

Manual for Interviewers MD Program

**Admissions
Undergraduate Medical Program
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PREFACE

The Faculty of Health Sciences considers the selection of applicants to medical school to be one of the most important functions in determining the basic characteristics of the group of physicians graduating from McMaster. The Multiple-Mini Interview (MMI) is an indispensable element of the admission cycle and the Faculty is very appreciative of the efforts of all participants in this process.

This manual is prepared for all Interviewers/Assessors taking part in the MMI for the McMaster Undergraduate Medical Program.

This Manual contains brief descriptions of:

- the approach to the education of medical students at McMaster and the basis for their selection;
- how the interview fits into our selection process; and
- the function of the interviewer/assessor.

Guidelines, with suggested approaches, are provided, to identify the areas that must be assessed for each applicant. Instructions on interview procedures are included. The main text makes reference to the procedures and to the forms that need to be completed during the interviews.

PREAMBLE

McMaster University offers a three-year undergraduate medical Program that culminates in the conferring of an M.D. degree. The Program is different from those at other medical schools in that students are largely responsible for their own learning, and their progress is frequently evaluated by peers, tutors and other faculty members. This self-directed learning is accomplished by small tutorial groups, assisted by large group sessions, and facilitated by elective activities that are tailored to the individual student's needs and interests.

In order to practice medicine in Canada, graduates of all medical schools must pass the licensing examinations of the Medical Council of Canada and, in most provinces, be certified by the College of Family Physicians of Canada or the Royal College of Physicians and Surgeons of Canada.

WHAT TYPE OF DOCTOR DOES MCMMASTER WISH TO GRADUATE?

McMaster tends not to prepare students for any particular career specialty but, rather, strives to produce graduates who will have the capacity and flexibility to select any area in the broad field of medicine. This means that graduates from this school, as a group, may have a wide range of interests, from the exclusively clinical to the non-clinical. It also means that, in the applicants to be interviewed, there may be the same breadth of interests.

SELF DIRECTED LEARNING

Physicians must be life-long learners. It is our belief that they should develop the skills to do this during their formative years at medical school. In the McMaster Program, students are encouraged to define their learning goals, to select appropriate experiences for achieving these goals and to be responsible for assessing their own learning progress. Statements of the goals of the Medical Program and its component parts (Medical Foundations) are provided to help students and tutorial groups define their individual goals. These goals must be explicit, realistic, and consistent with the general goals of the Program. In order to function well in this type of educational environment, a student must be responsible, motivated and mature.

SMALL GROUP LEARNING

One of the goals of the medical Program is to graduate individuals who will become effective members of groups engaged in various educational, research and clinical activities. The setting for learning in the McMaster medical Program – small tutorial groups – provides opportunities for developing interpersonal skills and becoming aware of individual assets and limitations. It is also effective in promoting group problem solving and having students learn how to listen to others and how to receive and provide constructive feedback. In addition, the tutorial setting also provides students with an opportunity for self-evaluation in order to monitor their learning progress.

While in the Program, students are expected to be responsible for their own learning as well as that of other members of the group, and they need to be responsible for developing skills in self-assessment, and skills in peer assessment.

PROBLEM BASED LEARNING

Learning based on problems represents an alternative to studying blocks of classified information in an organized sequence. In problem-based learning, students focus on a problem (or situation) which they or the tutorial group have selected. They then bring to the examination of the problem all of their previous information and experience as well as their ability to think rationally and critically.

As students begins to ask questions, specific issues become better defined and require a search for additional information. After assembling the appropriate information, a solution to the problem is synthesized which includes a re-evaluation of the formed hypotheses. The students learn how wrestling with any one problem may open up many other avenues of enquiry.

Problem-based learning contributes to the student's motivation, enhances transfer, integration and retention of information, and encourages curiosity and systematic thinking.

EVALUATION OF STUDENT LEARNING

Students are assessed frequently while they learn. Individual assessments provide the opportunity to form or modify the student's learning practices. Evaluation is a constructive and integral component of the learning process rather than a detached activity.

