be used in combination with other measures	Very fair: could be used alone	Uncertain
Predicted grades declared on UCAS application.	○	○	○	○	○
Calculated grades based on mock exams, coursework etc, and awarded in place of final examination grades.	○	○	○	○	○
Exam grades taken in September 2020 (if these take place).	○	○	○	○	○
AS level/Higher grades taken in Year 12 (S5).	○	○	○	○	○
Grades in end-of-Year 12 (S5) internal school exams.	○	○	○	○	○
GCSE/Nat5 grades.	○	○	○	○	○
Grades in other qualifications (e.g. Extended Project Qualification).	○	○	○	○	○
For those in their final year at university, marks earlier in their course.	○	○	○	○	○
Score at interview (including MMI, panel, and other types of interview).	○	○	○	○	○
UCAT score.	○	○	○	○	○
BMAT score.	○	○	○	○	○
GAMSAT score (for Graduate Entry students).	○	○	○	○	○
UCAS personal statement.	○	○	○	○	○
UCAS reference from teacher.	○	○	○	○	○
Work experience declared on UCAS form.	○	○	○	○	○
Attendance at university summer school/widening access programme.	○	○	○	○	○
Personal background (e.g. giving an advantage to students from under-represented groups).	○	○	○	○	○

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3.a. If you think there are other measures that could be used by medical schools to select applicants, please explain by typing in the box:

4. The cancellation of exams could potentially result in medical schools having many more students than they had planned for. In that situation, how acceptable or unacceptable are each of the following for medical schools to do:

	Completely unacceptable	Slightly unacceptable	Neutral	Slight acceptable	Completely acceptable
Accept all applicants whose calculated grades meet the conditional offer, although it could mean fewer resources per student.	○	○	○	○	○
Raise conditional offers for all applicants (e.g. an AAA offer becomes AAA*).	○	○	○	○	○
Raise conditional offers for applicants with lower interview scores and/or admissions test results.	○	○	○	○	○
Raise conditional offers for applicants from schools that tend to give higher predicted grades than their students typically achieve.	○	○	○	○	○
Ask some applicants with offers to volunteer to defer a year.	○	○	○	○	○
Require some applicants with offers to defer for a year.	○	○	○	○	○

4.a. If you have any other comments about how medical schools should cope with having many more students than places, please type it into the box:

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Looking to academic year 2020/2021

5. The coronavirus outbreak could have a knock-on effect for medical school selection in 2021. Please indicate how much you agree or disagree with the following statements about what medical schools should do in selection next year:

Current applicants re-applying next year should not be treated specially as that would not be fair for those applying for the first time next year.	Please select
Medical schools need to change their selection system for next year to give priority to applicants who are rejected this year.	Please select
Applicants with conditional offers rejected this year should automatically be given conditional offers next year regardless of any grades they are awarded this year.	Please select
Applicants rejected this year should be given special consideration when re-applying next year.	Please select
Applicants rejected this year should be required to take A-levels next year when they are running normally.	Please select
Applicants rejected this year should apply next year in the usual way and be considered with all other applicants.	Please select

6. It is possible that universities will not start the next academic year at the usual time in October 2020. In that case, which of the following should universities do?

- ○ Start the academic year on time using distance learning for as long as is necessary.
- ○ Defer the start of the academic year only when face-to-face teaching is possible.

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Calculated Grades

Now that examinations have been cancelled, students will be awarded 'calculated grades'. We are interested in your opinion on this. Before giving us your opinion, please read the information below about how calculated grades will be awarded.

For each examination a student takes:

- Teachers will judge the grade a student would have got had they had taken the examination (for example A*, A, B, etc); AND where that student ranks compared to other students also getting that grade. For example, a student judged to get a B in Chemistry will be compared to all others also judged to get a B in Chemistry, with all students being ranked in order (1st, 2nd, 3rd etc). Teachers will do this after 29th May 2020.
    - Judgements will NOT be based on predicted grades submitted to UCAS. Instead they will be based on evidence such as classwork, homework, mock examinations, coursework etc.
    - Judgements are not told to students and are passed confidentially to exam boards and Ofqual (the English exam regulator).
- A final grade is then awarded by exam boards and Ofqual, based on the teacher judgement and other information about the school/college a student attends, such as how students at that school performed in previous years.

