



Bishop Ullathorne Catholic School



A Journey into **Medicine**

Name:.....

Keep this booklet in a safe place

Introduction

Medicine is a highly popular degree choice and students need commitment in preparing their application. The journey starts in Year 12 with a genuine interest in the profession and undertaking work experience.

This small booklet will help you to make the best application, demonstrating your understanding of the required core values and attributes needed to be a doctor. University Admission Officers are seeking to find applicants who have identified their strengths and experiences which match these values.

Work Experience

Practical first-hand experience in a care setting is obligatory for medical applicants. A range of opportunities would provide the insight necessary to reflect on your ability to interact with health-care professionals.

- Volunteer at a local hospital
- A dedicated work experience at a medical centre.
- Volunteer at a care home, gaining an understanding of the needs of the aging population.
- Work shadow a health professional, for example a physiotherapist, dentist, optician, GP or nurse.
- Reading for the Blind service.
- Volunteering at a specialist school for students with a broad spectrum of needs including physical disabilities, medical conditions and learning needs. For example, Sherbourne Fields school.
- Volunteer work at a Hospice.
- Any experience in caring for a relative or being part of a network that supports a care plan for an individual.
- Community work at a day centre.

It is important that you record your reflections throughout a placement or volunteering programme. Use the core values and skills to consider how you have developed personally from the experiences.

Remember: It is imperative that you have an understanding of the role of health professionals in society and the social factors that influence health and disease.



Prior to applying

The Attributes to Study Medicine (as published in the Selecting for Excellence report November 2014) are listed below:

- Motivation to study medicine and genuine interest in the medical profession
- The ability to reflect on your work
- Personal organisation
- Academic ability
- Problem solving
- Dealing with uncertainty
- Manage risk and deal effectively with problems
- Ability to take responsibility for your own actions
- Conscientiousness
- Insight into your own health
- Effective communication
- Team work
- Ability to treat people with respect
- Resilience and the ability to deal with difficult situations
- Empathy and the ability to care for others
- Honesty.

The Core Values

There are **six values** that all NHS staff – everyone from porters, physiotherapists, nurses, paramedics and gardeners to secretaries, consultants, healthcare scientists and phlebotomists – are expected to demonstrate:

- **working together for patients.** Patients come first in everything we do
- **respect and dignity.** We value every person – whether patient, their families or carers, or staff – as an individual, respect their aspirations and commitments in life, and seek to understand their priorities, needs, abilities and limits
- **commitment to quality of care.** We earn the trust placed in use by insisting on quality and striving to get the basics of quality of care – safety, effectiveness and patient experience right everytime
- **compassion.** We ensure that compassion is central to the care we provide and respond with humanity and kindness to each person's pain, distress, anxiety or need
- **improving lives.** We strive to improve health and wellbeing and peoples experiences of the NHS

- **everyone counts.** We maximise our resources for the benefit of the whole community and make sure nobody is excluded, discriminated against or left behind

Reflect on the values and ask yourself questions of how you have acquired these attributes?

Refer to your Enrichment log book.

Think of the examples which would illustrate a real understanding of the core values. Use the STAR technique when structuring your thoughts. (Situation, Task, Action and Result/Reflection)



Action

Research: GMC website

Choosing a Medical School, things to consider:

- Type of course
- Curriculum/ethos
- Size and location
- Clinical Placements
- Research opportunities
- Extra and co-curricular activities
- Student support system

Investigate

- How do medical schools assess academic potential: GCSE points / predicted A Level grades / Admission Test score? Have you the subject requirements? For GCSE, a guideline is a good spread of science and non-science subjects at grades 9/8 .
- What are they looking for in the personal statement? Non-academic attributes (reflect back to Core Values and Attributes). Do you have the expected work experience?
- How do they structure their interview? Offers are usually made based on the ranking of the students at interview.

Keep a diary:

- Voluntary work undertaken and what did you learn about yourself?
- Articles about the NHS, difficulties they are facing
- Articles from medical / science journals about health care issues / biological or chemical breakthroughs / developments which will impact on medicine
- Record of your practical laboratory work / investigations
- Record of visits to laboratories, hospitals or workshops attended
- Record of discussions with medical practitioners
- Medical Society membership
- Ethical debates
- Books you have read.

