

Mentorship Handbook 2025-2026





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Welcome to In2MedSchool!

Dear Student,

Thank you for signing up to In2MedSchool. The mentoring scheme has been set up to support Year 12 and Year 13 students to give you a strong foundation for your medical school application. We are aware that many students lack exposure to opportunities due to various circumstances, with only 4% of UK doctors coming from working-class backgrounds and many students having English as an additional language (EAL). As such, we aim is to offer you encouragement, help and guidance through our voluntary initiative.

We are proud to have recruited over 2500 Mentors from all over the UK who all want to give back to the community. Upon signing up for the programme, you are going to be paired up with a Mentor, ranging from local medical students to professionals working in the medical field. We know that some of you may be in the process of applying already, whereas some may have just made the decision to consider Medicine as a career - well done on getting to this stage!

Your Mentor will offer you a friendly chat and advice where appropriate. The meetings are likely to cover a wide array of topics and are likely to entail:

- A check-in to see how you are doing with your studies.
- Providing encouragement along the way of your application process.
- Answering questions about medical school and life at WMS.
- Offering advice or discussing Mentor's experience with applying to Medicine.
- Providing support around BMAT/UCAT exams.
- Support with personal statement, work experience and interview preparation.

You will be emailed by your Mentor to arrange a meeting. The timing of the meeting is totally up to you and the Mentor, with the expectation of at least one meeting happening every half-term. These meetings are going to occur virtually due to Covid-19. The meetings are done on Zoom or Microsoft teams and are recorded. Your Mentor will send these recordings to the In2MedSchool President to be stored - they will not be viewed unless we believe there has been misconduct and your Mentor will only breach confidentiality if they have any concerns.

During the first meeting you are likely to focus on getting to know your Mentor, and they will try to find out what you would like to get out of this opportunity, and see what your knowledge about applying for Medicine is. Remember to keep in touch with your Mentor and to be proactive and honest when asking for help - this will ensure you are getting appropriate support and are getting the most out of this initiative.

If you have not done so previously, could please fill in the mentee registration form: https://bit.ly/I2MS-Mentee

Do not hesitate to contact your Regional Head with any questions

Very best of luck, The In2MedSchool Team



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Authors & Acknowledgements

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In2MedSchool Housekeeping

Key contacts

- Please contact your Regional Head with any queries relating to your mentoring experience or with any queries.
- For general queries or suggestions, please contact admin@in2medschool.com
- For events, please contact <u>events@in2medschool.com</u>

Contacting your mentor

Below is an email etiquette that you should have in mind with replying to Mentors:

- 1) <u>Replying to Mentors</u>: This is a reminder to please reply to your Mentor promptly or let them know if you will be taking a few days to email back, or perhaps if you usually do not check emails as often so that they are aware of what to expect.
- 2) <u>Meeting times</u>: Similarly, when replying about meeting times to Mentors, please try to be specific with timings that work well and do not. As you can all imagine, the Mentors are all quite busy and letting them know that you can make certain times, and letting them know you accept a select meeting time is important so that they do not wait for you on the day.

Email etiquette

- You must only use your school email address wherever possible to contact your Mentor. You must not attempt to contact them using any other method i.e. by calling them on their phone number or following them on their Instagram or other social media.
- Remember all emails/messages to be addressed either with 'Dear X' or "Hello X" and concluded 'Best wishes", "Thank you" etc.
- All requests to be made politely: 'I write to ask you if I could have some guidance with/if you could explain this task to me/when you would expect me to...'
- All emails to have a subject written in the subject line, such as 'Request for Guidance', "Meeting Availability".
- Understanding that emails will be responded to, but not instantly; your Mentors are helping other students and are busy with their university and it may take them some time to get to your request.
- Never use slang, informal language or any kind of impolite language such as swearing, insults or anything that may appear offensive.
- If you are worried about your safety or wellbeing, or you would like to raise a concern about another Mentee, email your Regional Head or the designated safeguarding point on contact, found on the In2MedSchool.com website so that a member of the In2MedSchool safeguarding team can help



Example email 1

Dear Brian,

Hope you are well.

Thank you for forwarding your suggested meeting times for our first session. I am available on the Wednesday (12/06) anytime between 2-3pm and Saturday (16/06) between 12-2pm. Could you please pick a time that is best suited to you and forward the meeting link once this has been set up?

Best wishes, Lee

Example email 2

Dear Gabriela,

Hope you have been well

I write to ask for some more guidance about the Essay Competition. I am not sure which sources I should use, can you give me some advice please?

Kind regards, Laura

Mentor allocation

Once you sign up, you will be matched to a Mentor and you will receive an email confirming and allocation and detailing your Mentor's name and email address.

Mentor and Mentee ID

You will be emailed a Mentee ID, in the format of two initials of your Mentor's medical school, followed by a number and letter S, for example for Warwick Medical School Mentee, this would be Wa1S.

- Please make a note of this number, as it will be required to book meetings and to communicate with the team should any queries arise.
- Please also confirm the ID of your Mentor, this will usually be the same number as your ID without the addition of the "S" for example, Wa1

First email contact and arranging a meeting

Your Mentor is responsible for making the first contact with you unless stated otherwise in the welcome email. They will introduce themselves and give a bit of their background in their first email.

We encourage virtual meetings and we expect you to have at least one each half-term, but we are mindful that some Mentees may need time to build up confidence towards a virtual meeting and are aware that your mentoring may start of as e-mail exchange initially. Please let your Mentor know about any doubts or preferences you may have.



Your first meeting will be virtual - remember to talk about your meeting preferences - some may choose to use video call, some may only want to use the voice function in a manner similar to a phone call.

- Check out Zoom and Teams meetings section for advice about arranging the first virtual meeting.
- You will also be informed of Mentor and Mentee ID which you may need to book a meeting or complete the Meeting Track- see below.

Zoom and Teams meetings

All meetings are due to occur virtually. The setup of the meetings may vary, with some schools giving specific instructions, while others let the Mentor and Mentee be in charge of setting up the meetings using Zoom or Microsoft Teams.

Your Mentor may use their personal Zoom or Microsoft Teams. If using personal account, the meetings are to be recorded and forwarded using the Meeting track. **Remember that all meetings must be recorded, irrespective of platform used.** Beware, you can't record on phones or iPad.

Resources

Please access the In2MedSchool website at https://www.in2medschool.com/ and the In2MedSchool YouTube channel https://www.youtube.com/@In2MedSchool/videos.



1) Introduction

Why Medicine?

A wise person once said... To put it into perspective, a doctor will spend more time at their job than with their spouse. So, the decision to apply to medical school should be treated with no less consideration than a proposal - an exciting but ultimately very committing step in life.

Hence 'Why Medicine?' is the pivotal question. One that you are certain to be asked at interview, but one which in many ways is the hardest to answer. Perhaps you're only just taking your first baby steps towards Medicine, perhaps you are already well into the swing of preparing your application. Whatever stage you are at, I encourage you to take a moment, take a deep breath and ask yourself: why do I want to do Medicine?

The NHS, and indeed any healthcare profession, is not an easy place to work. As I'm sure you're aware from various media outlets, the events of the Covid pandemic have introduced unprecedented levels of pressure on an already stretched service. Healthcare staff are experiencing high volumes of burnout, and often struggle with their physical and mental wellbeing. The previous generation of doctors was plagued with 72h shifts and working weeks averaging over 75h. This current generation struggles with providing continuity of care due to high staff turnover rates, a service that suffers and fears litigation more than ever before, and service provision being prioritised over training needs due to extreme demands.

This is the bad news, and as someone who has tutored / mentored in medical school admissions for almost a decade, I feel that this is not discussed often enough at the very beginning. Similarly, very few candidates at this stage (or indeed even as medical students) understand the shape of training in Medicine and career progression, which will ultimately have a huge impact on major life decisions.

All of this I'm bringing to your attention not to put you off applying for Medicine, but rather to make you aware - so that if you do take up this ultimately unique and exciting challenge (and I really hope you find that this is the right decision for you!), you can also prepare to look after yourself when times get rough. Sadly, I can promise you they will.

Over the years I have run a number of mock interviews, and my favourite question to ask a candidate is what their understanding of resilience is. The majority of answers I hear centre around concepts of 'pushing harder': working longer hours, being more dedicated and altruistic. These are all very noble thoughts and emotions, but they simply cannot last. Throughout years and years of studying, exams, jumping hoops anyone can get worn down – emotionally, mentally, physically. So really, resilience is the opposite – it is rest, recovery and reflection that allow rebound from adversity. I think of it as a spring, which when maintained well recoils to its neutral state with ease – but as you might recall, springs can be stretched to a point where they lose their shape and elasticity. Similarly, someone who is exhausted is unlikely to recover easily, and that kind of brittleness runs the risk of breaking.

We all have different set points, and it takes a degree of skill, time, and dedication to discover our own. We all tolerate and cope with challenge in different ways, and there is nothing wrong with that. There are tools, such as good time management (I know it gets toted a lot...), which are invaluable in finding that set point where each of us is comfortable.



You have probably experienced a variety amongst your peers - 'sprinters' who cram just a week before the exam and do well, and 'marathon runners' who burn through the material slow and steady. Wherever you stand on that spectrum, Medicine will certainly force you out of your comfort zone, but the more resilience you build through taking care of yourself, the easier you'll find to re-establish your balance.

I'd like to share with you the best bit of advice I was ever given: when trying to decide if a job is right for you, don't look at the job itself - rather, observe the people doing it. Do you want to be them in ten, twenty, thirty years down the line? When you get round to doing your work experience, treat it as an exploration. Don't just use it to tick boxes for your application, to give you something to talk about in your personal statement / interview - but rather, really explore Medicine. Talk to medical students, doctors, healthcare professionals and ask them what motivates them, what they like and dislike about their job, what they do outside of their work, and how they cope on rough days. If the answers you hear make you feel more enthusiastic, make you feel that it's a life you can adapt to and be content to lead, then you're on the right track.

The journey through Medicine is a very personal one, everyone's experience of it will be different. Only you can really know why Medicine is right for you. Wherever your travels take you, on behalf on the entire team at In2MedSchool, I wish you the very best of luck!

Dr Adrienn Gyori, BSc MBBS Anaesthetics Core Trainee Director of Academia 2022-2025



2) Work experience

Work experience, either paid or voluntary, that provides a service of care in health or a related field is crucial to a successful medical school application. Work experience allows you to develop important soft skills (eg. teamworking, communication, empathy), observe professional behaviours and explore your own motivation behind wanting to study medicine. Your work experience should feature in your personal statement, and you should expect questions about it in your medical school interview.

Having said that, work experience can be tricky and time-consuming to set up, and you should start the process sooner rather than later. Some ideas as to how to go about setting up work experience:

- Contact your local GP practice
- Contact the voluntary services at your local hospital / local medical school (as they often run their own outreach programmes)
- Contact your local hospice
- Contact your local foodbank
- Contact local charities working with vulnerable people / children / elderly (eg. Shelter, Age UK, GoodGym)
- Join St John Ambulance and become a first aider
- Talk family & friends in a healthcare field about shadowing opportunities

Further advice on work experience:

- British Medical Association: https://www.bma.org.uk/advice-and-support/studying-medicine/becoming-a-doctor/getting-medical-work-experience
- Medical Schools Council: https://www.medschools.ac.uk/studying-medicine/how-to-apply-to-medical-school-in-the-uk/work-experience
- NHS: https://www.healthcareers.nhs.uk/explore-roles/doctors/applying-medical-school/gaining-experience-medical-school
- Medify: https://www.medify.co.uk/admissions-guide/work-experience/medicine-dentistry-work-experience

For virtual work experience, check out:

- The Brighton and Sussex Virtual Medicine Experience: https://bsmsoutreach.thinkific.com/courses/VWE

Applying for Work Experience: The Art of Writing Letters

It is a very important skill to have good writing etiquette when inquiring about work experience. You need to ensure that you are:

- Formal
- Have good spelling, punctuation and grammar
- Outline clearly why you're applying for experience
- Persistent (!) but patient.