There will be an appeals process and it is possible students will be able to sit the examinations when schools open again, although that is still uncertain.

Full details of the process here https://www.gov.uk/government/publications/gcses-as-and-a-level-awarding-summer-2020. Please note the process may differ outside of England. However if you are outside of England please answer the questions as if the same arrangements were to apply to the exams you are taking.

7. Please rate how much you *agree* or *disagree* with each of the following statements about using calculated grades:

More info

	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree
I would prefer not to have calculated grades at all and instead take A levels (or equivalents) in September.	☐	☐	☐	☐	☐
Overall, I would prefer to withdraw entirely from calculated grades and sit exams properly next summer.	☐	☐	☐	☐	☐
The process described above is the best way to be fair to most students.	☐	☐	☐	☐	☐
The process described above ensures that schools cannot get an advantage by giving all of their students high calculated grades.	☐	☐	☐	☐	☐
I feel confident this process will result in an accurate assessment of my true abilities.	☐	☐	☐	☐	☐
It is unfair to judge students based on the work they have done since schools/colleges closed due to coronavirus.	☐	☐	☐	☐	☐
It seems unfair that my attainment at GCSE (or equivalent) is not taken into account.	☐	☐	☐	☐	☐
Many students do better than their teachers expect; calculated grades cannot take that into account.	☐	☐	☐	☐	☐
My teachers should take into account the disruption caused by coronavirus when judging grades.	☐	☐	☐	☐	☐
Calculated grades should be based only on my performance, not on how previous students at my school performed.	☐	☐	☐	☐	☐

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8. Please rate how much you *agree* or *disagree* with each of the following statements about calculated grades:

	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree
I am confident in my teachers' abilities at grading and ranking students.	☐	☐	☐	☐	☐
My teachers do not know enough about me to grade and rank me accurately.	☐	☐	☐	☐	☐
In large schools/colleges, it is difficult to see how teachers can rank so many students.	☐	☐	☐	☐	☐
Teachers judging grades should take into account the fact that many students do not do well in mocks but then work hard and do well in exams.	☐	☐	☐	☐	☐
Teachers should find it easy to account for any special needs and reasonable adjustments a student has when judging grades.	☐	☐	☐	☐	☐
Teachers will find it difficult to provide objective unbiased judgements of their students' performance.	☐	☐	☐	☐	☐
Appeals against calculated grades are unlikely to be successful as they will only be my opinion against my teachers'.	☐	☐	☐	☐	☐
Employers and universities in the future will treat grades from 2020 differently compared to exam grades taken from other years.	☐	☐	☐	☐	☐

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Your application to university

9. **Did you apply to university this academic year (2019/2020)?** ✱ *Required*

- Yes applied to study medicine
- Yes applied but NOT to any medical courses
- No

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Your university choices

10. **Please indicate which universities and courses you have applied to, the response you have had from each, and type in any offers you have received.** For the course, please type in either the UCAS course code (e.g. A100, B900) or the course name (e.g. Standard Entry Medicine, Biomedical Science).

	University name	Course	What response have you had from this university?	Please type in your conditional offer (if applicable):
1st Choice			Please select	
2nd Choice			Please select	
3rd Choice			Please select	
4th Choice			Please select	
5th Choice			Please select	

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Communication from universities about changes to selection

For each of your choices: has this university been in touch with you about any changes they are making to their selection processes due to coronavirus/COVID-19?

11. Your Choice 1: has this university told you about any changes they are making to their selection processes due to coronavirus/COVID-19?

11.a. If you selected Other, please specify:

12. Your Choice 2: has this university told you about any changes they are making to their selection processes due to coronavirus/COVID-19?

12.a. If you selected Other, please specify:

13. Your Choice 3: has this university told you about any changes they are making to their selection processes due to coronavirus/COVID-19?

13.a. If you selected Other, please specify:

14. Your Choice 4: has this university told you about any changes they are making to their selection processes due to coronavirus/COVID-19?

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14.a. If you selected Other, please specify:

15. Your Choice 5: has this university told you about any changes they are making to their selection processes due to coronavirus/COVID-19?

15.a. If you selected Other, please specify:

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Your education and qualifications

To put into context the answers to the earlier questions it would be helpful if we knew more about your educational qualifications, both those you were due to take this year, and those you have taken in previous years.