Useful websites to use prior to your application

- www.medschools.ac.uk
- www.admissionstestingservice.org

Reading /Podcasts/ Lectures

- Human Physiology by Gillian Pocock and Christopher Richards, covers most of the major physiological systems in a clinical relevant way
- Principles of Evolutionary Medicine by Peter Gluckman, Alan Beedle and Mark Hanson, a good review of advances in the field of evolutionary Biology
- The Rise and Fall of Modern Medicine by James le Fanu, a lively account of medical history
- The Man Who Mistook His Wife for a Hat by Oliver Sacks, details the strangest neurological conditions Sacks treated as a clinical neurologist
- When Breath becomes Air by Paul Kalanithi, is a life affirming reflection on facing our mortality and on the relationship between doctor and patient, from the writer who became both
- This Is Going To Hurt by Adam Kay, based on his secret diaries as a Junior Doctor
- Medical Journals and Scientific Magazines, for example, New Scientist
- Gresham College Lectures, For example, Professor Chris Whitty's presentations on "Vaccination" and "The Changing Geography of Ill Health"
- Dr Alex George, the Government Youth Mental Health Ambassador. Research his work and campaign on supporting young people.

The Medic Portal Weekly News Summary: At the start of every week the Medic Portal uploads a summary of the main news stories relating to health and medicine. To access these pieces, visit the blogs page of the website and filter by 'medical news.'



Admission Tests

There are two main admission tests for medicine, the BMAT and the UKCAT.

Find out how different medical schools use the test.

- Decide whether to invite a student to interview
- Inform whether an offer should be made
- Decide between two equally ranked applicants

BMAT	UKCAT
Paper based	Computer based
2 hours	2 hours
Mathematics / Scientific knowledge / aptitude	Mental abilities, professional behaviour
3 separate papers	Sub-tests - VR, DM, QR, AR and SJT*
Tests taken in school	Test Centre
Registration October deadline	Registration May to mid-September
One day in November	July to beginning of October
Results to Medical Schools Look up BMAT online Cambridge, Oxford, B&S, ICL, Keele, Lancaster, Leeds	Look up UKCAT online 24 medical schools in UK, offering standard courses

*Each UKCAT subject includes one minute of instruction time.

VR: Verbal Reasoning (22 minutes)

DM: Decision Making (32 minutes)

QR: Quantitative Reasoning (25 minutes)

AR: Abstract Reasoning (14 minutes)

SJ: Situational Judgement (27 minutes)

Total time of 120 minutes

Bio Medical Admissions Test (BMAT)

The test takes 2 hours and there are three sections:

- A one hour multiple choice focussed on aptitude and skills
- A 30 minute multiple choice that assesses scientific knowledge and ability to apply it.
- A 30 minute writing task on a topic of general medical or scientific interest

Making the Application

Choices

- **Four** choices for medical courses
- **Fifth** non-medical choice without prejudice
- Closing date for application is **October** for medicine
- **NOTE:** Students should aim to submit their application to Mrs Casey by **1 October**

Completing the UCAS form

- Fill in the form carefully and completely
 - Declare accurately all certified and pending results
 - Explain gaps in education
- Personal statement structure
 - Address the criteria of the medical school (see appendix 1)
 - Reflective
 - Spelling
 - Confidentiality and ethics
- Advice from admissions offices
 - Do not plagiarise
 - Resit applicant?
 - Honesty
- Non-academic criteria at Liverpool
 - Evidence of the core values and skills required to be a medical student
 - Healthcare career awareness/insight
 - A caring contribution to the community
 - A critical coherent and informative approach to verbal and written communication
 - The value that embody and underpin good healthcare practice
- Academic reference is a personalised reference which will highlight general and specific ability.
 - Personal qualities and contribution to the school and community
 - Mitigating circumstances
 - Students preparation for the application (anything that address the specific criteria of the medical school)
 - Credibility in predicted grades



Interviews

How to prepare:

- Know about the medical school, its course and location
- Re-read your personal statement
- Re-read any reflection diaries
- Keep up to date with news and medical developments
- Think about the possible questions you might be asked and prepare a few of your own questions

Read the invite carefully, locate any documents that you might need

- Contact the medical school immediately if there are any issues
- Check the location and travel directions
- Travelling on the day? Have you allowed for travel delays?
- Create a file to take to interview:
 - Copy of original (emergency contacts etc)
 - Original certificates and/or copies
 - Photo ID
 - DBS declarations/ work experience declarations

Key Advice

Start Early

- Interview preparation starts with your work experience. Identify what you want to achieve from it and reflect on what you did achieve (record in diary).
- Talk to medical students, open days, taster days, summer schools, online forums
- Developing confidence
 - Being well prepared
 - Activities to develop depth of thinking and response

Example: consider the following questions. Can your response demonstrate an understanding of medicine as a career as well as your skills and aptitude for the subject and profession?