It's important to remember that people can get very busy and may often not reply. It is a good idea to resend emails/letters if you don't get a reply. Sometimes, there are just too



many applicants and they may not be able to offer you any experience specifically - but don't worry! There are lots and lots of different places to keep trying to try and get experience.

Experience is a very, very important part of your application for medicine as it will allow you to talk about the skills you have gained and developed during your interviews and when writing your personal statements.

Below is a quick guide to help guide you in writing work experience letters/emails:

What is a work experience letter?

A work experience letter is something you attach on your application for work experience, to let a company know you're interested in finding a placement with them. It's similar to a cover letter, although it will tend to focus more on your skills and education, rather than your previous experience (although it is possible to find work experience later on in your career).

What should a work experience letter include?

Although your work experience letter will always be unique to you and your situation, you should generally try to include the following:

- Who you are
- What kind of role you're looking for
- Your overall career goals (and why this position would help)
- Your skills (or previous experience, if you have any)
- Why you'd be suitable for the role

Opening the letter: who are you, and what are you looking for?

This section should be short, to the point, and most importantly - accurate. Always double-check to make sure you've got the right address and name, and don't forget to edit it for each organisation you send your letter to. Because (unsurprisingly), work experience letters addressed to the wrong person won't impress any employer.

And, as work experience placements are rarely formally advertised, it'll be up to you to make your own offer. So also give the employer a brief outline of who you are, what you're doing (e.g. at school, university, or working), and explain what you're looking for.

Main body: think before, during, after

- What are your aspirations / career goals? (E.g. if applying for work shadowing in A+E, this experience will allow you to gain insight into the life of an A+E doctor which you could be considering).
- Why are you suitable for this placement?
- What are your hobbies and interests?
- How will the experience help you? What do you hope to gain?

Closing the letter: conclude what you have discussed

• Close the letter summarising your suitability and interest



- Express your gratitude!
- Keep this short and concise
- Sign off with yours sincerely (if you know their name), yours faithfully (if you do NOT know their name), or kind regards

Writing a CV

When applying to university, you will be required to write a short personal statement about yourself detailing who you are and why you want to study the course you have chosen. For medicine specifically, the personal statement is orientated around why you want to be a doctor and what qualities, skills and experience you have that will make you a good doctor.

Thus, it would be a good idea to practise writing up a CV to include:

- Short personal statement
- Education and grades
- Work experience and voluntary work

Producing a CV in Year 12 would be very useful as it will allow you to attempt to focus on writing a concise piece of information about yourself and seeing how this will be presented to your Universities!

The other obvious advantage is that you have a CV ready and complete which you can use to apply for any jobs (paid or voluntary) and submit to hospitals, GP surgeries, care homes and other places where you can gain insightful work experience to help prepare your application!

Take a look at the 'CV Template' for an idea about how to organise your CV and write up a CV!

Making the most of your work experience

Brilliant, you've got your work experience organised! What next? To make the most of your work experience, treat each opportunity as a learning experience. Keep a log of each of the sessions you attend (see the template for work experience reflection at the end of this handbook), and keep in mind the reflective cycle.

Many candidates make the mistake of listing out the work experience / volunteering they'd done, without showing any learning from the experience. Structured reflection is a cornerstone of medical practice in the UK, one that you will have to undertake and demonstrate throughout your medical career: during your time at medical school, during foundation and specialty training and as a consultant / GP. Your interviewers want to see this being demonstrated.





Taking the Extended Project Qualification - should I do an EPQ?

With the "EPQ" acronym floating ominously around many of your schools, here is a summary about what the EPQ entails, some advice about its' value as an additional qualification, and reasons why you may choose to pursue it.

What is it?

Extended Project Qualification (EPQ) is an independent project which can be taken in addition to your A-levels. You have the choice of writing a 5,000-word essay or creating a "product" (e.g. an app, a piece of art, or hosting an event), with an accompanying report of 1,000-words. You are also expected to keep a logbook, which outlines your plans for the project, and helps you to reflect on your journey and consider ways to improve the project. Towards the completion of the qualification, you give an oral presentation where the audience (usually other students completing EPQ and some teachers) can ask you questions about your work. You will be assigned with a supervisor/mentor at your school, who will offer you support during the process.

When is it?

Some schools offer it in Year 12/S5, others in Year 13/S6 – speak to your teachers to find out more information. Most schools prefer students taking 3 A-levels, but EPQ falls outside of this and forms a great addition to your portfolio. Overall, it is estimated that the project should take around 120 hours total from start to finish (distributed over the academic year, with some students doing the bulk of their work during the holidays).



Who assesses it?

Likely one of the teachers will be an "assessor" marking the projects done by students within your school. The marks awarded will also be reviewed externally.

The project mark distribution varies between exam boards, but is roughly split into:

- 20% project planning and time management evidence
- 20% using resources and research skills evidence
- 40% Development of an idea and producing an outcome
- 20% Evaluation and presentation skills

Your assigned supervisor/mentor is also allowed to give you some guidance throughout the project i.e. support you with formulation of an appropriate question. However, this is an independent research task so there are limitations to this - you will be working on your own most of the time.

Why do it?

There are multiple reasons why EPQ is performed, which include:

- EPQ gives you an opportunity to engage with university-style learning and allows you to move outside of the scope of what is taught in the classroom. You will independently research a project, which can but does not have to relate to an Alevel subject you are studying. It will help to build on your organisation skills, time management, presentation skills, research, essay writing and teach you about referencing.
- By doing an EPQ, you will be able to demonstrate breadth of reading and independent research which will be extremely handy, whether for writing your personal statement or during your interviews. Many universities like the EPQ - it shows you can undertake independent research, which is necessary for all students at university and helps to bridge the gap between sixth form and degree-level study.
- If you are interested in an area, EPQ helps to evidence a genuine interest it shows passion and self-discipline. Choosing what you are interested in and/or curious about will also motivate you to complete the project.
- Although most Medical Schools do not consider EPQ for their offers, some universities go on to make special considerations. For example, Hull and York Medical School states the following: "If you are taking the EPQ alongside your A Levels, our offer is AABa. You will only be eligible to this offer if you choose Hull York Medical School as your firm choice in UCAS. This offer is not available if you are resitting A Levels or the EPQ.". In this instance, the AAA offer was reduced to AAB, with the caveat of receiving A(a) in the EPQ component.
- If you are looking to secure university options outside of Medicine, most universities go on to make special offers for EPQ students. For example, as of the time of writing this article, Birmingham University states the following (excluding Medicine and Dentistry): "At the University of Birmingham, applicants who take an EPQ and meet the offer criteria will be made the standard offer for their programme of choice; PLUS an alternative offer which will be one grade lower, plus a grade A in the EPQ",



while Bristol University may make two alternative offers. Overall, EPQ is equivalent to half an A level, and is worth more than an AS. With an EPQ you are able to achieve an A* grade, unlike with an AS level, so it can be worth more tariff points (valued at 50% of a full A Level in the UCAS tariff).

What should I be aware of?

- Beware that applying for Medicine means that any potential UCAS tariff points are
 not applicable as medical admissions teams do not use the tariff process when
 looking at applicants. However, admissions teams may use EPQ grades as part of
 forming a conditional offer, as in the example with Hull and York Medical School
 above.
- The project will be quite time consuming you will need to be good with your timemanagement while staying on top of the demands of you A-levels. Take the time to decide whether you want to take an additional commitment, alongside the need for work experience, volunteering, and entrance exams required for Medicine.
- A lot of people complete EPQ for the purpose of enhancing their skills and due to genuine interest in the subject if you are really interested in the topic, it may distract you from doing your normal A-level work.
- On the other hand, if you are not as interested in a topic, the quality of your project may suffer as you will need to commit a lot of research and reading time and you may feel less engaged with the topic.
- The mentors/supervisors can give you advice, but they are not permitted to interfere with your work you will be working independently a lot of the time and will need to find the motivation to get through the project.

Final thoughts...

EPQ is a fantastic opportunity and a highly valued qualification, although you should carefully consider choosing this qualification in addition to your A-levels. I had the opportunity to perform my own EPQ during sixthform and have thoroughly enjoyed my experience, however some of my peers have struggled with their own work due to some of the factors mentioned above. I knew that I wanted to work on my skills, and my reading as part of my EPQ helped me during my interview. However, the best piece of advice is to have a chat with people from the year above to get an idea about their experience as this may vary in each school.

If you are thinking about starting an EPQ or want to learn some of the skills mentioned above, then perhaps you'd like to participate in the annual In2MedSchool Essay Competition to get a feel for writing about a topic beyond your school curriculum.



3) Personal Statement

A new format for the Personal Statement for entry 2026 has been introduced, swapping the freeform essay format for three fixed white space questions. A few important things to note with this change:

- The overall character limit remains the same: 4,000 characters (including spaces)
- Each of the three sections must contain a minimum of 350 characters, and the rest you can allocate as you wish
- The content covered by the three questions is much the same as the old format, but organised a bit differently, and therefore much of the advice on writing a good PS is still applicable

The three questions are fixed and they are:

- 1. Why do you want to study this course / subject?
- 2. How have your qualifications and studies helped you prepare for this course or subject?
- 3. What else have you done to prepare outside of your education and why are these experiences useful?

Don't panic about the change in format. The personal statement is still your opportunity to demonstrate *why* you want to study Medicine, *what* you did to better understand the skills required, and *how* you arrived at the conclusion that you're an ideal candidate with the right qualities / attributes. The focus should be on your learning and reflections. Many personal statements fall foul of listing various medicine related activities (volunteering, work experience, etc), however fail to demonstrate any form of learning and only draw weak / generalised conclusions. Let's start with a bit of general advice:

Keep it unique to you. The interviewers will have seen hundreds of personal statements and interviewed dozens of students. Make sure your statement is as unique to you as possible. Stay truthful to your own ambitions. Don't lose sight that this is a 'personal' statement, and should therefore be a reflection of you.

Don't make things up. We can all agree that the personal statement does involve a lot of 'selling yourself', but make sure you can back up what you are saying. A lot of medical school interviews will ask you about specific experiences or hobbies that you mention in your statement. These questions could test if you have knowledge around the subject or activity. For example, if you say you have a keen hobby for scuba diving, would you be able to describe what happens during 'the bends'?

Avoid generalisations or clichés. While it's unavoidable to have overlap with other personal statements, consider your use of vocabulary. Phrases like 'passion since childhood' are commonly overused.

Avoid endlessly listing extracurricular activities. Extracurricular activities are an important part of your statement and demonstrate that you are an all-rounded student. Make sure that you tie these in with the overall narrative of your statement, rather than just listing them out of context. Saying 'I captained my school football team' means nothing to the interviewer if you do not explain it in the context of your personal statement. When writing your statement, be sure to include the activities that can demonstrate your soft skills. What did you learn from doing this particular activity? Will



it set you apart in your overall application? If the answer is no, then it is best not putting it in.

Refer to extra reading. If you have been particularly struck by an academic book or essay related to the subject, it may be a good idea to write a few lines about it. It does not need to say much, but writing a little bit about why you found it particularly interesting/surprising will give the reader an insight into how you think. This is also a good way to move interview topics towards an area you know about or are interested in, and that can only be a good thing!

Spelling and grammar. You will have all heard the advice from your peers about showing your personal statement to trustworthy friends and family. It is also a good idea to have your statement seen by someone who can really make it sparkle. The biggest help I received when writing my personal statement was from my school librarian. She was able to make the statement much more interesting to read and help the overall flow. This is really helpful especially if the personal statement seems a bit like a list.

Print out your statement before submitting. You would have read your statement countless times on your laptop and think you know it inside out. However, reading a UCAS Personal Statement back as a printed document can really help you hone your eye for detail.

The personal statement is your chance to showcase yourself. Don't chase a 'perfect' personal statement - prioritise your own personal experiences and motivation for applying to medical school. Read through your PS and be proud of what you have achieved up to now. Next we'll look at each of the three questions in turn and consider content, structure and efficiency.