16. Which one of the following best describes you? ✱ *Required*

- In Year 13 (S6) of school/college
- Was in Year 13 (S6) of school/college last academic year (2018/2019)
- In the final year of a degree programme
- Have a degree already
- Mature applicant without degree
- Other

16.a. If you selected Other, please specify:

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Your university

17. Please type in the name of your the university and course and subject you are currently studying for or have already gained (e.g. University of Bath, BSc Biomedical Science 2.1). If you have more than one degree, please type each in.

18. If you are currently in the final year of your degree, has your university told you how they will determine your final degree mark (please choose one)? If you are not in your final year please select 'Not applicable'.

- No
- Yes - please give details below
- Uncertain
- Other - please give details below
- Not applicable

19. If you selected Yes or Other to the question above, please give details in the box:

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Your school/college

Please type in the full name and first part of the postcode of the school or college you are currently attending. If you are not at school or college, please type in the details of your last school/college.

20. Name of school/college (e.g. St Mary's C of E School, Kilburn):

20.a. First part of postcode of school/college (e.g. NW6):

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Your qualifications

21. **Please tell us about the A levels, Scottish Highers or equivalent qualifications you are currently taking and/or have already taken (most A level students will have 3 subjects). For each qualification, please indicate the qualification type, subject, grade (predicted or achieved), and the year in which you are expected to achieve/achieved the qualification.**

	Qualification type	Subject	Predicted grade	Achieved grade	Year
1	Please select				
2	Please select				
3	Please select				
4	Please select				
5	Please select				
6	Please select				
7	Please select				
8	Please select				
9	Please select				
10	Please select				

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Admission tests: UCAT

In this section please give us some basic information about the various admissions tests such as UCAT, BMAT and GAMSAT that you may have taken.

If you are not certain of precise scores then put in approximate values.

22. Did you take the UCAT (University Clinical Aptitude Test) in 2019?

- Yes
- No

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UCAT score

23. **What was your total UCAT score and your score on each UCAT subsection (please type)?** *If unsure, type "unsure". If you have taken UCAT more than once, please give your most recent scores. Please estimate if you cannot remember your exact scores.*

	Score
Total UCAT score	
Verbal Reasoning	
Decision Making	
Quantitative Reasoning	
Abstract Reasoning	
Situational Judgement	

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Admissions tests: BMAT

24. Did you take the BMAT (BioMedical Admissions Test) in 2019?

- Yes
- No

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BMAT score

25. **What was your score on each BMAT subsection (please type)?** If you have taken BMAT more than once, please give your most recent scores. If you did not take the test, please type "na". *If unsure or unknown please type "unsure". Please estimate if you cannot remember your exact scores.*

	Score
Section 1	
Section 2	
Section 3	

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Admissions test: GAMSAT

26. Did you take the GAMSAT (Graduate Medical School Admissions Test) in 2018 or 2019?

- Yes
- No

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GAMSAT score

27. **What was your overall GAMSAT score and your score on each GAMSAT section (please type)?** If you have taken GAMSAT more than once, please give your most recent scores. *If you are unsure what your scores were, type "unsure". Please estimate if you cannot remember your exact scores.*

	Score
Overall score	
Section I	
Section II	
Section III	

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Impact of coronavirus/COVID-19 on your day to day life

It would be helpful to understand how applicants' lives and education are being affected by coronavirus/COVID-19 so medical schools can take this into account in selection if necessary. Please be assured all your answers are kept confidential.

If you want support dealing with this difficult time please contact the organisations listed here: https://www.nhs.uk/conditions/stress-anxiety-depression/mental-health-helplines/ or Childline on 0800 1111 https://www.childline.org.uk/.

28. On a typical day in the past five days, about how much time have you spent on the following?

	Time per day						
	Zero mins	1- 10 mins	11-30 mins	31-60 mins	1 to 2 hours	2 to 4 hours	4+ hours
Reading about coronavirus/COVID-19	○	○	○	○	○	○	○
Phoning/texting/video calling your friends	○	○	○	○	○	○	○
Watching TV or videos	○	○	○	○	○	○	○
Gaming online with friends	○	○	○	○	○	○	○
Gaming alone	○	○	○	○	○	○	○
Reading for pleasure	○	○	○	○	○	○	○
Exercising	○	○	○	○	○	○	○
Other hobbies	○	○	○	○	○	○	○
Studying	○	○	○	○	○	○	○
Household chores/shopping for necessities	○	○	○	○	○	○	○
Caring for members of your household	○	○	○	○	○	○	○
Volunteering	○	○	○	○	○	○	○

Your education during the coronavirus outbreak

29. If you are currently in education which of the following is your school/college/uni providing? For each activity, please indicate whether you have used it or not. If you have not used it, please tell us why not. If you are not currently in education, please leave these questions blank.