- During work experience what was the most important thing you learned about yourself?
- Why did you choose the medical school and university?
- What element of medicine particularly interest you?

A skill that is required for a successful interview is ACTIVE LISTENING

- Hearing what is said
- Interpreting the message
- Evaluating the message
- Responding to the message
- Whole body listening
- Controlling emotional triggers

The Interview

Interviews can be a structured panel interview or for many schools a multiple mini interview is preferred (MMI).

The MMI Format

- Several short interviews on a specific topic
- Different interviewers on each station
- Awareness of issues relevant to profession
- Communication
- Team work
- Ethics
- Short numeracy test
- Work experience

The philosophy behind the process of selecting students is seen as Values-based recruitment

“Values-based recruitment is an approach which attracts and recruits students, trainees and employers on the basis that their values and behaviours align with the values of the NHS constitution.”

Interview day

- Make sure you know the venue
- Arrive early
- Smart but comfortable clothes; if dress code follow it
- Listen carefully/ follow instruction
- Try to relax and be yourself
- Demonstrate appropriate body language
- Be calm, appropriate preparation means you have a good chance
- Be respectful
- Reflect
- ‘Competition’
- Awaiting results

Post Interview

Students often have to wait until March before receiving the outcome of their interview. This is due to the medical schools' policy to interview all their selected students before making a decision.

The Sixth Form team will support you throughout the process.



Personal Statement by medical applicant accepted to Cardiff University

Attending a lecture, "Cancer: Why have we not found a cure yet?", instigated my desire to become a doctor. Combining medical theory with clinical practice to care for patients fascinates me and motivates me to have a future in Medicine. I enjoy helping people. I supported younger students who struggled in Science by explaining difficult topics and assisting them with coursework. I also helped in school vaccination programmes, comforting and reassuring children who were tearful about having an injection and calming down a child who was panicking and feeling faint. As part of a Summer School for ten year olds, I was responsible for managing large groups of children and directing them during different activities. Volunteering in a care home for people with dementia involves talking to residents; this makes them feel valued and has a positive impact on their wellbeing. Through these experiences I have developed skills in empathising and communicating effectively with others.

I have shadowed doctors on Paediatric, Elderly Care and Postnatal wards. Seeing many mothers in pain and a baby with a diaphragmatic hernia highlighted the emotional difficulty of caring for patients in agony or with life-threatening conditions. It was difficult to see parents getting distressed as their child's condition deteriorated; this showed that it is not always possible to help patients and being able to cope with this feeling is yet another challenge faced by doctors. Seeing doctors being constantly interrupted by their bleeps showed me how unpredictable work can be and that doctors need to prioritise patients' needs. I learnt that they work with nurses and other professionals in multidisciplinary teams and that in addition to providing patient care, they have to teach medical students and study for exams after work. Over two shifts I saw doctors working with very few breaks but still putting their patients' needs first, as shown by a paediatrician staying behind to discuss test results with parents. I witnessed patients being rude to consultants who nevertheless responded sympathetically and with sensitivity. These experiences gave me a realistic insight into the physical and emotional demands of a doctor's life. However, I also experienced how rewarding work can be when I listened sympathetically to a mother who chose to share with me her difficult experience of a traumatic labour. I felt privileged that she was comfortable speaking to me about personal issues. I also saw the compassion of a doctor reassuring a patient with dementia who could not answer basic questions. This reinforced my desire to support patients on both a clinical and an emotional level.

Tony Hope's book on Medical Ethics inspired me to form a school Medical Society to discuss ethical issues I encountered during my placements. I saw doctors speaking to patients with dementia and people who wanted to be discharged against medical advice. Noticing how they addressed the patients' concerns with kindness taught me that respecting patients' autonomy is essential when working in partnership with them. While shadowing a doctor in Sri Lanka, I saw that, due to overcrowding, beds were very close together, making it difficult to respect patients' dignity and confidentiality.