Content

Question 1: Why do you want to study this course / subject?

This question is looking for:

- Your inspiration & motivation to study Medicine, including any key moments that led you to applying
- Skills & traits with appropriate examples to demonstrate that you are well suited to studying Medicine and becoming a doctor
- A demonstration of realistic insight & expectations of what studying Medicine / becoming a doctor means

Tips:

- Be authentic! Everyone's motivation is a result of their own experiences
- Avoid generalisations and use precise statements with examples specific to you
- Demonstrate what you've done to understand Medicine as a subject, the demands of the course and the life of a doctor



Question 2: How have your qualifications and studies helped you prepare for this course or subject?

This question is looking for:

- Academic achievements: mention relevant aspects of you subjects
- FPO
- Recognition you've received in the form of awards / prizes
- Exploration of Medicine (beyond the school curriculum!)
 - Medical books / journals / papers
 - Medical lectures / conferences / webinars / podcasts
 - Online courses (eg. MOOC, Coursera, FutureLearn)
 - Projects / essays / competitions
 - Clubs / societies related to Medicine (Does your school not have a Med Soc? Great, set one up!)

Tips

- Don't list, showcase!
- Make it relevant to Medicine: many personal statements make the mistake of veering off in the direction of 'just science'
- Use specific examples to demonstrate your learning
- Show that you have gone 'above and beyond' to explore Medicine: enthusiasm, independent motivation, intellectual curiosity
- Reflect on your learning

Question 3: What else have you done to prepare outside of your education and why are these experiences useful?

This question is looking for:

- Work experience: face-to-face (eg. hospital, GP, care home) or virtual programmes
- Volunteering / services in the community (eg. working with charities / local food bank / mentoring responsibilities)
- Jobs (if relevant)
- Carer responsibilities (if relevant)
- Extracurriculars (to a lesser extent)

Tips:

- Demonstrate your learning from your experiences
- Utilise the reflective cycle (more on this when we talk about structure)
- Demonstrate ability to cope with challenging situations
- Showcase you non academic skills, eg. communication, teamwork, problem solving, empathy
- Show that you are a well-rounded applicant



Structure

There is an old adage in Medicine: classify or die. It means that knowledge (or content) is not sufficient without a solid, logical framework to hang it on. Your personal statement is no different. A good flow to the answers that you provide for each of the three questions relies on a logical, structured approach. We will look at the following structures / frameworks that you can utilise when writing your answers:

- PEEL
- STAR
- The reflective cycle

Worth pointing out that you are likely to rely on these structures at all stages of your Medical career. Reflections are compulsory at every stage of medical training, starting as a medical student, and also feature heavily in core & specialty training interviews, GP / consultant post applications. Same goes for PEEL and STAR, they are universally recognised frameworks for constructing effective interview answers.

PEEL

Function

- To deliver organised, well-evidenced arguments / observations
- Can be used to demonstrate your exploration / interest in Medicine, particularly when answering Q1

P - point: the statement (eg. Medicine is a busy career)

E - evidence: the experience that led to the statement (eg. GP work experience)

E - explanation: how the evidence supports the statement (eg. importance of coping well with stress during extracurricular activities)

L - link: re-direct to original idea (eg. healthy work-life balance is important to prevent burnout in Medicine)

STAR

Function:

- Provide a clear, succinct narrative (in your PS every word counts!)
- Can be used to demonstrate skills / competencies beyond the curriculum, particularly when answering $\Omega 2/3$

S - situation: describe the background / context

T - task: what needed doing / what was the challenge

A - action: what you did, demonstrating what skills you used

R - results / resolution: what was the outcome



The reflective cycle

Function

- Demonstrate learning from experiences: reflection has the real potential to set you aside from other applicants, because it shows that you have insight into your own learning and development
- Showcase skills such as overcoming challenges
- Quality > quantity!



Description: don't get too bogged down - keep it a brief but informative description of the setting and participants of an encounter

Feelings: the mental / emotional response you had to the situation

Evaluation: the good / bad aspects of the encounter

Conclusion: learning points from the encounter

Action: the change you would implement in your actions / thoughts in future as a result of your learning experience



Efficiency

You cannot exceed 4,000 characters (spaces included) across your three answers. This translates into about 600 words in which you have to convince a complete stranger that you are the candidate they want for their medical school. Make every word count!

The drafting process:

- Organise your content into Q1/2/3: avoid duplication! Mind maps can be helpful.
- Write feely (don't worry about editing or the character count just yet), but focus on having a structured approach
- Rough edit: start cutting down to character count (this will feel ruthless, keep only the most essential content, and use rephrasing to get maximum content into minimum space)
- Fine edit: now that you're roughly at your character count, finetune to make sure that your writing isn't clunky and has a clear / logical flow
- Overview: read and re-read your answers (ask parents / teachers / friends to proofread for you)

Final thoughts

Very quick recap on things to avoid in your PS:

- 1. Too short (most candidates have the opposite problem!)
- 2. Lack of detail / use of generalised statements (the most common mistake!)
 - → Try instead: implementing structures such as PEEL, STAR and the reflective cycle
- 3. Negativity (you want to demonstrate unwavering enthusiasm)
 - → Try instead: rephrase negatives as positives, eg. as learning points
- 4. Using stock / cliché phrases
 - → Try instead: ask proofreaders for help: does your PS reflect you?
- 5. Demonstrating unrealistic expectations of medicine as a career
- 6. Being boastful / condescending in attitude
 - → Try instead: evidence-based self-evaluation
- 7. Discussing earnings
- 8. Being untruthful (in an interview you'd get caught out)
- 9. Using words / phrases you don't fully understand
 - → Try instead: elaborate on what you know with vocabulary that you are comfortable with (anything in your PS is fair game in an interview, so if you use medical terms / abbreviations, you absolutely have to know what they mean / stand for)

Be strategic. Some medical schools use the PS to select for interview, others will only read it once they have already selected for interview based on your UCAT score, predicted grades and references. If you feel that your personal statement is your forté, consider giving yourself the advantage by applying to medical schools that read your PS earlier rather than later in the selection process.

Logbook. As general advice, I would recommend keeping a logbook of any placements / activities you undertake (see the templates included at the end of the handbook), as this will help keep track of the nuances of your experience. This is very much a similar idea to the portfolio that you will be required to keep as a medical student / doctor, and the earlier you get in the habit of reflective practice, the better.



Qualities of a good doctor. Use your PS to demonstrate that you have the following skills:

- Communication
- Ability to work well as part of a team
- Strong work ethic
- Compassion / empathy
- Good listener
- Motivated to teach others
- Comfortable taking the lead
- Organisational & time management skills
- Academic diligence
- Stress management & building resilience
- Professionalism & integrity
- Genuine enthusiasm for Medicine

A note on Al...

- Copy-pasting from an Al platform = cheating
- Using ChatGPT / Al draft with your own input, experiences, writing = not cheating
- Read UCAS guidance on using Al
- Can be a useful tool to brainstorm / organise ideas
- Beware the pitfalls: generalisations, lack of originality, lack of structure / cohesion, not a true reflection of you, use of phrases / words you don't understand, not written in 'your style' (becomes evident at the medical school interview)

Personal statement templates & examples

Below are some example sentences / structures for your personal statement. They should serve more as guidance, rather than to be used verbatim, but can provide a starting point if you're struggling with writer's block. Remember to refer back to PEEL, STAR, and the reflective cycle.

Q1: introduction & motivation

Having experienced [...] made me explore [certain aspect of medicine]. Through learning / further reading / research about [...], I discovered [this interesting thing] and this has inspired me to want to study Medicine. I can see how this is applicable to the day-to-day lives of many patients struggling with [medical condition], which opened my eyes to [...].

My background has made me face [certain challenges], which I was able to apply to [certain aspect of Medicine]. Through this I learned that I have [skill set], which has set me up well to study Medicine.

Through my learning I discovered that I am [insert three qualities], which I believe are qualities of good doctors.



Q2: academic achievement

At school I learned about [certain thing] / participated in [certain event]. This made me interested in [...], and I furthered my knowledge with [...].

I excelled at [...] / presented a poster on [...] / participated in [academic society] / submitted an essay on [...] / won a prize for [...] / undertook experiments or research beyond the curriculum on [...] / wrote a blog on [...] / engaged virtually with [...] / attended online student conference or webinar on [...] / engaged with initiatives such as [...] / participated in teaching of others on [...].

Q3: work experience, volunteering, extracurricular activities

Insight into procedural skills. I observed a procedure / operation, and as a result I can appreciate the diligence and academic rigour that are needed for clinical excellence, given the degree of skill and level of responsibility. Then reflect.

Insight into soft skills / patient experience. I observed a consultation / MDT / discussion with patient in which [describe event]. I witnessed the excellent communication / empathy / candour / professional integrity. Then reflect. In the course of my volunteering, I was able to implement what I had learned through [example of skill in action] and build on it by [description of experience at volunteering].

Insight into challenges / medical ethics. I came across a challenging situation in which [describe conflict]. I understood from this how the doctors and patient's priorities might differ, and witnessed [describe the resolution of the incident]. This demonstrated to me the importance of medical ethics and professionalism at practice, and I furthered my knowledge through reading the GMC guidance on good medical practice.

I understand the importance of work-life balance and stress management given the demanding nature of Medicine. To this end I [do this activity], which impacts me positively [in this way] and helps me maintain my physical / mental health in a holistic manner.



Examples of personal statements from successful applicants

While these personal statements were written for the old format, they are excellent examples of showcasing standout candidates. The new format is not that different in what it's looking for, it's just structured slightly differently.

My enthusiasm for medicine has stemmed from an interest in genetics, developed during GCSE biology. This, coupled with a TED Talk on evolutionary medicine, propelled me to present an award-winning talk on heterozygote advantage. I outlined the benefits of being carriers of inherited recessive conditions, like cystic fibrosis. Applying this concept to my heritage led me to research the link between sickle cell anemia and malaria. The thought that a single defect in one's genome can impact their susceptibility to diseases, inspired me to study medicine.

To gain further insight into medicine, I undertook work experience at my local hospital's Oncology department. I witnessed a consultant break bad news regarding terminal renal cancer to a distressed woman. I admired the way the consultant mitigated some of her fears, an approach which I emulated when tutoring less able science students who needed extra support. The consultation was a paragon of patient-centered care; all the treatment options including surgery, radiotherapy and chemotherapy were discussed, ensuring patient autonomy. Viewing the MRI brain scan of a patient who had reported speech disturbance was intriguing. I expanded on this in AS psychology; I learnt that a lesion in Broca's area could cause expressive aphasia. This initial exposure to oncology motivated me to read 'When Breath Becomes Air' by Paul Kalanithi, which informed me of the holistic approach to cancer treatment. Enthused by this, I participated in The Cottrell Essay Prize arguing, "The physician should not treat the disease but the patient who is suffering from it". I underlined the importance of treating the biological, psychological and social comorbidities associated with a disease.

During my work experience at a GP surgery, the diversity of clinical presentations was apparent. I became aware of the intense time constraints faced by GPs, a challenge which was managed through focused and efficient history taking. This was reinforced when I completed the General Practice module on the BSMS virtual work experience. From a surgical perspective, I observed minor surgery involving a mole removal. I recognised that a high level of manual dexterity and precision underpins any successful surgery. Exploring primary healthcare unveiled the importance of patient confidentiality, urging me to join a medical ethics debate, using the 'Good Medical Practice' guidelines as a reference. This revealed the four ethical pillars of the NHS, which embody the values that must be adhered to by all healthcare professionals.

Prior to the Covid-19 pandemic, I volunteered at a care home for over six months, interacting with dementia patients and adults with learning difficulties. My role involved engaging residents in activities such as reading newspapers and playing board games. Through these activities I demonstrated empathy towards the residents, appreciating that daily routines which seem effortless for me, may be difficult for them, due to their neurodegenerative pathology. Whilst conducting surveys to monitor residents' satisfaction, I adapted my communication appropriately with both groups, learning that effective communication across a range of people is essential to medicine.