		If you have not used this, why not?
Online teaching in real time using video (e.g. Zoom, Skype, Teams).	Please select	Please select
Online resources for home learning (e.g. links to activities, apps).	Please select	Please select
Paper resources for home learning (e.g. workbooks).	Please select	Please select
Online exams/assessments that count toward your calculated grades/degree award.	Please select	Please select
Online assessments that don't count towards your calculated grades/degree award (e.g. quizzes).	Please select	Please select
Pastoral support (e.g. asking about mental health, providing mental health resources, checking on home circumstances and suitability for studying).	Please select	Please select

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Support with your university application (e.g. choosing between firm and insurance choices).	Please select	Please select
Other.	Please select	Please select

29.a. If you selected Other reasons then please specify here:

30. Will your school/college/uni formally assess you on any work you do or have done since schools/unis closed? For example, to inform your calculated grades or to determine your degree class, if applicable? If you are not currently in education please select 'Not applicable'.

- Yes
- No
- Uncertain
- Not applicable

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Preparing for medical school or university

31. Other than schoolwork or studying for your degree (if relevant) are you doing any preparation for medical school or university? Please select all that apply:

- ☐ Watching online lectures
- ☐ Online private tutoring
- ☐ Reading textbooks
- ☐ Reading other books
- ☐ Volunteering in a clinical environment
- ☐ Volunteering in a non-clinical environment
- ☐ Exam preparation (e.g. timed essays, past papers)
- ☐ Talking to friends
- ☐ Other
- ☐ Not doing any preparation

31.a. If you selected Other, please specify:

32. If you are not doing any preparation, please tell us why not (please select all that apply):

- ☐ I'm not going to university this year
- ☐ Don't have enough time
- ☐ Can't focus because too worried
- ☐ Don't have any resources
- ☐ I'm caring for others
- ☐ I'm unwell
- ☐ It's not necessary
- ☐ Other

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Your general approach to life

The following questions are about how you behave and how you see yourself as a person. Please select the response which best describes how you see yourself, where 1 means does not apply to me at all and 7 means applies to me perfectly. Don't think too hard before answering, just give the first answer that comes to mind.

33. *I see myself as someone who...*

	1=Does not apply to me at all. 7=Applies to me perfectly.						
	1	2	3	4	5	6	7
is sometimes rude to others	○	○	○	○	○	○	○
does a thorough job	○	○	○	○	○	○	○
is talkative	○	○	○	○	○	○	○
worries a lot	○	○	○	○	○	○	○
is original, comes up with new ideas	○	○	○	○	○	○	○
has a forgiving nature	○	○	○	○	○	○	○
tends to be lazy	○	○	○	○	○	○	○
is outgoing, sociable	○	○	○	○	○	○	○
gets nervous easily	○	○	○	○	○	○	○
values artistic, aesthetic experiences	○	○	○	○	○	○	○
is considerate and kind to almost everyone	○	○	○	○	○	○	○
does things efficiently	○	○	○	○	○	○	○
is reserved	○	○	○	○	○	○	○
is relaxed, handles stress well	○	○	○	○	○	○	○
has an active imagination	○	○	○	○	○	○	○

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Your parent/carers' occupations and education

This section has some questions about your parents' or carers' occupation(s) and your household. Your answers will help us understand how family background may affect entry to medical school.

Please select the option(s) that best describes the occupation(s) of your parent(s)/carer(s).

If your parent(s)/carer(s) are not currently working please choose what they were employed as.

If you are no longer living with your parent(s) or carer(s), or are unsure what their occupation is, please still answer these questions as best you can.

34. Occupation of Parent/Carer 1:

34.a. If you selected Other, please specify:

35. Occupation of Parent/Carer 2:

35.a. If you selected Other, please specify:

36. Does one or more of your parent(s)/carer(s) have a university degree?

37. Is one or more of your parent(s)/carer(s) a medical doctor?

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Your identification details

Please complete this section to enable the research team to use your survey responses as described in the Information Sheet. Remember, your information is kept confidential and stored securely.