The purpose of our evaluation system is primarily to facilitate student learning and to modify, where necessary, the student's learning Program. The tutor has final responsibility for

evaluation, but the students themselves and their peers, are important contributors to the process. This is consistent with the concept of self-directed learning in small groups.

SELECTION OF STUDENTS

It is the overall goal of the admissions process to select those applicants who are most likely to fulfill all the goals of the Program, who will thrive in a flexible learning environment, and who will develop into competent physicians that can meet the health care demands of society.

The admissions process includes the selection of applicants not only on their academic qualifications but also on personal characteristics and aptitudes, such as problem-solving ability, self-appraisal ability, the ability to relate to others, motivation to study medicine and learning styles which may be better suited for learning medicine at McMaster. The rationale for this is that we believe that for the practice of medicine the physician must recognize personal assets and limitations and evaluate emotional reactions.

As well as the obvious need to select applicants who will be sensitive to patients, we hope to select students who will also be sensitive to the needs and potential contributions of colleagues in their tutorial group setting.

We need to be aware that the educational system at McMaster is not ideal for everyone. Some individuals may enjoy working in tutorials and thrive on self-directed learning and problem-based learning which for them may generate enthusiasm and excitement. However, others may need, or enjoy, a more structured environment, and thus may not be well-suited to the Program at McMaster.

THE MULTIPLE MINI-INTERVIEW

The Medical Program utilizes the Multiple Mini-Interview (MMI) as one of its admission assessment tools. This protocol has been modeled on the Objective Structured Clinical Examination (OSCE) that is commonly used by Health Sciences Programs to evaluate student competence. The procedure has undergone a series of tests and has been deemed more psychometrically sound than the traditional interview. In addition, both interviewers and applicants have reported positive feedback on their perceptions of the MMI.

The MMI consists of a series of short, timed interview stations in an attempt to draw multiple samples of the applicant's ability to think on his or her feet, critically appraise information, communicate ideas, and demonstrate that they have thought about some of the issues that are important to the medical profession. You will be asked to either interview applicants or observe an applicant's interaction with a human simulator (i.e. an actor portraying a particular character).

The interview is an opportunity for the medical school to assess the applicant in a live virtual setting. Applicants have reached this stage because of their sufficiently high academic standing, strong MCAT verbal reasoning or critical analysis and reasoning score, and/or by presenting themselves as highly suitable on their CASPer test. It is the combination of these assessments that is used to select applicants for this next stage of selection.

The purpose of the interview is therefore to collect information concerning the personal qualities of those applicants selected for an interview. This information, in conjunction with a battery of other data, will be used to help the Collation Committee determine which applicants may be better suited for, and therefore more likely to succeed in, the McMaster Program.

REASONS FOR USING THE MULTIPLE MINI-INTERVIEW PROCESS:

As the performance of an individual is highly variable across situations, evaluations that use multiple scenarios have been found to be more psychometrically sound, with a strong basis in educational and evaluation theory. This is advantageous for applicants. If applicants have trouble in one scenario they can recover with an excellent performance in another situation. Also, with the MMI, individuals with diverse backgrounds have a better opportunity to demonstrate the quality of their educational and personal experiences.

Applicants have reached this stage of the admissions process because their academic performance has been sufficiently high. For this reason, *we will not test their specific knowledge in any given subject*. There is absolutely no intent to test the applicant's present knowledge of the health sciences. Clinical knowledge will be no more useful than knowledge from any other discipline, including, for example, chemistry, music, or English literature. We are, however, trying to assess the applicant's ability to apply general knowledge to issues relevant to the culture and society in which they will be practicing should they gain admission to (and graduate from) medical school. Equally important, is the applicant's ability to communicate and defend his or her personal opinions.

Recognize that there are **no right answers** for many of the scenarios that applicants will be required to address. They are simply asked to adopt a position and defend any ideas they put forward, or discuss the issues raised in the scenarios. You, the interviewer, are an individual who has some expertise in the topic. You can, and should, challenge the applicant to express his or her ideas clearly and rigorously.

