

■ Preparing Students for Multiple Mini Interviews

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Interviews are as essential to the process of admitting students to medical schools as they are fraught with widely acknowledged problems: cultural differences between interviewer and interviewee; the human tendency to prefer applicants who are like us; the influence of appearances; and the subjectivity and vagaries of brief high-stakes social interaction, to name just a few. As Stanford's Associate Dean of Admissions Dr. Gabriel Garcia pointed out, traditional interviews often tell us more about the interviewer than the interviewee.

Increasingly, medical schools are turning to multiple mini-interviews, or MMIs, to interject some measure of objectivity, by comparing applicants' performance in standardized situations.

MMIs constitute a major change in the application process, and health professions advisors everywhere are understandably anxious to learn about them and how best to prepare their students. In response, there were sessions about MMIs at almost every regional AAHP meeting this past spring, and WAAHP was no exception.

At the WAAHP conference in Palo Alto, California, AAMC's Western Group on Student Affairs sponsored a panel discussion, *Multiple Mini Interviews in Selecting Medical Students*. The session featured six presenters from two institutions, Stanford University

and the University of California at Davis (UCD). Dr. Garcia opened with a "Review of MMI Literature and Rationale"; Charlene Hamada spoke from her recent experience implementing a MMI program at Stanford, "MMI Mechanics: Lessons Learned"; and Mark Henderson, Stuart Henderson, Julie Rainwater, and Francis Sousa described lessons learned from the UC Davis MMI program, in "Implementing MMI at UC Davis: A Qualitative Analysis." The UC Davis team also offered a hand-out comparing the experiences of implementing a MMI program at the University of Arizona at Phoenix College of Medicine, the University of California at Los Angeles David Geffen School of Medicine, and UC Davis's School of Medicine. The session ranged from explaining how MMIs work to summarizing feedback received from interviewers and interviewees.

Although the session was meant for medical schools that are considering implementing the MMI format, it turned out to be valuable for health professions advisors, providing insight into the rationale behind MMIs and their implementation.

How do MMIs work?

When explaining MMIs, people frequently liken it to "speed dating," but that is more than a little misleading. For admissions purposes, "speed dating" — a series of short interviews with

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the goal of sorting through potential partners quickly, searching for that all-important “click” that makes a long-term relationship a possibility – would retain the disadvantages of traditional interviews and none of the advantages of the extended, in-depth interaction of traditional interviews. MMIs, on the other hand, minimize the relationship between interviewer and interviewee and focus instead on how applicants respond in a series of standardized situations.

To introduce us to MMIs, the UC Davis team played a training video produced by McMaster University, where the MMI format was created. The ProFIT Human Resources video is available from McMaster University, as is their training manual, which can be downloaded free from fhs.mcmaster.ca/mdprog/interviews.html

The video described three common formats: questions, scenarios, and tasks. The interviewees, or applicants, move through a series of sessions, each session designed to test a specific aspect, such as problem solving, cultural competence, or teamwork. Applicants move through a series of sessions, meeting 1-2 interviewers in each session. The individual interviewers, or “raters,” present their same question, scenario, or task to all applicants, making it easy for them to compare the quality of responses.

In “Question” sessions, there is one rater and one applicant. The rater asks each applicant the same stem question but may ask different follow-up questions, depending on how the applicant answers. Questions test attributes such as communication skills, professionalism, and thought processes.

In “Scenario” sessions, there are three people: a rater, the applicant, and an actor. The applicant often receives the scenario prompt before entering the room and then responds by interacting with the actor, who is trained to deliver a consistent performance, while the rater observes. Scenarios test attributes such as social interaction, compassion, and problem solving.

In “Task” sessions, there are two raters and two applicants. The applicants are given a task to complete (or attempt!) while the raters observe, each rating his/her assigned applicant. Tasks test attributes such as teamwork, communication skills, and problem solving.

Sessions last anywhere between just a few to ten minutes; the average session at Stanford this past year lasted four minutes.

What are the advantages of MMIs?

Not surprisingly, many health professions advisors worry about whether their students will perform well with the MMI format, and the UC Davis team noted the disadvantages advisors worry about:

- Isn't MMI impersonal? How will the admissions committee really get to know students if they only see them for a few minutes and in such structured situations?
- Will shy students be able to shine in such short sessions?
- Is there a bias? How do culture and language impact performance and rating?
- Will there be opportunities for students to meet faculty one-on-one to help them decide whether they like the school?

They also noted the disadvantages for the medical schools, including the significant investment in funding, personnel, and training. In fact, one of the real challenges is to convince raters to use the full rating scale (i.e., rating half the applicants in the upper half, and half the applicants in the lower half of the scale); raters tend toward Garrison Keillor's “Wobegon” effect, in which they find that all the applicants are above average.