Please type your FULL NAME [first name(s) and surname] in the boxes below.

38. First name:

39. Surname:

40. Please type your **date of birth** using the format DD (day) MM (month) YYYY (year).

(dd/mm/yyyy)

41. Which of the following best describes the gender you identify as?

41.a. If you selected Other, please specify:

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Additional comments

42. Please use this space for any additional comments you wish to make about the questionnaire or selection of medical students:

43. These are unprecedented times. Please tell us about your **hopes for now and the future**, and tell us what **inspires** you.

Thank you for completing this questionnaire.

If you wish to go back and review your answers then please do so now.

When you click on the finish button below, your responses will be submitted to the UKMACS research team.

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Thank You

Thank you for completing this questionnaire for UKMACS.

You can share this questionnaire with other medical applicants: **https://ucl.onlinesurveys.ac.uk/ukmacs-covid19-questionnaire**.

There is also more information on our website:https://ukmacs.wordpress.com/

If you have any questions about the study or this questionnaire, please contact the UKMACS Research Team medsch.choice@ucl.ac.uk

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Key for selection options

5.1.a -

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

5.2.a -

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

5.3.a -

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

5.4.a -

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

5.5.a -

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

5.6.a -

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

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10.1.c - What response have you had from this university?

Rejected without interview/MMI
Rejected after interview/MMI
Waiting to hear if I will be interviewed
Due to be interviewed
Interviewed and waiting to hear if I have an offer
Conditional offer (please type offer in box on the right)
Unconditional offer
Other

10.2.c - What response have you had from this university?

Rejected without interview/MMI
Rejected after interview/MMI
Waiting to hear if I will be interviewed
Due to be interviewed
Interviewed and waiting to hear if I have an offer
Conditional offer (please type offer in box on the right)
Unconditional offer
Other

10.3.c - What response have you had from this university?

Rejected without interview/MMI
Rejected after interview/MMI
Waiting to hear if I will be interviewed
Due to be interviewed
Interviewed and waiting to hear if I have an offer
Conditional offer (please type offer in box on the right)
Unconditional offer
Other

10.4.c - What response have you had from this university?

Rejected without interview/MMI
Rejected after interview/MMI
Waiting to hear if I will be interviewed
Due to be interviewed
Interviewed and waiting to hear if I have an offer
Conditional offer (please type offer in box on the right)
Unconditional offer
Other

10.5.c - What response have you had from this university?

Rejected without interview/MMI
Rejected after interview/MMI
Waiting to hear if I will be interviewed
Due to be interviewed
Interviewed and waiting to hear if I have an offer
Conditional offer (please type offer in box on the right)
Unconditional offer
Other

11 - Your Choice 1: has this university told you about any changes they are making to their selection processes due to coronavirus/COVID-19?

No
Yes, said changes will be happening but did not specify
Yes, specified changes
Other

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12 - Your Choice 2: has this university told you about any changes they are making to their selection processes due to coronavirus/COVID-19?

No
Yes, said changes will be happening but did not specify
Yes, specified changes
Other

13 - Your Choice 3: has this university told you about any changes they are making to their selection processes due to coronavirus/COVID-19?

No
Yes, said changes will be happening but did not specify
Yes, specified changes
Other

14 - Your Choice 4: has this university told you about any changes they are making to their selection processes due to coronavirus/COVID-19?

No
Yes, said changes will be happening but did not specify
Yes, specified changes
Other

15 - Your Choice 5: has this university told you about any changes they are making to their selection processes due to coronavirus/COVID-19?

No
Yes, said changes will be happening but did not specify
Yes, specified changes
Other

21.1.a - Qualification type

A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Degree
Postgraduate qualification
Other

21.2.a - Qualification type

A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma

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BTEC National Diploma
Extended Project Qualification
Degree
Postgraduate qualification
Other

21.3.a - Qualification type

A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Degree
Postgraduate qualification
Other

21.4.a - Qualification type

A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Degree
Postgraduate qualification
Other

21.5.a - Qualification type

A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Degree
Postgraduate qualification
Other

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21.6.a - Qualification type

A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Degree
Postgraduate qualification
Other

21.7.a - Qualification type

A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Degree
Postgraduate qualification
Other

21.8.a - Qualification type

A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Degree
Postgraduate qualification
Other

21.9.a - Qualification type

A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate

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Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Degree
Postgraduate qualification
Other

21.10.a - Qualification type

A-Level
AS level
Scottish Higher
Scottish Advanced Higher
International Baccalaureate
Welsh Baccalaureate
Cambridge Pre-U
Irish Leaving Certificate
European Baccalaureate
Access to HE Diploma
BTEC National Diploma
Extended Project Qualification
Degree
Postgraduate qualification
Other

29.1.a -

Used
Not used

29.1.b - If you have not used this, why not?