As well as academic ability, I believe I have the compassion and commitment to helping others needed for a career in Medicine. It is the prospect of being able to apply these to enhance patients' wellbeing which drives my ambition to become a doctor.

Personal Statement by medical applicant accepted to Leicester University

Growing up with relatives who work under the vast umbrella that is medicine, I am aware of the intellectual challenge it encompasses as well as the necessity of altruism and utmost dedication. Currently the NHS is facing many difficulties and yet I am not daunted at the prospect of entering a resource-constrained profession, undergoing restructuring. During my numerous work experiences at Optometry, GP and Dental practices, it further highlighted the interdisciplinary approach within medicine as I witnessed patients being referred to other medical specialties. Reminiscing on the conversations I had with my grandfather, an AMREF Flying doctor who travelled throughout Africa, treating wounded soldiers and civilians emphasised the multitude of different environments the profession can enter. His skills of recognising and linking symptoms to health problems with apparent ease mesmerised me. During my time in the urology ward shadowing a FY1 doctor, I became conscious of the health challenges associated with Britain's ageing population and various chronic diseases. This experience allowed me to observe and understand the importance of teamwork and communication in delivering effective treatment, a key principle of the NHS.

During my studies in Biology, I have always been fascinated with Neuropsychology, which prompted my enrolment to the online FutureLearn Program "Good Brain, Bad Brain". This program has helped to improve my understanding on the effects of neurotransmission when exposed to various chemical alkaloids such as morphine and heroin. I enjoyed studying organic chemistry and learning how it plays a significant role in the discovery, potential use and manufacture of vital medicines. As a confident mathematician, I can interpret statistical data and solve mathematical problems logically, which helps me work with precision, improving my accuracy when completing lab-based work.

Gaining confidence and critical thinking skills as a Debate club member, I was able to fully immerse myself in an ethics workshop within a UHCW Medical Conference. Debating health-related ethical issues, most commonly euthanasia, in current affairs was especially compelling. As a result, I became interested in the application of the four main principles of medical ethics, and read "Medical Ethics A Short Introduction" by John Hope, which made me appreciate the difficulty in balancing patient beneficence and autonomy with regard to treatment. By choosing to take a gap year I have secured a position in a care home, where I provide holistic care specific to each resident. This appointment allows me to actively empathise and communicate with people from a range of backgrounds. Working in the challenging environment has shown me that it is essential to work within a strong team, which offers the best support and care. I have noticed that a simple smile when greeting a resident can have a huge impact on their physical and psychological well-being. I have also secured a second job at Next, where I have to complete tasks under strict time limits, which is developing my problem solving and prioritising skills. I continue to volunteer at UHCW where I am able to interact with patients directly. My interest in the Macmillan Programme led me to organise a coffee morning raising GBP100.

I enjoy playing basketball where I was the team captain, organising training and games. In addition, I develop my passion for art through drawing, enhancing my hand-eye coordination and dexterity. As a Sikh I assist with kitchen duties at the temple weekly, providing food for the patrons.

The book "When Breath Became Air" by Paul Kalanithi, underpins the uncertainty that follows a diagnosis for both patient and doctor and yet illustrates the importance of having hope for the best outcome. My experiences have only increased my ambition to study medicine, as they have allowed me to understand that medicine requires determination, hard work and for sacrifices to be made.

Personal Statement by medical applicant

My desire to become a doctor developed whilst studying a GCSE History module, 'Medicine through Time'. The advancements in medical knowledge and healthcare fascinate me, and my determination to accomplish something that could benefit future generations entices me further to this complex career. Paul Kalanithi's book, 'When Breath Becomes Air' has helped me to develop an understanding of what it really means to be a doctor, as well as appreciate how the nature of human wellbeing can be unpredictable. It has reinforced my aspiration to attain a medical degree.