With MMIs, raters cannot give every applicant the same or similar evaluation. For example, if a rater sees ten applicants, s/he assigns a score ranging from 1 – 10 to each applicant without duplicating a score. This allows for a clearer, more finely tuned ranking of applicants. The panelists assured the audience that outlying scores are taken into account in the final review, e.g., deleting exceptionally high or low scores.

The multiple scores of MMIs allow students to have a few weaker sessions and still perform well overall. Unlike traditional interviews, MMIs make it possible to eliminate a single bad interview or interaction so it doesn't have a major impact on the student's admissions decision.

MMIs are so new that there are few data of any kind, and no long-term data on the relationship between MMI selection and later performance. Nonetheless, both Stanford and UC Davis asserted that MMIs offer greater validity and reliability. The presenters felt the MMI process was fairer than traditional interviews because MMI questions and scenarios are

consistent for all applicants, the individual opinions of raters have less impact, and multiple encounters/ratings not only provide more data points for a more accurate rating but also lessen the impact of one bad session.

Because the MMI sessions are not knowledge-based but situational, Dr. Garcia believes they may be a better predictor of clinical performance. The UC Davis team shared evaluation statistics that show high satisfaction by both applicants and raters, and the presenters felt MMIs are significantly better for evaluating problem solving and interpersonal skills.

Another advantage to MMI that is significant in this era of increasingly interdisciplinary health care teams is that the MMI raters come from diverse professions: both Stanford and UC Davis enlisted not only physicians as raters but also nurses, lawyers, residents, administrators, and others.

Preparing students for MMIs.

As Stanford's and UC Davis's presentations unfolded, it became clear that students will need to prepare differently for MMIs than they have for traditional interviews.

In addition to developing poise, a professional persona, and an ability to speak articulately about themselves, their goals, preparation, and accomplishments, students will also need to practice flexibility in facing new situations and confidence in solving problems under challenging conditions. The more students prepare, the more likely they will do well.

MMIs have an element of the performing arts about them, and like performers, students undergoing MMIs will need to manage performance nerves and the skill of "letting go" and refocusing when one of the sessions goes poorly.

Also, because the purpose of MMIs is not for students to talk about themselves, there will be added pressure for students to ensure that their story is conveyed clearly in other parts of the application. MMIs will place additional emphasis on students' essays and mini essays about their experiences.

Health professions advisors can help their students prepare for MMIs first by ensuring that both they and

their students understand MMI formats. The *Medical School Admission Requirements* (MSAR) has begun to indicate schools' interview format, and details about the formats individual schools use should become more available as MMIs become more widespread.

The McMasters University HR video and downloadable training manual mentioned above are excellent, as useful for health professions advisors helping students as for medical school admission offices training staff. In addition, there are 30-40 MMI questions, scenarios, and problems already in public domain that could be very useful in preparing students.

When structuring activities to prepare students, advisors can use the example given by UC Davis: these are the areas for which they have designed questions, scenarios, and tasks to evaluate:

- Professionalism
- Dealing with stress
- Problem solving
- Interpersonal skills
- Culture/diversity
- Integrity/ethics (2 sessions)
- Pathway to medicine
- Teamwork – giving
- Teamwork – receiving

UC Davis is considering adding an additional session to learn about students in more detail and to allow students to share information about themselves.

Although different from traditional interviews, MMIs offer schools a new tool for evaluating applicants and allow the most well-rounded applicants to shine. With appropriate preparation, applicants can feel confident going into MMIs and make the most of the experience.

Whether MMIs are a passing fad or will become the new norm is not yet possible to predict. What we do know is that enough medical schools are using the MMI format that preparing for it needs to be part of the health professions curriculum. What that means during this period of transition is that health professions advisors will need to do double duty and prepare their students for both traditional and MMI formats. The good news is that the skills students need to do well in both formats will serve them well throughout life.

THE MULTIPLE MINI-INTERVIEW AT MCMASTER: A TRAINING MANUAL FOR INTERVIEWERS

The interview is one of the opportunities for the medical school to assess the applicant in person. Applicants have reached this stage because of their sufficiently high academic standing, strong MCAT verbal reasoning score, or by presenting themselves as highly suitable on their CASPer test. It is the combination of these assessments that is used to select the applicants for this next stage of selection.

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

INTRODUCTION

The Medical Program has changed its admissions interview to a Multiple Mini-Interview (MMI). This protocol has been modeled on the Objective Structured Clinical Examination 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 traditional interview processes. In addition, both interviewers and candidates reported positive feedback perceptions of the MMI. The MMI consists of a series of short, carefully timed interview stations in an attempt to draw multiple samples of applicants' ability to think on their feet, critically appraise information, communicate their 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 the applicants' interaction with a human simulator (i.e. an actor portraying a particular character).