Not available
Not enough private/quiet space
Not enough time
Find it hard to focus
No access to computer/internet
Don't need to do this
Other reason(s)

29.2.a -

Used
Not used

29.2.b - If you have not used this, why not?

Not available
Not enough private/quiet space
Not enough time
Find it hard to focus
No access to computer/internet
Don't need to do this
Other reason(s)

29.3.a -

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Used
Not used

29.3.b - If you have not used this, why not?
Not available
Not enough private/quiet space
Not enough time
Find it hard to focus
No access to computer/internet
Don't need to do this
Other reason(s)

29.4.a -
Used
Not used

29.4.b - If you have not used this, why not?
Not available
Not enough private/quiet space
Not enough time
Find it hard to focus
No access to computer/internet
Don't need to do this
Other reason(s)

29.5.a -
Used
Not used

29.5.b - If you have not used this, why not?
Not available
Not enough private/quiet space
Not enough time
Find it hard to focus
No access to computer/internet
Don't need to do this
Other reason(s)

29.6.a -
Used
Not used

29.6.b - If you have not used this, why not?
Not available
Not enough private/quiet space
Not enough time
Find it hard to focus
No access to computer/internet
Don't need to do this
Other reason(s)

29.7.a -
Used
Not used

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29.7.b - If you have not used this, why not?

Not available
Not enough private/quiet space
Not enough time
Find it hard to focus
No access to computer/internet
Don't need to do this
Other reason(s)

29.8.a -

Used
Not used

29.8.b - If you have not used this, why not?

Not available
Not enough private/quiet space
Not enough time
Find it hard to focus
No access to computer/internet
Don't need to do this
Other reason(s)

34 - Occupation of Parent/Carer 1:

Modern Professional (e.g. teacher, nurse, social worker, artist, police officer (sergeant or above))
Clerical & intermediate (e.g. secretary, call centre agent, nursing auxiliary, nursery nurse)
Senior managers or administrators (e.g. finance manager, chief executive)
Technical & craft (e.g. motor mechanic, plumber, printer, tool maker, gardener, train driver, fitter)
Semi-routine manual & service (e.g. postal / farm worker, security guard, catering/sales assistant)
Routine manual & service (e.g. HGV driver, cleaner, porter, sewing machinist, bar staff, labourer)
Middle or junior managers (e.g. office / retail / bank / restaurant / warehouse manager, publican)
Traditional professional (e.g. accountant, solicitor, medical practitioner, scientist, civil servant)
Never worked
Do not know
Information withheld
Other

35 - Occupation of Parent/Carer 2:

Modern Professional (e.g. teacher, nurse, social worker, artist, police officer (sergeant or above))
Clerical & intermediate (e.g. secretary, call centre agent, nursing auxiliary, nursery nurse)
Senior managers or administrators (e.g. finance manager, chief executive)
Technical & craft (e.g. motor mechanic, plumber, printer, tool maker, gardener, train driver, fitter)
Semi-routine manual & service (e.g. postal / farm worker, security guard, catering/sales assistant)
Routine manual & service (e.g. HGV driver, cleaner, porter, sewing machinist, bar staff, labourer)
Middle or junior managers (e.g. office / retail / bank / restaurant / warehouse manager, publican)
Traditional professional (e.g. accountant, solicitor, medical practitioner, scientist, civil servant)
Never worked
Do not know
Information withheld
Not applicable
Other

36 - Does one or more of your parent(s)/carer(s) have a university degree?

Yes, one has a degree
Yes, both have degrees
No
Rather not say

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37 - Is one or more of your parent(s)/carer(s) a medical doctor?

Yes, one is a medical doctor
Yes, both are medical doctors
No
Rather not say

41 - Which of the following best describes the gender you identify as?

Male
Female
Prefer not to answer
Other

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