I understand that medicine is a demanding career, however my involvement in co-curricular activities will ensure a healthy work-life balance. Having completed grade 6 violin and played in orchestras, my passion for music allows me to relax during intense periods. Competing in national tournaments for chess and table tennis has instilled sheer tenacity, which will support the challenges faced in medicine. Leadership and teamwork skills have been ingrained through the DoE award, choreographing cultural dance routines for children and captaining the school cricket team.

I believe my academic and co-curricular achievements have equipped me with the scientific aptitude, compassion and commitment needed to thrive in this stimulating vocation.



Being from a country with a struggling national healthcare system whilst living in a progressive city has opened my eyes to the mortifying gap in healthcare opportunities for different socioeconomic groups. I would like to study medicine to improve the quality of life of patients from all different backgrounds. I believe that my avidness for sciences, keenness for lifelong learning and compassion for others makes me a good candidate.

As someone driven by academic excellence, I was awarded the AP scholar with honour award by Collegeboard and was the valedictorian. I was also a member of the "gifted and talented" students at school, in which I would research real-world scenarios beyond the syllabus and support struggling peers.

Recently, I enrolled in an online course offered by Harvard University on Bioethics and explored ethical cases pertaining to reproductive technology. One case was on genetic testing and how it can lead to terminating pregnancies to prevent births of fetuses with serious genetic diseases. This enlightened me on the importance of empowering women to make decisions regarding their own pregnancies.

As an intern, one of my most challenging moments was with a cancer patient undergoing anesthesia before a liver biopsy. This procedure was vital in terms of her prognosis if it did show a potential metastatic disease. She asked me to continue talking to her to distract her from her anxiety. At first I felt self-conscious about what to say given the gravity of the situation, but I eventually found the words to calm her down.

I shadowed specialist doctors as well and observed a multi-disciplinary team meeting, a laparoscopic cholecystectomy and different imaging modalities. In one cancer MDT meeting, the doctors discussed a patient's potentially cancerous mucocoele and if they should do CT scans, blood tests or measure tumor markers. I was impressed by the different specialists combining their unique skills and knowledge. The influx of information had left me in awe and I would reflect on the cases by researching them and writing reports. The doctors' perseverance in piecing together multiple treatment plans made the rigor of their jobs evident to me, but I believe that I have the resilience to face these challenges.

With my interest in global medicine, I wrote an essay on CRISPR gene editing potentially eradicating malaria by targeting the anopheles mosquito's genome. This won me a scholarship to attend the Immerse medicine program at Cambridge University. I presented my work on CRISPR alongside socioeconomic factors there and suggested that this could eradicate other deadly conditions such as Tay-Sachs.

For my gap year, I observed that online learning had created gaps in younger students' knowledge, so I offered tuition for AP Chemistry and Biology. I also signed up for the InvestIN Young Doctor Program to gain insight to the practical applications of medicine and volunteered to join the Pakistan Medical Center in which free healthcare is provided to financially struggling patients.

I previously volunteered with the Pakistan Association for breast cancer and diabetes awareness, which made me aware of how widespread these diseases were in my community, so I worked with student council members to educate my peers on recognizing symptoms and national screening programs.

I was elected student council representative for four years, participated in Model UN and was a finalist in speech competitions. These experiences boosted my confidence and helped me develop my leadership, team working and communication skills.

As the first woman in my family aspiring to study abroad who has been privileged with good quality education and healthcare, I am determined to work in a healthcare system such as the NHS that strives to provide patient-centred care rooted in evidence-based medicine.



4) UCAT

UCAT Universities

Please always keep up to date with which of the universities are using UCAT by visiting https://www.ucat.ac.uk/about-ucat/universities/

For UCAT timeline and test dates please visit: https://www.ucat.ac.uk/about-ucat/ucat-test-dates/

As this is the final year of the BMAT, which will no longer be offered in 2024, it is possible that all universities that were using the BMAT thus far, will transition to using the UCAT, but this information is yet to be confirmed for the 2025 entry.

You will immediate receive your UCAT score on the day of the exam. This means that you will have you UCAT score before you submit your UCAS application - be strategic! Read the universities' requirements / advice and follow it. For example, if a medical school states that they require minimum of 660 as average score on the UCAT for an applicant to be considered, don't apply there if your score is less than 660. Unfortunately, doing so leads to immediate rejection, and you will have wasted one of your UCAS choices

UCAT overview

Section	Number of questions	Time (UCAT)	Time (UCATSEN)
1. Verbal reasoning (VR)	44	1min:	1min 15s:
		instruction	instruction
		21min: test time	26min 15s: test time
2. Decision making (DM)	29	1min:	1min 15s:
		instruction	instruction
		31min: test time	38min 45s: test time
3. Quantitative	36	1min:	1min 15s:
reasoning (QR)		instruction	instruction
		24min: test time	30min: test time
4. Abstract reasoning	55	1min:	1min 15s:
(AR)		instruction	instruction
		13min: test time	16min 15s: test time
5. Situational judgement	69	1min:	1min 15s:
(SJ)		instruction	instruction
		26min: test time	32min 30s: test time

What makes the UCAT challenging?

- 1. Time pressured: you need copious practice to get good at pattern recognition.
- 2. Psychometric testing: not possible to rely on your pre-existing academic knowledge
- 3. Computer-based exam: questions and calculator are on screen, you have a pen and small white board to write on, but you can't cross out / circle / highlight as you would on a paper-based exam



UCAT scoring¹

Your UCAT score is adjusted based on the performance of others in your application cycle. So, it is possible to get some questions wrong and still get full marks for the section. Scores for the first four sections (VR, DM, QR, AR) range 300 - 900 per section, and UCAT scores are either stated as a total across the four section (out of 3600) or an average across the four sections (out of 900). Below scores are given in terms of averages across the four sections:

Low score: <610

Average score: 620 - 630 Good score: 640 - 670 High score: 680 - 720

Excellent score: 720 - 800 (difficult to achieve)

Outstanding score: >800 (very difficult to achieve, equates to about 80% correct)

The last section (SJ) is scored in terms of banding quartiles:

Band 1: top (best) quartile Band 2: second quartile Band 3: third quartile

Band 4: bottom (worst) quartile

No negative marking! Don't leave any questions unanswered - I guess with some chance of success is always better than a score of zero.

Section 1: Verbal Reasoning

VR questions test the ability to find relevant and analyse statements. VR is generally considered the hardest section of the UCAT and tends to score the lowest. Challenges of VR are:

- Not enough time to read the entire passage (some passages significantly longer than others!)
- Extreme time pressure to evaluate the question / statements
- No time to go back / check answers

Evaluating VR statements:

- True: matches the passage (including paraphrasing / inference)
- False: opposes something in the passage (including direct contradictions / torsions of truth using extreme statements eg. never / always)
- Can't tell: statement is entirely / partially outside the scope of the passage (cannot be evidenced true or false, not an opposite nor a match)

VR questions fall into two main categories: either identifying a given statement as 'True / False / Can't tell' based on the passage, or evaluating four individual statements and selecting one based on what the question is asking. The best approach with VR questions is:

¹ Medic Portal: UCAT scores. https://www.themedicportal.com/application-guide/ucat/ucat-scores/



- 1. Work backwards! It is a mistake to read the passage before the statement / question you will run out of time. Save time by always reading the question / statement before the passage.
- 2. Scan the passage for support. Timed practice is crucial, the more you can train your speedreading skills the better! Remember, it's not about reading the entire passage, but about identifying the relevant words / phrases.
- 3. Eliminate & select. Move on and don't linger this is uncomfortable, but ultimately necessary. In VR you have 30s per question, 2min per passage set, the pace is brutal, probably worse than any other exam you have sat before. Triage is crucial, and in your preparation identifying questions that on test day you would abandon is a vital strategy.

VR subtypes:

Subtype	Task	Tips
True / false / can't tell	Identify whether statements relating to the passage as true / false / unable to tell based on the information in the passage	- Scan for keywords, anything that stands out (numbers / dates / names in capital) - Key words may be repeated, try to scan the entire passage for the relevant information
Question + 4 statements	Select the statement that best answers the question (usually you are asked to pick the one that is 'most correct')	- First try to identify a key word in the question itself and scan the text accordingly - If this is not possible (open question - see below), identify keywords in the individual statements (but! very time consuming; best approach: eliminate one or two then guess and move on)
Inference	Identify the statement, which must be true based on the information presented in the passage	- Often paraphrased and drawing a conclusion from the information presented - Never assume more (eg. from pre-existing knowledge) - the information given is the limit - Understand what's happening in the passage, see the bigger picture (verbs make for good key words!)
Author questions	Identify the statement (opinion / conclusion) that the author of the passage would most likely agree with	- Similar to inference questions Sometimes presented as a negative, ie. what the author is least likely to agree with - Sometimes not possible to answer without reading the entire passage guess & move on
Open questions	Select the correct / incorrect statement(s) and answer a question that is too generic to contain any keywords	 Red flag for timing! Decide quickly whether to attempt or abandon the question If you attempt, you have to scan the text for individual keywords from each of the statements If you're tight on time, best abandon: guess and go



Negative questions	Identify the statement that opposes the passage / is outside the scope of the passage	- Incorrect answers match the passage, eliminate these
Difficult passages	Long / convoluted passages that can be paired with any subtype of questions	- Have a lower threshold for abandoning questions related to difficult passages - Even long / difficult passages should allow you to answer two of the associated questions in 30s each - Identify the type of question and if it's not favourable opt for guess & go

Practice scanning and pacing! If you're running out of time, you have to allow less time per question, make snap decisions whether to attempt or abandon. But! make sure you always mark an answer. A stab at the right answer is always better than a guaranteed zero.

Section 2: Decision Making

DM questions test the ability to make logical connections, deductions and inferences from data. Challenges of DM questions:

- There is quite a spectrum in questions, both in terms of type and complexity (we will outline the different subtypes below)
- Some questions require calculations / sketching as you already know, you won't have any paper to work from, and using the whiteboard and pen can be a time-consuming process
- Easy to lose track of time always keep an eye on the timer

The best approach with DM questions is:

- 1. Copy out codes exactly. Write out literal translation on whiteboard, keeping parts of message separate(comas) or grouped together (brackets).
- 2. Eliminate answers that do not have the same codes and groupings as original message. Compare answers to translated message and eliminate answers that miss out codes that are in the message, or that include elements that go beyond what is included in the message.
- 3. Check the operators to see if these create any new terms Some codes in the operator section are very powerful as they can create new terms. Check on these in table and any new tables. Most powerful are opposite, increase and negative.
- 4. Work with one part of the message at a time. Eliminate answers which are not a good fit for each part of the code to reveal best answer.
- 5. Check new words against the message and the table. Check all the answers are needed for the message, eliminate any unnecessary ones. Check new words against table to see if that can be represented with any existing codes. Then eliminate based on essence.