McMaster University wishes to ensure the full and fair implementation of the principles which recognize that every person is equal in dignity and worth, and should be provided with equal rights and opportunities without discrimination.

The following is an excerpt taken from McMaster University Policy, Procedure and Guidelines

https://www.mcmaster.ca/vpacademic/documents/Discrimination_Harassment_Sexual_Harassment-Prevention&Response.pdf

Ontario Human Rights Code

<http://www.ohrc.on.ca/en/ontario-human-rights-code>

The Code prohibits actions that discriminate against people based on a protected ground in a protected social area.

Protected grounds are:

- Age
- Ancestry, colour, race
- Citizenship
- Ethnic origin
- Place of origin
- Creed
- Disability
- Family status
- Marital status (including single status)
- Gender identity, gender expression
- Receipt of public assistance (in housing only)
- Record of offences (in employment only)
- Sex (including pregnancy and breastfeeding)
- Sexual orientation

Interviewers may NOT ask applicants questions related to the following unless they have been raised by the applicant, and if they are relevant to the issue under discussion.

INTRODUCTION TO BIAS

A **cognitive bias** is a systematic error in thinking that affects the decisions and judgments that we make. Some of these biases are related to memory. The way you remember an event may be biased for a number of reasons and that in turn can lead to biased thinking and decision-making. Cognitive biases can be caused by a number of different things, but it is these mental shortcuts, known as heuristics, that often play a major contributing role. These biases can deeply impact on your assessment of an applicant and in order to be objective and fair with consistency throughout the MMI process, these need to be considered. The following are some examples of assessor bias for consideration:

1. **Anchoring Bias**

This is the tendency to rely too heavily on the very first piece of information you learn. Anchoring occurs when, during decision making, an individual relies on an initial piece of information to make subsequent judgments.

2. **Halo Effect**

When we take one positive attribute of someone and associate it with everything else about that person.

3. **Confirmation Bias**

We tend to listen only to the information that confirms our preconceptions. Once you've formed an initial opinion about someone, it's hard to change your mind.

4. **Inter-group Bias**

We view people in our group differently from how we see someone in another group. This bias helps illuminate the origins of prejudice and discrimination.

5. **Recency Bias**

The tendency to weigh the latest information more heavily than older data.

6. **Bizarreness Effect**

Recalling only unusual information in a series of facts or details.

7. **Selective attention**

Allowing our expectations to influence how we perceive the world.

8. **Status Quo Bias**

Having an aversion to change or an emotional attachment to the current state of being.

9. **Bias blind spots**

Failing to recognize your cognitive biases is a bias in itself.

10. **Fatigue**

It is natural for us all, at the end of the day, to occasionally rush through the last few tasks on our plate. When assessing applicants, however, this creates an unfair bias against the last applicants assessed at the end of the MMI process.

Admissions MMI – Sample Station 1 (Ethical Decision-Making)

INSTRUCTIONS FOR THE INTERVIEWER

In 2012, a provincial health authority implemented an enhanced influenza control policy which, among other things, requires all hospital staff to receive the flu vaccination or wear a mask during flu season.

If you were in charge of a committee investigating whether to implement a mandatory flu vaccination policy for healthcare workers in Ontario, what information would you want to collect before making a recommendation?

1. **Ensure that the Applicant has read the scenario.**
2. The applicant has **8** minutes to discuss these issues with you. After 8 minutes a bell will sound and you will have **2** minutes to complete the score sheet. Do not give the applicants feedback.
3. Discuss some of the following issues with the applicant. Some background information is given on the following pages.
 - A. Some organizations argue that such a policy is an infringement on the rights of healthcare workers. Discuss your thoughts on this statement.
 - B. If you chose **NOT** to implement a mandatory vaccination program, what strategies might you use to increase healthcare provider vaccination coverage?
 - C. The policy implemented allows staff to opt out. Do you think it would be fair to penalize them if they get sick with the flu (i.e. unpaid sick day)?
4. In assessing the applicant, consider the following issues.
 - A. How well did the applicant demonstrate their analytical and critical thinking skills?
 - B. Did the applicant consider the issue from multiple perspectives?
 - C. Did the applicant demonstrate an understanding of the professional and ethical principles related to this issue?