Volunteering at a care home has led to part-time work, where I witness the daily needs of the residents. The staff display great care to ensure that everyone feels safe, and I have learnt from them how to communicate using different tones and gestures. I have built friendly relationships with the residents and also experienced having to cope with losing them. I am able to respond to unforeseeable situations, like a five-hour long power cut which allowed me to review my ability to work as part of a team and under pressure. I realise higher life expectancies mean more people will be susceptible to illnesses linked with old age, placing additional strain on the NHS to provide further rehabilitation programmes and nursing care.

My discovery of William Harvey's work and exploring the structure of the heart through my Biology studies motivated me to secure a placement on a Cardiology Ward. This gave me the opportunity to shadow Consultants and view their interactions with patients; their confidence and empathy created a positive atmosphere and reassurance. I observed how critical thinking is necessary when dealing with difficult cases, such as aortic dissection, where the patient had to be monitored to ensure she did not sit up beyond 15 degrees. I witnessed the Consultant teaching a Junior Doctor about the severity of this condition using the patient's angiogram, which made me reflect on the importance of a doctor's continued professional development. It was clear that a doctor's daily life is very demanding; an issue explored further when I led my school's Medical Society debate on whether Junior Doctors should strike. I was intrigued by the technological aspects of Cardiology as one of the Consultants explained the various surgical procedures, like inserting a pacemaker. The uncertainty of work on the ward included the constant possibility of a cardiac arrest, a scenario covered on my St John Ambulance First Aid Course. After speaking with various medical professionals it became clear to me that the multidisciplinary nature of the NHS is reliant on teamwork and respect for others.

I attend a neighbouring Sixth Form Centre for Biology, which has enabled me to adjust to a new learning environment with confidence. The topic of DNA influenced my HE+ project that focused on the consequences of epigenetics. I worked collaboratively to research and produce a presentation, adopting a leadership role in coordinating meetings. Undertaking experiments in Chemistry has helped me to develop my analytical, organisational and time management skills. Studying History has broadened my ability to consider source material in order to strengthen contextual arguments and write structured essays. I take an active role in school life, for example, helping with the reading club which encourages children with learning disabilities to improve their skills. In my leisure time I enjoy reading, cross-stitch and sports, which includes partaking in the annual charity Swimathon.

I found Klaus-Dieter John's book 'I Have Seen God' enthralling and inspiring as I could see the prospective challenges that Medicine encompasses. This highlights the perseverance and enthusiasm required to pursue a vision to help others, qualities which I possess.

Personal Statement by medical applicant who received offers from:

Manchester, Leeds, Anglia Ruskin and Sheffield

From an early age, caring has been at the forefront of my life. I have one sibling, a severely disabled brother, who has Profound and Multiple Learning Difficulties (PMLD), Autism and Epilepsy. For many vulnerable people like him, the most basic of tasks can be difficult. Supporting my brother with my parents has given me an insight into the struggles that an individual may face and how these struggles have a huge impact not only on the individual but upon their families. I feel the experiences I have had living with my brother have given me a rare understanding at an early age of caring in often stressful situations. I understand that for all the advances in medical knowledge, it is the care and resilience of workers in the National Health Service (NHS) that provide patients and their families with better lives. I know I have what it takes to care. I now want to gain the knowledge to enable people to lead better lives and this is my main motivation to study medicine.

I have sought to gain an insight into what it means to work in a hospital environment. During a webinar with an A&E Doctor, I learnt about some of the challenges facing the NHS such as the ageing population and evolving healthcare needs including the increase in cases of obesity, diabetes and antibiotic resistance. I have also spoken remotely to a Senior House Officer at UHCW (University Hospitals Coventry & Warwickshire) to ask him about his experiences training to be a doctor. I further explored the impact of obesity and poor nutrition, completing a Future Learn course, "Causes of human disease: nutrition and environment". I am acutely aware of the implications of a poor diet and overall health as my mother, a Cardiology nurse at UHCW, tells me that she routinely looks after obese patients. I place a large personal emphasis on physical fitness and wellbeing, having been a member of the City of Coventry Swimming Club for the past eight years. I currently swim two to three times weekly and learning from professional athletes has been a privilege.