DM questions fall into two main categories:

1) Data synthesis: calculations, application of rules, pattern recognition

Subtypes: syllogisms, puzzles, probability questions

2) Data extraction: analysis & evaluation of data than can be presented in a textual / numerical / visual format

Subtypes: Venn diagram, strongest argument, inference

Subtype	Task	Tips
Syllogism	Based on a series of statements given in the question, determine if each of five conclusions is true / false	- Decide if a statement can be inferred based on the information provided - Don't limit yourself to only a fixed number of options unless the information explicitly says so (eg. Tim has books and Ben has books. This doesn't mean Ben and Tim have all the books.) - Some questions involve classifications and subgroups within groups - be careful of what is a subset of what (eg. a square is always a rectangle, but a rectangle isn't always a square)
Puzzle	Based on information provided, use deductive reasoning to draw a logical conclusion	Where possible, use abbreviations / tables / diagrams to keep track of the data - Sequencing: arrange a number of items in a specific (absolute / relative) order - Matching: pair items from two different categories - Spacial: arrange items in specific geometry (2D / 3D)
Probability	Select the best answer based on a short passage containing statistical information	These questions require a good working knowledge of percentages and basic probability calculations - simple probability - independent / dependent / mutually exclusive events - percentage increase /decrease
Venn diagram	Solve problems based on diagrams that have (unusual) overlapping shapes	There are two main types of Venn diagram questions: - Add up figures from several data categories based on the Venn diagram you're given - Given the data, select the correct Venn diagram
Strongest argument	Based on information provided, select one of four statements (x2 'yes, because' and x2 'no, because') that is most in line with the terms question	The correct answer will have the most direct link with the terms set out in the question; statements can introduce New information and this is acceptable as long as it's within the boundaries of the question - Strong arguments are evidence-based facts directly related to the terms of the question - Weak arguments are based on assumption / opinion / emotion



Inference	Select the statement	- A valid inference must follow the data accurately
	that must be true	- Avoid statements that contain synonyms /
	based on the data	paraphrasing
	given	- Make no assumptions beyond the data

Section 3: Quantitative Reasoning

QR questions require you to choose the relevant data from charts / graphs / tables, and to set up & solve calculations. Challenges of QR questions are:

- Data can be complicated, and hence finding the relevant bits is time consuming
- Some questions may give you multiple data sets with

Best approach with VR questions:

- 1. Work backwards! First read the question and identify the target.
- 2. Check the data. Once you have the target, identify which bits of the data are relevant.
- 3. Set up the calculation & solve it. Where possible use estimate and rounding, as it's a time pressured section and the on-screen calculator is of limited use.
- 4. Fliminate & select.

There are 3 subtypes of QR questions: estimation (rather than calculating), simple calculations, complex calculations

Subtype	Task	Tips
Estimation	Read & 'eyeball' the data, no actual Maths involved	Eyeball, estimate and eliminate: most efficient way to answer some questions will be not to calculate them - compare data and answers with a rough visual approximation to avoid unnecessary steps - estimate answers based on rounded figures helps to quickly move through section - eliminate wrong answer choices to reduce no of calculations necessary
Simple calculation	Use the data to set up calculations involving one or two steps	Most QR questions fall in this category - percentages - formulae - conversions
Complex calculation	Use the data to set up calculations involving more than two steps	Best leave complex calculations for last - mark a best guess answer, but also flag question and return to it once you have done the estimation / simple calculation questions (but always mark an answer in case you run out of time)



Useful Maths formulae:

Three-part formulae	
Percentage	(part / whole) x 100
Percentage change	(difference / original) x 100
Original value	final / (1 ± percentage change)
Speed	distance / time
Mean (= average)	(sum of terms) / (number of terms)
Percentages & proportions	
x %	x / 100
Rate of A to B (= proportion of A to B)	A:B=A/B
Geometry	
Area of quadrilateral	base x height
Area of triangle	½ x base x height
Perimeter of polygon	sum of its sides
Area of circle	πr^2 (r = radius, π = 3.14)
Circumference of circle	$2 \pi r (r = radius, \pi = 3.14)$
Volume of uniform solid	Area of base x height

Section 4: Abstract Reasoning

AR tests your ability to find patterns in shapes. The challenges of AR are:

- Spectrum of patterns from straightforward to complicated
- Needs plenty of practice to build reliable pattern recognition
- Fastest paced section of the UCAT no time to com back to questions, either you clock the pattern with minimal time to think, or you guess & go
- Avoid the following traps: starting with the test shape, matching rather than pattern finding, losing track of time (spending too long on single test shape / set)

Best approach with AR questions:

- 1. Ignore the test shape. The test shape does not help you find the pattern, it may not have the pattern of either set so looking at it is a waste of time. Marks come from finding patterns not matching, occasionally there will be overlap between the patterns for set A and B, a test shape may look similar to a box in one of the sets but actually fit the pattern for the other set.
- 2. Scan the sets starting with the simplest box. Distracting shapes are minimized, not all shapes in the boxes have to be of any relevance to the patterns. Shapes that are not part of the pattern are distractors. The box containing the fewest number of items will have the fewest distractors and thus will help you focus in on the true pattern. Even the simplest box contains the pattern, making the task more straightforward.



- 3. Identify the pattern there are five categories (SCANS). Patterns for set A and set B will usually use the same pattern category however the patterns do not necessarily have to be related.
 - **S**hape: a particular type of shape
 - Colour: white / black / grey / striped
 - **A**rrangement: the position of shapes within a box as well as relative to each other
 - **N**umber
 - **S**ize
- 4. Eliminate / select / move on. Spending too much time on one pattern means that you will run out of time and miss easy marks at the end of the section. Spend no more than 1 minute on each set. Take a guess and mark questions for review. Be ruthless in moving forward to finish the section.

There are four types of AR questions:

Subtype	Task	Approach
Type 1	Identify which set test shape belongs to	Presented with 2 sets of shapes, Set A & Set B, followed by 5 test shapes. Decide which set the test shapes fit into: Set A / Set B / neither. - Set A: test shape must fit the pattern of Set A exactly - Set B: test shape must fit the pattern of Set B exactly - Neither: three options when the correct answer is 'neither' 1) Test shape does not fit either Set A or Set B 2) Test shape only first part of the pattern 3) Test shape fits into both patterns
Type 2	Identify the sequence	Presented with a series of shapes. Select the next shape in the series out of 4 options.
Туре 3	Identify the impact of change	Presented with a statement involving a group of shapes. Determine which shape completes the statement based on change implemented.
Type 4	Identify which set a set of test shapes belongs to	Presented with 2 sets of shapes, Set A & Set B. Select which of 4 responses belongs to Set A or Set B.



Section 5: Situational Judgment Test

The SJT is different from the other four sections of the UCAT. It tests your ability to discern what factors are important and what behaviours are appropriate to maintain a high degree of professionalism applied to real-life medical / educational scenarios. In some ways, this is the section of the UCAT with the most direct applicability, and the SJT is a type of exam that recurs at various stages of medical training. For example, all medical students in their final year are required to sit a SJT, which contributes to their overall score when applying for foundation doctor jobs. Similarly, when applying for specialty training, many training programmes require candidates to sit the Multi-Specialty Recruitment Assessment (MSRA) – half of this exam is based on clinical knowledge, but half of it is SJT. Challenges of the SJT are:

- Very time pressured: limited time to read questions, often having to make snap decisions
- Unlikely to have time to review questions
- Last section of the exam: you're likely to be very tired at this point
- There is a lot of objective reasoning behind why each answer is correct
- 'What you would do' is different to 'what you should do'; it is unlikely you have ever directly been examined on your skills as a professional (ethics, integrity, empathy, communication, team working) - it is likely that at first you will not find the SJT intuitive

Resources for the SJT:

- Download the free handbook on Good Medical Practice from the GMC²
- Good Medical Practice in action: interactive scenarios / case studies³

There are 2 subtypes of SJT questions:

Туре	Task	Approach
'Importance'	- Assess the importance of	- Any factors pertaining to
scenario	each factor in terms of their influence on deciding how to respond to the situation - Each factor is assessed independently	professionalism / ethics / patient safety are important / very important - Factors that have limited relevance to the above have minor / no importance - Factors relating to personal beliefs can be difficult to assess - consider if any harm being caused
'Appropriateness	- Assess appropriateness of	- Decide if the response is appropriate /
' scenario	each response to a given	inappropriate
	situation	- Consider if anything could make the
	- Each factor is assessed	response more / less appropriate or
	independently	inappropriate
		- Use this to discern between
		'appropriate / not ideal' and
		'inappropriate / not awful'

² GMC: Good Medical Practice. https://www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/good-medical-practice

³ Good Medical Practice in action. https://www.gmc-uk.org/gmpinaction/characters/



Best approach with SJT questions

The SJT tests four different domains (as outlined by the GMC), and the best approach is to understand key underlying principles and apply these with a degree of common sense.

Domain	Approach
Knowledge +	- Make patient care & safety the top priority
skills +	- Ensure your knowledge & skills are up to date (and practise new skills
performance	where appropriate senior supervision & consent from the patient are in
	place)
_	- Know the limitations of your knowledge & skills, and work within them
Safety & quality	- Act immediately if patient safety / dignity / well-being is at risk (this doesn't mean that you must resolve the problem, in fact that might mean working outside your competence which is wrong; often the best answer entails escalating appropriately to a senior) - Defend patient health and advocate for public health
Communication	- Be polite & considerate towards patients and peers / colleagues
+ partnership + teamwork	- Protect patient confidentiality - Listen to patients and ensure they understand your responses & the information you provide (make sure this is adapted for the patient's needs: don't use medical jargon, speak clearly and loudly enough for the patient to hear, ensure the presence of a qualified medical interpreter if the patient's knowledge if English is lacking) - Communicate with colleagues & your team to meet the needs of the patient - Offer information to patients about options regarding their treatment, discuss these options with them, support their decision-making, and respect patient autonomy (even if you disagree with the patient's choice, so long as they have capacity to male the decision) - Assist patients with their general health (offer advice / leaflet in an approachable, non-judgemental way) - In teamwork, all members of a team are required to contribute equally
Maintaining	- Act honestly & with integrity (doctors who try to cover up mistakes /
trust	lie / falsify notes get into a lot more trouble than doctors who admit to
	mistakes and work towards preventing a similar situation from
	occurring again)
	- Never treat patients or colleagues unfairly (never make assumptions -
	always try to clarify the other person's standpoint first)
	- Never damage patient trust or public confidence in the profession (badmouthing colleagues / gossiping to others, posting on social media / talking to news outlets are generally no-no)



5) Interview

Medical school interviews can be quite daunting especially given that it might be your first ever formal interview. However, interviewers know this! They truly aren't trying to catch you out but rather tease information out of you so that your interview is a good representation of how you would be as a student.

Below are some top tips in preparing for interview:

1. First impressions count

Be sure to smile, shake the interviewers hand if possible and dress formally. This will not only ensure that you feel in the zone for an interview but also show the interviewer that you are excited to speak about medicine.

2. Preparation not memorisation

It is key to go through past interview questions so you have a better idea of the sorts of questions asked and have thought about bullet points of what you could say. However, I would not advise anyone to memorise answers as they can come across as robotic.

3. Take your time answering questions

It is completely normal to take time to think about an answer before speaking and you by no means will be penalised for this. It will also allow you to digest exactly what the interviewer wants from you so that you are able to answer the exact question they are asking as opposed to the question you want to be asked.

4. There is no negative marking

Interviewers are actively looking for reasons to give you an offer. A lot of the time the process of getting to interview was so strenuous that at interview all they want to see is that you are a person they would want in their class. Do not let a small mistake or one question dictate how the rest of the interview goes.

5. Interviewers are just normal people!

It is easy to imagine interviewers as an alien body but they are predominantly lecturers, students and consultants at the university or its hospitals. There is no need to be afraid of them as they truly do want to see you do well.

6. Reread your personal statement

By the time interview season arrives, it may have been a while since you wrote your personal statement. It is vital that you read through your personal statement and feel ready to delve into more detail on anything you have written on there.

7. Know your university

It is crucial that you know the structure of the medicine course at your university to show that you have researched it and understand what makes it different from other institutions.



Personalising your answers to a universities medicine course can seem impressive and make your answers that bit better.

8. Give it a shot

Often, a question may seem very difficult to answer when you first hear it. Rather than saying 'I dont know' it might be good to ask the interviewer for more clarity on the question or just give it a guess. This also goes for terminology-be sure to ask the interviewer to define any terms that they have used which you do not fully understand.

9. Practice, practice!

Try to rehearse by answering questions with family and friends. It is also a good idea to rehearse in the mirror or film yourself answering questions as this will allow you to gage how your body language and eye contact is while answering questions.

10. Be yourself

You do not have to put on a persona for interview. If you get asked what societies you are looking to join and you know the university has a quidditch society it is totally okay to say that is the society you are looking forward to most. While they want to see your passion for medicine, it is desired for you to do extracurricular activities and get involved with the university in other ways too.