BACKGROUND AND THEORY

In 2012, British Columbia's Health Authorities implemented an enhanced influenza control policy which, among other things, requires all hospital staff to receive the flu vaccination or wear a mask during flu season. If you were in charge of a committee investigating whether to implement such a policy in Ontario, what information would you want to collect before making a recommendation?

Applicants may discuss some of the following points (this is not an exhaustive list):

- What is the burden of influenza on both health care workers and patients?
- How effective is the vaccine?
- What is the safety profile of the vaccine?
- What proportion of the staff is eligible for the vaccine?
- Is there evidence demonstrating that vaccinating staff reduces patient mortality secondary to influenza (or other outcome measures)?
- How would the vaccine affect the number of missed work days by staff?
- How effective are masks at preventing influenza transmission?
- How receptive is the staff to such a policy?
- What is the cost of this policy?

Some organizations argue that such a policy is an infringement on the rights of healthcare workers. Discuss your thoughts on this statement.

Applicants may discuss some of the following points:

- Autonomy of health care workers
- Nature of the policy: invasive procedure, risks of vaccine
- Professional responsibilities of health care workers – respect, altruism, commitment to patients, health advocate, quality assurance
- Ethical responsibilities of health care workers – non-maleficence (“do no harm”)

If you chose NOT to implement a mandatory vaccination program, what strategies might you use to increase healthcare provider vaccination coverage?

Applicants may discuss some of the following points:

- Educational initiatives to inform staff of risks/benefits, etc.
- Accessibility: i.e. self-administered needles, provide flu shots for staff on hospital wards
- Incentives: money? food?
- Penalties: i.e. unpaid days if missed work due to influenza illness

Admissions MMI – Sample Station 2 (Communication/Actor Station)

INSTRUCTIONS FOR THE OBSERVER

Your company needs both you and a co-worker (Sara, a colleague from another branch of the company) to attend a critical business meeting in San Diego. You have just arrived to drive Sara to the airport.

Sara is in the room.

1. **Ensure that the student has read the scenario**
2. Observe the applicant and be prepared to assess the communication skills displayed. Some background information is given on the following pages.
3. The applicant has 8 minutes to interact with the actor. After 8 minutes a bell will sound and you will have 2 minutes to complete the score sheet. Do not give the applicants feedback.
4. In assessing the applicant, consider the following issues. Note, however, that these are just a guideline and should not be considered comprehensive.
 - A. Did the applicant appear empathetic?
 - B. Did the applicant attempt to console Sara without belittling her or making light of her concerns?
 - C. Does the applicant help Sara consider multiple potential courses of action?

BACKGROUND AND THEORY

History

Sara is anxious regarding her safety. She had a friend who narrowly escaped being at the World Trade Center when it was destroyed. Until now, she had not experienced angst regarding air travel, but presumably there were latent feelings present, surfacing today with the immediate prospect of flying to San Diego. She had routinely travelled via air in the past, but this is the first time air travel was required since September 11th, 2001. She is gripped with fear over what might happen.

Focus of station

This station is intended to be one that will allow an observer to evaluate the applicant's communication skills. The simulator should act in a standard manner for all applicants, but should also be reactive to the approach taken by the applicant.

One of the essential roles that the CanMeds 2015 Physician Competency Framework, published by the Royal College of Physicians and Surgeons of Canada defined as critical to the performance of medical specialists is "Communicator". The key competencies under this role include:

- Establishes professional therapeutic relationships with patients and their families;
- Elicits and synthesizes accurate and relevant information, incorporating the perspectives of patients and their families;
- Shares health care information and plans with patients and their families;
- Engages patients and their families in developing plans that reflect the patient's health care needs and goals;
- Documents and shares written and electronic information about the medical encounter to optimize clinical decision-making, patient safety, confidentiality and privacy.