As I believe the response to the Covid-19 pandemic has shown, the NHS is a giant network of employees spread across a vast umbrella of occupations and settings. I know that it is only through effective teamwork and communication that the NHS can continue to save and improve lives. Teamwork was important in my work as a Leisure Assistant at Coventry Sports and Leisure Centre in my role as a lifeguard. While training for my National Pool Lifeguard Qualification and Level 2 AED award, I realised the importance of collaboration to maximise casualty safety and also how a temporary lapse in concentration can have dire consequences. The importance of teamwork was also highlighted to me in the seven years I spent in The Scout Association. I took part in many Scout camps where everyone had a role to play to ensure the smooth functioning of camp. Whilst with the scouts I was also involved in various fundraising activities.

Throughout my academic studies, I have had a passion for Science and Mathematics. I have found great personal enjoyment in having both ethical and scientific discussions in my school's Medical Society. I have also found teaching other students in lower year groups and helping them with their subjects very rewarding. I have found it thrilling to help ignite scientific curiosity in students who would typically regard Science as a dull subject.

The book "This is going to hurt" by Adam Kay, underlines the hard realities that face junior doctors and shatters the sometimes glamorised view of the medical profession. These realities have not nullified my ambition to study medicine. I understand that working in medicine requires tremendous personal sacrifice and unwavering determination to serve patient well-being. However, I feel that I have the caring attitude, the confidence and the determination to succeed.

**Personal Statement by medical applicant who received offers from:
Cambridge, Keele and Southampton**

Life happens fast, and it is up to medics to keep up. I became interested in medicine and accompanying research when my uncle suffered a stroke and missed the vital 4.5-hour period for treatment via alteplase, which may have exacerbated the lasting effects of the stroke, such as his loss of speech. Coincidentally, weeks later I undertook work experience at Warwick University, where Prof. Frenguelli had created a stroke detector, enabling swifter diagnoses, ergo quicker treatment, for suspected stroke victims, lessening the severity of long-term side-effects. Both the need for and innovation behind medical technology, inspired my application.

In a BBC documentary, "Back from the dead", surgeons treated an aneurysm in the aortic arch by inducing deep hypothermic circulatory arrest, reducing the body's need for oxygen by slowing the metabolic rate. The complexity of the procedure was fascinating, but what struck me was that this condition may have been prevented with simple lifestyle changes. Upon further research, I found that the most common causes of death are linked to lifestyle, leading me to wonder: does the nature of medicine need to shift from proactive to reactive? This was a topic discussed in the medical society I established within my sixth form. I learnt more about lifestyle-associated diseases during the Fututrelearn course, "The Science of Medicines," gaining an understanding of such diseases, risk factors and treatment, nociceptive and neuropathic pain, pain medications and their interactions with receptors in the body. The sophistication of the biological mechanisms involved have sparked a curiosity and appreciation for medical science that continues to fuel my studies; enthusiasm which I hope will support my continued professional development as a doctor.

As a participant in the HE+ program, I undertook a group project, creating a presentation debating whether vaccines should be made compulsory. Our Measles case study showed vaccine programs to be highly successful, however compulsory vaccination challenges the autonomy of the individual, a core ethical principle in medicine, a debate which is becoming increasingly relevant during the search for a COVID-19 vaccine.

Growing up with my father, an obstetrician, and my mother, a midwife, gives me an insight into their work. Volunteering at my local hospital has allowed me to reflect on my suitability to this work: I admire the team dynamic enabling the treatment of large volumes of patients efficiently and professionally. I recently experienced the challenge of working on a COVID ward whilst supervising an elderly woman suffering from dementia, who had tested positive for coronavirus. Due to her cognitive decline, she was restless and repeatedly tried to leave her bedside. Each time, I had to don full PPE, enter the bay and reassure her, following infection control guidelines closely. The patient required my dedicated attention and compassionate care: had I not been there, they may have required a nurse to perform these duties and this would have been detrimental to other patients. Coronavirus is a devastating illness, even more so when superimposed onto late stage dementia, requiring a fine balance between empathy and efficiency.

Through reading Adam Kay's "This is going to hurt", I have been able to comprehend the patience required by doctors, along with the need to take initiative. I have embraced these qualities as a member of the scouting movement, organising and assisting "Gateway" camps for adults with learning difficulties, as well as developing leadership skills by coordinating activities at our weekly Beaver-Scout group.

Medicine combines my love of people and motivation to improve through research and innovation. The capabilities of today were never envisaged in the medicine of the past. We are progressing further and faster than ever before, and I am excited to be a pioneer in my career as a doctor.

Notes