11. Practice with your in2medschool mentors

Ask your mentor for help and even a test interview. You can also discuss your concerns and queries with them and get personalised feedback.

Interview strategies & domains

Preparing for interview is daunting. You may feel that either nothing comes to mind, or suddenly you want to say everything and your reply ends up muddled and lacking in focus. Here's a secret: that literally happens to everyone! You are not alone. This section aims to give you a toolbox on how to approach structuring your interview answers. You will find parallels with the previous section detailing the PS, and interviews have a similar key to success: content + structure + timing.

Traditionally, interviews were one of two formats:

- 1. Panel style: open format discussion with a number of faculty members
- 2. MMI (multiple mini interviews): consisting of individual timed stations

Please note: in Covid times interviews have moved onto virtual platforms, each medical school has developed its own system & structure to adjust - check on the med school's website for the most recent update, make no assumptions based on previous years! That being said, the skill set tested by panel vs MMI interviews is identical, it's only the presentation that differs.



Content:

Interview domains closely mirror qualities of a good doctor demonstrated in the personal statement, and the interview is an excellent opportunity to elaborate on / add to what you have already demonstrated in the PS:

- 1. Motivation to study medicine: the predictable!
 - Why Medicine?
 - What attributes make you right for medicine?
- 2. Knowledge about the specific medical school & candidate's potential contribution
 - Why this medical school?
 - What do you know / lie about our school?
 - What could you contribute to the medical school if we gave you a place?
- 3. Teamwork & leadership
 - Describe a time when worked as part of a team. What went well and where could you improve?
 - Describe a time when you were in a position of leadership. What were your priorities?
- 4. Understanding the role of a doctor
 - What do doctors do? Describe a day in the life of a (junior) doctor.
 - Understand variety of roles: clinician, teaching, upholding clinical governance, research
- 5. Knowledge about the NHS & current health issues / medical research (the more academic unis will want you to have read about the research they do Oxbridge, UCL, Imperial)
 - Covid & vaccine development / allocation
 - Brief history of the NHS
 - Structure of Primary & Secondary care
 - Day in the life of a junior doctor
 - Effect of social media / Dr Google on healthcare
 - Prominent cases in the media: Mid-Staffordshire & Francis Report, Charlie Gard, Ella Kissi-Debrah, 2016 junior doctor strikes
 - Top 10 causes of morbidity & mortality: dementia recently made 1st place, mental health pandemic, lifestyle & socioeconomic factors
 - The future: artificial intelligence, shift towards personalised 'silver bullet' medicine
- 6. Knowledge of candidate's personal statement: know your PS like the back of your hand, and be prepared to elaborate



- 7. Communication skills empathy & breaking bad news: see the SPIKES format in the next section on 'Structure'
 - Good eye contact
 - Open body language
 - Clear verbal cues: 'I am sorry to hear that', 'It seems like you've had a rough time'
 - Listen!!
- 8. Medical ethics / professional dilemma
 - Four pillars of medical ethics (autonomy, justice, beneficence, non-maleficence) & duty of candour
 - Capacity & consent
 - Patient refusing treatment
 - Best interest decisions
 - Termination of pregnancy & conscientious objection
 - Contraception in underaged patients
 - Professional integrity
 - BMAT unis: have a look at BMAT essays (the topic you chose, as well as other BMAT essay topics)

<u>Useful resources for Medical Ethics</u> (ties in with UCAT Situational Judgment):

GMC Good Medical Practice

GMP in action (case studies): https://www.gmc-uk.org/gmpinaction/

- 9. Reflective practice & resilience / wellbeing
 - Revisit details of the reflective cycle: description, feeling, evaluation, conclusion, action plan
 - Understand what resilience means! Focus on aspects on rest & recovery in the context of wellbeing and prevention of burnout

Structure

In this section I will give you three structures to utilise when answering interview questions. They will help you when you feel either brain fog or verbal diarrhoea setting in, and really help you come across as a mature candidate ahead of the game.

<u>CAMP</u>: Used in answering questions about motivation / personal attributes.

C - clinical: work experience, showing understanding of the day-to-day life of a doctor

A - academic: achievements at school & extracurricular interests & activities relevant to medicine

- M management: demonstration of leadership & teamworking skills, volunteering
- P personal: empathy, people skills, unique experience that has led the mentee to applying for medicine



<u>STAR</u>: Used in answering questions where you have to demonstrate a skill / talk about overcoming challenge.

- S situation: set up, background, source of challenge / conflict
- T task: planning on how to tackle the challenge / conflict
- A action: details of steps taken / adjustments made to resolve challenge / conflict
- R resolution / reflection: what was the final outcome, and what learning has this event provided for the future

<u>SPIKES</u>: Used for demonstrating communication skills (particularly with patient in a role play setting).

- S setting up: offer comfortable & private space for conversation
- P permission: ensure patient is happy to talk to you
- I insight: ask the patient what they already know about the situation
- K knowledge: provide information to the patient in small pieces 'chunking & checking'
- E emotions: empathise with the patient (ICE: ideas / concerns / expectations)
- S summarise: go over key points & determine plan of action (eg. follow-up)

Timing

Last but not least! Very likely each of your interviews will be different in length / structure / number of stations

- follow the structure carefully, make no assumptions based on previous years
- do timed practice
- look up past interview questions specific to the med school you're interviewing for (Medic Portal)

Again, work closely with your mentor! They are there to help you discuss topics for your interview, recommend reading / resources, and assist with timed mocks & feedback.



MMI stations & markschemes

Section A: motivation / personal attributes	Section B: skills	Section C: ethics / interest / insight
Motivation and commitment to Medicine 1. Why do you want to be a doctor? 2. What have you done to explore Medicine as a career?	Communication skills 1. Tell me about a time when you, or someone you observed, had a difficult time communicating with someone. 2. What are the most important aspects of communication?	Medical ethics 1. Would you prescribe the oral contraceptive pill to a 14-year-old girl who is having sex with her boyfriend? 2. What do you understand by capacity? What happens if a patient has no capacity to give consent?
Personal attributes 1. What are the qualities of a good doctor? 2. What qualities do you have that would make you a good doctor? 3. Do you think you have the resilience to become a doctor?	 Teamwork 1. Tell me about when you have worked as a team and what was successful and what was not successful. 2. Why is it important for a doctor to be good at teamwork? 	Interest in medicine & insight into the NHS / healthcare 1. Tell me about something you learned in the course of your work experience/volunteering. 2. Tell me about any medical advances and issues you have heard about recently 3. What do you understand about evidence-based medicine and patient centred care? 4. What are the strengths and weaknesses of the NHS?

Section D: roleplay

Patient scenario: Breaking bad news

You are medical student on clinical placement in a hospital. The lab called to say that the blood sample you have just taken from Mr / Ms Patel unfortunately clotted and cannot be used for analysis. The blood test has to be repeated.

Please discuss this with Mr / Ms Patel. This station is about communication, clinical skills are not assessed.

Patient scenario: Giving advice

You are a medical student on clinical placement at a GP surgery. You have been asked to see Mr / Ms Jones for their regular annual health check-up. You notice that Mr / Ms Jones has put on a lot of weight over the past year, and you are concerned about the effect this has on their health. Please discuss this with Mr / Ms Jones. This station is about communication, clinical diagnosis is not assessed.

Colleague scenario: Empathy / integrity

You are a medical student finishing lectures for the day when you spot your friend Sam crying in the corridor. They tell you that they're very distressed about bad news they received from home, and as a result have been attending less. Sam is very worried about passing the year and asks you to share with them the questions from last week's exam that they missed but you've already taken. Please discuss with Sam.



Section A: motivation & commitment to Medicine	Not Partially Well				
	done	done	done		
The candidate provides a clear, structured answer	0	1	2		
that is easy to follow					
The candidate provides evidence of what they have	0	1	2		
done to explore Medicine as a career					
The candidate shows evidence of reflection	0	1	2		
The candidate shows reasonable expectations, having	0	1	2		
also explored alternative careers					
The candidate displays good communication skills	0	1	2		
(both verbal and non-verbal)					
Total score		/ 10			

Section A: personal attributes	Not done	Partially done	Well done
The candidate provides a clear, structured answer	done	1	2
that is easy to follow	O	I	
The candidates reflects on 2-3 personal attributes in depth	0	1	2
The candidate shows how their personal attributes are relevant to studying Medicine	0	1	2
The candidate identifies challenges they have faced and how they would improve	0	1	2
The candidate displays good communication skills (both verbal and non-verbal)	0	1	2
Total score		/ 10	

Section B: communication / teamwork	Not done	Partially done	Well done	
The candidate provides a clear, structured answer	0	1	2	
that is easy to follow				
The candidate gives an effective example of them	0	1	2	
using communication / teamworking skills				
The candidate reflects on their experience	0	1	2	
The candidate displays consideration and empathy	candidate displays consideration and empathy 0			
towards others in the situation				
The candidate comments on what they learned and	0	1	2	
how they would apply it in Medicine				
Total score		/ 10		



Section C: medical ethics	Not Partially Well				
	done	done	done		
The candidate is able to weigh up the question in	0	1	2		
terms of the four pillars of medical ethics					
The candidate can outline the discussion they would	0	1	2		
have with the patient					
The candidate recognises that if capacity is	0	1	2		
confirmed, patient autonomy must be upheld					
The candidate describes how decisions would be	0	1	2		
made if the patient lacks capacity					
The candidate recognises the importance of	0	1	2		
escalating to a senior for advice					
Total score	/ 10				

Section C: interest in Medicine / insight into the NHS	Not	Partially	Well
& healthcare	done	done	done
The candidate provides a clear, structured answer that is easy to follow	0	1	2
The candidate can discuss the topic holistically, evaluating benefits and challenges	0	1	2
The candidate can state the relevance to safe patient care	0	1	2
The candidate displays realistic expectations of working in the NHS / use of medical research in practice	0	1	2
The candidate comments on how they would further educate themselves on the topic	0	1	2
Total score		/ 10	

Section D: roleplay - patient scenario	Not Partially Well				
	done	done	done		
The candidate introduces themselves, checks the	0	1	2		
patient's details and asks permission to proceed					
The candidate checks the patient's understanding of	0	1	2		
the situation, showing active listening					
The candidate offers further information in a way that	0	1	2		
is easy to understand					
The candidate remains calm and non-judgmental	0	1	2		
throughout the consultation, expressing empathy					
The candidate displays good verbal and nonverbal	0	1	2		
communication skills					
Total score		/ 10			



Section D: roleplay - colleague scenario	Not done	Partially done	Well done	
The candidate expresses empathy, and asks for permission to discuss the situation further	0	1	2	
The candidate enquires sensitively about the situation, showing active listening	0	1	2	
The candidate acts within their limitations, suggesting reasonable sources of support	0	1	2	
The candidate acts with integrity (ie. does not share exam questions)	0	1	2	
The candidate displays good verbal and nonverbal communication skills	0	1	2	
Total score	/ 10			

Panel interview questions & markschemes

Motivation and commitment to Medicine

- 1. Why do you want to be a doctor?
- 2. What have you done to explore Medicine as a career?
- 3. What will you do if you are not accepted to medical school?
- 4. What do you think will be your greatest challenge at medical school?
- 5. What do you think is good / bad about being a doctor?
- 6. Describe to me a day in the life of a junior doctor.

Personal attributes

- 1. What are the qualities of a good doctor?
- 2. What qualities do you have that would make you a good doctor?
- 3. What is your greatest strength?
- 4. What is your biggest weakness?
- 5. Tell me about a time you failed at something or made a significant mistake. What did you do?
- 6. How do you cope with stress?
- 7. How would you balance your outside interests with studying a degree?
- 8. Tell me about a time you had to take responsibility

Interest in medicine

- 1. Do you read any medical publications?
- 2. Tell me about any medical advances and issues you have heard about recently.
- 3. What is the difference between primary care and secondary care?
- 4. What do you understand by the term "postcode lottery"? How does this link to applications to medicine?
- 5. What have you gained from your work experience/community work/hobbies?