Obviously applicants can't be placed in clinical situations and expected to show that they are capable of each of these competencies, but this exercise is intended to serve as a proxy measure of these abilities.

Below are some characteristics of effective communication skills that the applicant might display.

- Listens well.
- Remains supportive.
- Avoids making light of Sara's concerns.
- Normalizes concerns, noting that these feelings of anxiety have become quite common.
- Confirms, without patronizing, that Sara is aware of the relative safety of air travel (e.g. better security now in place at airports, statistically tiny chance of being targeted, etc).
- Helps Sara separate the intellectual response of low danger from the emotional response of anxiety.

Admissions MMI – Sample Station 3 (Personal Interview)

INSTRUCTIONS FOR THE INTERVIEWER

What experiences have you had (and what insights have you gained from these experiences) that lead you to believe you would be a good physician?

Discuss this question with the interviewer.

1. **Ensure that the applicant has read the scenario**
2. Discuss some of the following issues with the applicant. Some background information is given on the following pages.
 - A. What personal skills does the applicant feel physicians require?
 - B. How have these skills been demonstrated by the applicant in the past?
 - C. If the applicant does not get in, what would he/she do in the following year to try and improve his/her chances during the next admissions cycle?
 - D. What was learned from the experiences described by the applicant?
 - E. What experiences does the applicant wish he/she had had an opportunity to participate in?
3. The applicant has 8 minutes to discuss these issues with you. After 8 minutes a bell will sound and you will have 2 minutes to complete the score sheet. Do not give the applicants feedback.
4. In assessing the applicant, consider the following issues. Note, however, that these are just a guideline and should not be considered comprehensive.
 - A. Did the applicant demonstrate having put some thought into the qualities that must be maintained by a good physician?
 - B. Did the applicant support his/her claim that he/she has these qualities with specific examples of past experiences?

BACKGROUND AND THEORY

Following is a list of essential roles and key competencies that the CanMeds 2015 Physician Competency Framework, published by the Royal College of Physicians and Surgeons of Canada defined as critical to the performance of medical specialists. Applicants cannot have demonstrated competency in each of these areas without medical training, but they might serve as a guideline when listening to responses.

Medical Expert

- Practice medicine within their defined scope of practice and expertise
- Perform a patient-centred clinical assessment and establish a management plan
- Plan and perform procedures and therapies for the purpose of assessment and/or management
- Establish plans for ongoing care and, when appropriate, timely consultation
- Actively contribute, as an individual and as a member of a team providing care, to the continuous improvement of health care quality and patient safety

Communicator

- Establish professional therapeutic relationships with patients and their families
- Elicit and synthesize accurate and relevant information, incorporating the perspectives of patients and their families
- Share health care information and plans with patients and their families
- Engage patients and their families in developing plans that reflect the patient's health care needs and goals
- Document and share written and electronic information about the medical encounter to optimize clinical decision-making, patient safety, confidentiality, and privacy

Collaborator

- Work effectively with physicians and other colleagues in the health care professions
- Work with physicians and other colleagues in the health care professions to promote understanding, manage differences, and resolve conflicts
- Hand over the care of a patient to another health care professional to facilitate continuity of safe patient care

Leader

- Contribute to the improvement of health care delivery in teams, organizations, and systems
- Engage in the stewardship of health care resources
- Demonstrate leadership in professional practice
- Manage career planning, finances, and health human resources in a practice

Health Advocate

- Respond to an individual patient's health needs by advocating with the patient within and beyond the clinical environment
- Respond to the needs of the communities or populations they serve by advocating with them for system-level change in a socially accountable manner

Scholar

- Engage in the continuous enhancement of their professional activities through ongoing learning
- Teach students, residents, the public, and other health care professionals
- Integrate best available evidence into practice
- Contribute to the creation and dissemination of knowledge and practices applicable to health

Professional

- Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards
- Demonstrate a commitment to society by recognizing and responding to societal expectations in health care
- Demonstrate a commitment to the profession by adhering to standards and participating in physician-led regulation
- Demonstrate a commitment to physician health and well-being to foster optimal patient care