Communication skills

- 1. What are the most important aspects of communication?
- 2. How would you rate your ability to communicate with your peers?
- 3. Tell me about a time when you, or someone you observed, had a difficult time communicating with someone.

<u>Teamwork</u>

- 1. What do you think makes a good team?
- 2. Tell me about when you have worked as a team and what was successful and what was not successful.
- 3. Why is it important for a doctor to be good at teamwork?

Medical ethics

- 1. Would you prescribe the oral contraceptive pill to a 14-year-old girl who is having sex with her boyfriend?
- 2. What do you think about abortion/euthanasia etc?
- 3. What do you understand by capacity / consent / confidentiality)

Insight into the NHS & healthcare:

- 1. How do you see the UK's healthcare system in 20 years' time?
- 2. If you had £1 billion to spend on one element of healthcare, what would it be and why?
- 3. What single healthcare intervention could change the health of the UK population the most?
- 4. What bureaucratic issues are you aware of within the NHS?
- 5. How would you incentivise creating new doctors for the NHS?
- 6. Should the NHS be private?
- 7. What do you understand about the GMC?
- 8. What do you understand about NICE guidelines / cost effectiveness?
- 9. What do you understand about evidence based medicine and patient centred care?
- 10. How has medicine evolved? What is the future of medicine?



Question: Why do you want to become a doctor?

	No material worth scoring	Very little material	Some material but domain not fully addressed	Good material, as expected from an interviewee	Very good material, better than would be expected	Excellent material, well beyond what would be expected
	(0/5)	(1/5)	(2/5)	(3/5)	(4/5)	(5/5)
Manner, Delivery & Communication Skills (Verbal and Non-Verbal)	does not manage to speak or is otherwise exceptionally poor at communication	poor communication, monotone delivery, poor non- verbal communication	generally poor communication, student attempts but struggles to engage with interviewers	generally good communication, student engages with interviewers and appears engaged	very good communication, student is well engaged and builds good rapport with interviewers	excellent communication, student builds excellent rapport and is enjoyable to spend time with
Content, Use of Evidence and Examples	no content relevant to question	some relevant content, little use of examples or concrete evidence)	content addresses most of question but is confused or unfocused, some use of examples	good content which addresses the question in full using strong evidence, but may lack detail or use examples inconsistently	very good selection of content to fully address the question in a thoughtful and considered way, using examples carefully to back up statements)	excellent selection of content which fully addresses the question and demonstrated considerable reflection and interest, using well- selected examples
Reflection	no reflection	unsuccessful attempts at reflection, such as half a reflective cycle	attempts at reflection showing some limited insight, mostly completed reflective cycle	attempts at reflection showing insight and understanding, at least one fully completed reflective cycle	answer is thoughtful and shows consistent and high quality reflection, at least one fully completed reflective cycle	answer shows exceptional reflection and insight, multiple at fully completed reflective cycles
Structure	material is wholly unstructured	overall no coherent structure but some attempt at structure	some attempt at structure but not consistent	answer is globally well structured and easy to follow	answer has a clear structure and is very easy to follow)	answer is excellently structured and could not be clearer
Accurate Understanding of Medicine as a Career	student makes factually incorrect statements and shows no understanding of medicine	student has significant misunderstandings about medicine as a career, but shows limited insight	student has one or two serious misunderstandi ngs about medicine, but shows general insight	student may have minor misconceptions about medicine, but shows overall good insight into the career and a realistic idea of day to day life	student shows a complete and holistic understanding of medicine as a career which may be idealistic but is globally accurate	student shows a complete and holistic understanding of medicine as a career which is fully accurate, including top-level content such as an understanding of alternative careers
Total score				/ 25		

Typical content from a strong candidate may include:

- Interest in science/the human body / 'how people work'
- Interest in a 'hands-on' career
- Helping people/making a difference, perhaps caveated by an idea that medicine allows one to do this first hand or in a more involved way
- Keen to take on a leadership role and make decisions about care
- Interest in a 'portfolio career' and other opportunities such as combining clinical and teaching work
- Drawing on experience from work experience or volunteering
- Enjoying teamwork and being part of the healthcare MDT
- Keen to develop greater scientific understanding and know 'why' we treat as well as 'how'
- Evidence of having explored other careers and why they are not for them
- Evidence of realistic expectations and being aware of the negatives to medicine



Question: What has your work experience shown you about the qualities of a good doctor?

	No material worth scoring	Very little material	Some material but domain not fully addressed	Good material, as expected from an interviewee	Very good material, better than would be expected	Excellent material, well beyond what would be expected
	(0/5)	(1/5)	(2/5)	(3/5)	(4/5)	(5/5)
Manner, Delivery & Communication Skills (Verbal and Non-Verbal)	does not manage to speak or is otherwise exceptionally poor at communication	poor communication, monotone delivery, poor non- verbal communication	generally poor communication, student attempts but struggles to engage with interviewers	generally good communication, student engages with interviewers and appears engaged	very good communication, student is well engaged and builds good rapport with interviewers	excellent communication, student builds excellent rapport and is enjoyable to spend time with
Content, Use of Evidence and Examples	no content relevant to question	(some relevant content, little use of examples or concrete evidence	content addresses most of question but is confused or unfocused, some use of examples	good content which addresses the question in full using strong evidence, but may lack detail or use examples inconsistently)	very good selection of content to fully address the question in a thoughtful and considered way, using examples carefully to back up statements	excellent selection of content which fully addresses the question and demonstrated considerable reflection and interest, using well- selected example)
Reflection	no reflection	unsuccessful attempts at reflection, such as half a reflective cycle	attempts at reflection showing some limited insight, mostly completed reflective cycle	attempts at reflection showing insight and understanding, at least one fully completed reflective cycle	answer is thoughtful and shows consistent and high quality reflection, at least one fully completed reflective cycle	answer shows exceptional reflection and insight, multiple at fully completed reflective cycles
Structure	material is wholly unstructured	overall no coherent structure but some attempt at structure	some attempt at structure but not consistent	answer is globally well structured and easy to follow	answer has a clear structure and is very easy to follow	answer is excellently structured and could not be clearer
Accurate Understanding and description of Work Experience	student did not undertake work experience or appears to have serious inconsistencies in account	student struggles to describe their work experience and what they did is unclear	student has one or two weaknesses in their description but the work experience undertaken is otherwise clear	student may have minor unexplained elements but provides a coherent explanation of their work experience	student shows a complete and holistic understanding of their work experience and what they have done is clear	student shows a complete and holistic understanding of their work experience including top-level content such as comparison between different placements
Total score				/ 25		
Comments (NB any s	scores below 3 must	be explained, as these i	ndicate a candidate is u	nappointable)		

Typical content from a strong candidate may include:

- specific example of good practice and reflection on why it was good
- mature reflection on an example of poor practice and what could be improved
- mention of several named qualities, such as teamwork, leadership, communications skills, empathy, resilience etc
- discussion of what it means to be a "good doctor" and attempt to define the term
- focus on specific qualities that they can reflect on examples for, not just a list



Oxbridge Interviews

- 1. <u>Brush up on your knowledge of science and maths.</u> The majority of applicants will generally have all science and maths A Levels and thus there is an expectation to have a good grasp of this up to AS/early A Level. Do not worry if you don't have a certain science or maths at A Level the interviewers at Oxbridge will know what level of science you have studied and pitch it around there.
- 2. Review the specification for science/maths and practice application questions from past exam papers. The science element of the interview is particularly challenging and a lot of it is focused on application of knowledge. Make sure you understand why and how things happen for different mechanisms in Biology and Chemistry and then be able to apply that.
- 3. <u>Be able to interpret graphs</u>! Oxbridge interviews love to present graphs (and other various images and data). Ensure you are confident in evaluating graphs critically and are able to draw conclusions well.
- 4. <u>Do a lot of wider reading!</u> Read as many books, journals, articles, attend talks, conferences and so on forth that are related to medicine, science and even general philosophy or things that interest you! Pool together the insight you gain and present this at the interview to show your passion and dedication to medicine.
- 5. <u>Display your talents beyond being an academic student</u> do you have any hobbies and interests that are particularly insightful about you as a person? This may be an instrument you play or a club you lead or different volunteering you may do. Have a wide range of interests and try and show this off in the interview to come across as a well-rounded individual.
- 6. Think out loud literally! Oxbridge interviews are a way to gauge exactly how you think and rationalise your thoughts. The questions presented are often incredibly challenging and very, very daunting. However, it is not a test of what you know rather it is an intellectual challenge and discussion surrounding your thoughts, ideas and how well you articulate these. Share your thinking with the interviewers and discuss your thoughts, write them down on paper and say them out loud!
- 7. <u>Re-read your personal statement!</u> If you have mentioned a book on your personal statement make sure you have recently read the book and can recall it sufficiently. Interviewers will often pick apart your personal statement and will want to engage in a discussion around this. Make sure everything you write is true.
- 8. <u>Do not panic!</u> If you are genuinely perplexed about what to say given a rather odd or bizarre question like "what would you look like on a horse" or "what would an atom think?" just take a minute to think and process your thoughts. Vocalise these thoughts and try to suggest ideas the interviewers are there to help you and will help clarify anything you are unsure of. Do not worry about "sounding stupid" the questions are designed to be (somewhat) weird!



Oxbridge interview questions: the weird & the wonderful

Remember that for Oxbridge, as all your interviews you should prepare questions from across the domains, but with Oxbridge, expect more in-depth science / research questions, and prepare these in addition (not in exclusion!). Below is a list of questions compiled from various sources⁴ that are meant to serve as indicative of the questions you might be asked, but by no means is this list exhaustive. The idea is to test how well you think on your feet, so focus on your reasoning and logical thinking rather than what the 'right answer' might be.

- 1. What makes a good doctor?
- 2. What keeps you awake at night?
- 3. Why are manholes round?
- 4. Explain how an ear works.
- 5. How would you measure the weight of your own head?
- 6. How would you poison someone without the police finding out?
- 7. Why does your heart rate increase when you exercise?
- 8. Why is it a disadvantage for humans to have two legs?
- 9. If you were a grapefruit, would you rather be seedless or non-seedless?
- 10. Given a skull: what animal is this, describe the teeth and why they are like that etc.
- 11. Describe what happens when a neuron is excited and the action potential that follows.
- 12. Tell me about a recent research paper you read.
- 13. Draw a graph to illustrate learning against time / stage in life.
- 14. Draw and explain a graph to show the concentration of medication in the bloodstream following administration against time.
- 15. If I gave you a 6-foot straw, would you be able to breathe through it? Explain.
- 16. Draw a cross section of a bicycle wheel.
- 17. Show what happens to the membrane potential of an animal cell when put in different solutions.
- 18. What do you think of the state of the NHS? What would you do to improve it?
- 19. What's the greatest medical innovation this century?
- 20. What do you like most about the brain?
- 21. How would you describe a human to a person from Mars?
- 22. Should someone sell their kidney?
- 23. How would you simulate altitude in your living room?
- 24. Can you describe an experiment to differentiate between a normal and a multi-resistant strain of bacteria?
- 25. How would you determine whether leukaemia patients have contracted the disease because of a nearby nuclear power station?
- 26. What is a tree?
- 27. Why does your heart rate increase when you exercise?
- 28. Why do we have red blood cells?
- 29. At what point is a person "dead"?
- 30. The door to the interview room was closed and there was a note to candidates instructing them to enter the room and sit beside the chymograph.
- 31. How can reindeer tell the difference between spring and autumn?
- 32. How is a city like a cell?
- 33. How many genes are there in the genome of a rice plant?

⁴ Sources: https://oxbridgeapplications.com/, <a href="https://oxbridgeapplications.com



- 34. How would you design a better brain?
- 35. If you were given a magic wand and you could eradicate all third world problems but would have to stop all medical research and development, would you do it?
- 36. If urine was emptied into the intestine instead of the bladder, what would happen?
- 37. If you are in a boat in a lake and throw a stone out of the boat, what happens to the level of the water?
- 38. If you could invite any 2 people alive or dead to a dinner party, who would they be and why?
- 39. What does the letter b stand for in B-lymphocyte?
- 40. What is your opinion on spontaneous human combustion?
- 41. Why don't we just have one ear in the middle of our face?
- 42. How do the prions actually affect the brain?
- 43. Calculate what volume of wine can be drunk to reach the legal concentration of alcohol in the blood for driving.
- 44. How does the body try to remove or recognise poison?
- 45. How many moles of H2O is there in a cup of water?
- 46. How many people believe in evolution in the United States?
- 47. How would I solve the aids crisis in south Africa?
- 48. How would you design an experiment to disprove the existence of god?
- 49. What leaves you drier if it's raining: running or walking?
- 50. Why can you not see many stars when you stand on top of a mountain?
- 51. About 1 in 4 deaths in the UK is due to some form of cancer, yet in the Philippines the figure is only around 1 in 10. What factors might underlie this difference?



6) Exam Revision

A-levels can be quite a daunting point in your life. Having just gotten off the back of your first school exams, it can be tricky to motivate yourself for another two years of work. Yet, despite how pessimistic older years can be when speaking about A levels, they truly are nothing to stress too much over.

In fact, given that you have finally narrowed your subjects down to only the select few that you genuinely enjoy, A levels can be seen as a lot more fun than school so far as you finally get to learn things in more depth.

One thing a teacher said to me that was quite inspiring is that during your A levels, in-spite of only being 17 or 18, you might know a subject better than the average person you meethow cool is that! So onto my top tips!

1. Organisation is key!

A levels can lead to you having a lot more free time for independent study. Create a timetable for what you want to revise in your study sessions-maybe even a checklist of topics you might want to get through. In addition, try to have folders for each subject which you regularly update.

2. Work smarter not harder

It is okay to experiment with revision techniques! A levels can be incredibly content heavy and so what worked for you at GCSE may no longer apply to A levels. I encourage you to try to delve into evidence-based study techniques such as flashcards and answering questions on a regular basis.

3. Try to review as you go along

You should try and review your revision and notes as much as possible because this is what is going to drill it into your long term memory and make it easier to recall for mocks and ultimately the final exam.

4. Don't be a sheep!

As much as it is appealing to just do exactly what everyone else is doing, revision techniques and what works for a person varies depending on how you learn. Just because everyone is making notes doesn't mean you have to and visa versa- I urge you to experiment so that you can find the best technique that works for YOU.

5. Make your mental health a priority

It is understandable to get stressed but you should not be constantly feeling overwhelmed. Be sure to keep time for yourself, family and friends and wind down in the evenings as you do not want to burn out. Also, try not to neglect eating healthy and doing exercise.

6. Sleep is important

Getting enough sleep can not only have a positive impact on your mental and physical wellbeing but also aid you in your learning. A good rule to follow is the 8x8x8 rule where an individual does 8 hours of work, 8 hours of fun and 8 hours of sleep per day. Having limited time to work will also put pressure on you to be more focused and work smarter



7. Use your mentor!

Getting older years tips and tricks can prove to be incredibly reassuring and helpful. Be sure to ask your mentor about their top tips for A levels.

Revising A-level Chemistry

A Level Chemistry can be a difficult subject to fully grasp especially as a Year 12 student. The jump from GCSE to A Level Chemistry is one of the stronger transitions as there is a definitive shift from knowledge and facts to understanding and deeper thinking.

Thankfully, once you understand the principles applying them in exams isn't all too difficult - the hard part is the content in itself (which is where this differs from Biology at times).

- 1. <u>Don't over-use the textbook when making notes</u>. There isn't actually that much (in terms of volume) to retain for chemistry. There are some definitions which need to be memorised specifically but the majority of is deeper understanding. You need to be able to recall the reactants and equations for organic synthesis but the point is those specific molecules and reactions <u>will NOT come up!</u> Rather, *forms* of those reactions will. E.g. you need to be able to appreciate the electrophilic addition reactions and draw these out. However, in an exam, you can be given any compound (often different to the basic example in the textbook) and then you are expected to apply your knowledge of 'Curly Arrows' and electron movement to this.
- 2. Take the time to understand the concepts it is useful to either record videos explaining the topic, teach the topic to your family / friends or just talk to yourself about it out loud! This is probably the best way to truly understand something taking a concept and explaining it in your own words so that you can understand it. Often, when explaining it to others, people will ask questions on parts that are unclear (or you may even confuse yourself a times). This is so so useful as it challenges your brain to think about the concept in another way.
- 3. <u>Invest in a whiteboard!</u> It is so useful to have a whiteboard where you can draw out different organic structures, reaction pathways and even for maths calculations!
- 4. <u>Practice lots and lots of exam questions.</u> This is the best way to get better at Chemistry do literally every single exam paper you can find from both the new and old specifications. This will help monumentally.
- 5. Memorise equations (and units) but also UNDERSTAND what these equations mean to help you with maths. There are lots of different equations and a majority of them need to be memorised. In calculations, you often need to use several equations to work out an answer. For example, if a question wanted you to find out identify of a metal (eg XSO₄), you would need to work out the relative molecular mass using the moles = mass / molecular mass equation. However, you may not have the moles of the element and you made need to work this out from by using the concentration and volume of the metal complex being dissolved in a solution of acid. Questions like these are very common and do take regular practice and understanding to get better at!

A Level Chemistry, at times, can seem impossible. It is challenging and just remember everyone is in the same boat. The more time you take to understand the concepts and the more practice questions you do the better you will get at it!



Revising A-level Biology

A Level Biology can seem incredibly daunting due to not only the sheer volume of content you have to retain but the seemingly impossible exam papers with mark schemes that seem like they've been written after spinning a wheel of random words! My A Level biology teacher said that you could take the textbook into the exam with you and it still wouldn't guarantee you a Grade B and she was not wrong!

However, despite the challenges it is still doable! The ridiculously low-grade boundaries does not mean you need to become complacent - rather it should serve as a reminder that there must be a reason an A is around 50 to 55% and an A* is 60-65% in most exam boards.

- 1. Take good quality, concise but detailed notes and present these well. I am a "visual" learner (I know these things have been refuted but I do learn through images). I found it useful to draw my own (really bad) diagrams to summarise processes. For example, I created a double sided A4 page in my notebook on the mechanisms of Respiration, linking all of the different metabolic reactions together and showing how they all feed into the Krebs cycle and then eventually the Electron Transport Chain. It's important to have good quality notes but not spend all your time on this.
- 2. <u>Understand the content, not just memorise.</u> Personally, I can't recall something from memory unless I actually understand WHAT it is I'm recalling. Some exam questions are pure recall and thus relay on you being able to retrieve these rather quickly from your mind. Retention of information can best be done through flashcards but also things like mind maps, posters etc. In order to ensure that you can correctly recall information, you need to be able to form good links and connections in your mind between the information you have and exactly what it means. For example, it's all great knowing that the glomerulus allows for ultrafiltration of the kidneys. However, if you don't understand that this is only because of the high hydrostatic pressure created it will be harder to firstly recall and then ultimately apply.
- 3. Know the holistic picture so that you can apply your knowledge the 'HOW' and the 'WHY'. As I said before, understanding makes it easier to memorise. Understanding also makes it easier to apply your knowledge. You can recall all the finite details of the electron transport chain, but if you can't suggest an explanation for how, for example, proton pump inhibitors can lead to the production of an alkaline gradient in the thylakoid space then you won't gain any marks in the exam! The second 'question' is a typical application question which tests whether you understand how and why a proton gradient is produced. Note that the context is shifted to 'alkaline' gradient, thus, testing whether you understand that a proton gradient refers to acidity and thus an alkaline gradient would be the lack of protons. Many application questions draw on different parts of the specification and thus a holistic understanding is needed!
- 4. <u>Don't 'fear' the application questions.</u> A very good majority of the questions you'll be asked in the exam will be 'novel' concepts that you haven't heard before. However, the point is you should draw on you have learnt and think <u>laterally</u> in order to apply it. Make sure you answer every question in the exam and try to draw a coherent answer for each question. Not every question is aimed at all students and some will be harder than others



5. <u>Practice, practice - and study mark schemes well!</u> Exam practice is the single most important thing for the majority of subjects - especially A Level sciences! By practicing questions you get used to the style of writing the examiners require and see the patterns that commonly occur in the mark scheme.

A Level Biology is hard - perhaps not in terms of understanding the content, but the exams are indeed a mental challenge! Focus on understanding information and applying it to unfamiliar context.



7) Reading list

- GMC Good Medical Practice: https://www.gmc-uk.org/education/standards-guidance-and-curricula/curricula
- GMC Tomorrow's Doctors
- Bad Science (Ben Goldacre)
- What is This Thing Called Science? (Alan Chalmers)
- The Man Who Mistook His Wife for a Hat (Oliver Sacks)
- Trust me, I'm a Junior Doctor (Max Pemberton)
- Reasons to Stay Alive (Matt Haig)
- Where Does It Hurt? (Max Pemberton)
- Blood, Sweat and Tea (Tom Reynolds)
- Blood and Guts: A Short History of Medicine (Roy Porter)
- In Stitches (Nick Edwards)
- The Children Act (lan McEwan)
- This is Going to Hurt (Adam Kay)
- Complications (Atul Gawande)
- Better (Atul Gawande)
- The House of God (Samuel Shem)
- The Other Side (Kate Granger)
- Bad Pharma (Ben Goldacre)
- Every Last Word (Tamara Ireland Stone)
- When Breathe Becomes Air (Paul Kalanithi)
- Pearls in Medicine for Students (Kumar Arup Kundu)
- Medical Ethics (Tony Hope)
- The Social Basis of Medicine (Andrew Russell)
- The Human Brain (Susan Greenfield)
- The Selfish Gene (Richard Dawkins)
- The Checklist Manifesto (Atul Gawande)
- The Immortal Life of Henrietta Lacks (Rebecca Skloot)
- The Emperor of All Maladies (Siddhartha Mukherjee)



8) Templates

CV template

CV: INSERT NAME
Personal details:
Name: Email:
Background
Brief statement about who you are, what you do and any key skills/qualities you have suited to the job roles you are looking at.
Education:
Name of School you've attended, subjects + grades, any additional qualifications
Work experience / voluntary
Job title, location of job – name of company / organisation worked for, dates during which position was held
Responsibilities:
For each job, position held write down the responsibilities you had in a bullet point list
Other interests / achievements / hobbies:
Hobbies? Interests? Accomplishments? Passions?
References: Provide at least 2 references (these can often be a teacher at school!)



Work experience application template

[Your name]
[Email]
[Address]
[Postcode]
[Date]
[Employer's name]
[Full address]
[Postcode]
Dear Sir/Madam [or name],
I am a [year group] student from [school name], studying [list of subjects].
I'd like to enquire about a potential work experience placement at [name], which I will be available to carry out for [amount of time] from [start date] to [end date]. OR state that you have some degree of flexibility.
I'm keen on gaining some work experience in [chosen field of work], because [reasoning for pursuing a placement].
I believe I am [relevant skills and attributes], which can be shown in my [real-life examples that demonstrate your skills].
This placement will be as [what you hope to learn from the placement, how it will help you]
In my spare time, I like to [list relevant hobbies and interests], and I've also had some experience in/am a member of [list any groups/clubs/other work experience].
As an enthusiastic student with a keen interest in [placement], I would be very grateful to be considered for an opportunity.
I look forward to hearing from you soon.
Yours [sincerely/faithfully]
[Your name]



Work experience reflection template

Experience	What I did	What I Learnt	Becoming a Doctor
Name of work experience e.g. "1 year voluntary work in hospital"	Bullet point what <u>exactly</u> you did during the experience	What skills did you learn / develop? What knowledge did you inquire?	How will this ultimately help you to become a successful doctor? Why?



Motivation to study Medicine template