REASONS FOR USING THE MULTIPLE MINI-INTERVIEW PROCESS:

As the performance of an individual is highly variable across situations, evaluation that uses multiple scenarios is a more sound psychometric approach with a strong basis in educational and evaluation theory. This is advantageous for applicants. If an applicant has trouble in one scenario they can recover with an excellent performance in another situation. Also, individuals with diverse backgrounds have a more equitable opportunity to demonstrate the quality of their educational and personal backgrounds.

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 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 their personal opinions.

Recognize that there are **no right answers** for many of the scenarios that applicants will see. 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 will challenge the applicant to express their ideas clearly and rigorously.

OPERATIONAL DETAILS:

Each mini-interview takes place in a different room. When the applicant comes to the door they will see a card that, in a few lines, describes the scenario for that room. There may be a brief additional note. The applicant will have two minutes to read the information and will be told when they may enter the room. A second copy of the scenario will be placed in the room, so the applicant need not memorize the information. Please do not allow the applicants to remove this copy from the room. The applicant may choose to take longer than the time allotted to think about the scenario before entering the room. However, any additional time will reduce the time available to discuss the issue with you, the interviewer. The mini-interview will take 8 minutes. No more. At the end of that time the session is over and the applicant should move to the next room. **Do not go over this time limit.** Be aware that there will be no feedback at any stage of the proceedings.

AN OUTLINE OF THE INTERVIEW

On the morning of the interview you will receive a copy of the station that we would like you to evaluate. Examples of two stations that have been used in the past are included in this manual.

- You will quickly note that the instructions the candidates are provided are relatively vague and deliberately so. This will allow different candidates to approach the station in different ways.
- If the instructions on the second page of the materials that you receive the morning of the interviews label you as an interviewer, you should prepare to discuss the topic with each applicant (some background information and theory will be provided for you).
- You need not read down the list of questions provided or discuss all of the information that you will receive with each candidate. Rather, follow the applicant's lead to some extent, but feel free to challenge the applicants to defend their opinions by offering a countering point of view.
- Candidates have been informed that there are no absolutely correct answers for any of the stations.
- You should note that the MMI is not intended to test the amount of prior knowledge candidates have in these domains.
- Feel free to provide definitions to terms or clarify what is meant by the instructions if the applicant is uncertain. Make sure you are familiar with the wording used in your station during the morning briefing session.
- If the instructions on the second page of your materials you receive label you as an observer, you have been assigned to a scenario outlined and you should observe and evaluate each applicant's communication skills and empathy.

• UNDER NO CIRCUMSTANCES SHOULD THE ASSESSORS DISCUSS THE ASSESSMENT PROCESS OR ANY ASPECT OF THE INTERVIEW PROCESS WITH THE APPLICANTS OR THE ACTORS OR ACTRESSES.

Admissions MMI – Sample Station 1

INSTRUCTIONS FOR THE INTERVIEWER

1. **Ensure that the applicant has read the scenario**

Dr. Blair recommends homeopathic medicines to his patients. There is no scientific evidence or widely accepted theory to suggest that homeopathic medicines work, and Dr. Blair doesn't believe them to. He recommends homeopathic medicine to people with mild and non-specific symptoms such as fatigue, headaches, and muscle aches, because he believes that it will do no harm, but will give them reassurance.

Consider the ethical problems that Dr. Blair's behaviour might pose. Discuss these issues with the interviewer.

2. Discuss some of the following issues with the applicant. Some background information is given on the following pages.
- A. What's wrong with the way Dr. Blair treats his patients? Why is that wrong?
 - B. Why do you think Dr. Blair does it?
 - C. Can you see any circumstances under which recommending a placebo might be the appropriate action?
 - D. What is the difference between (C) and Dr. Blair's practice?
 - E. What action would you take regarding Dr. Blair?
3. The student 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 student, consider the following issues. Note, however, that these are just a guideline and should not be considered comprehensive.
- A. Did the applicant express balance and sympathy for both intellectual positions?
 - B. Was there a clear analysis of the ethical problems paternalism raises?
 - C. Did the applicant suggest a course of action that is defensible and moderate?

Background and Theory

Placebos are still commonly used in research, and they have been used for centuries in clinical practice. The simple fact that Dr. Blair uses placebos, then, is not what makes this case unpleasant. The ethical issues in this case arise because the doctor is behaving paternalistically. He is treating his patient much as a parent would treat a child, and he is deciding a course of care for the patient based on what he perceives the patient's needs to be. This entails deceiving his patients, and making them do what is good for them.

Paternalism is only one model of the doctor/patient relationship. Others see the relationship as one between colleagues who share a common goal (the health of the patient), one between rational contractors (who agree on a contract leading to health), or one between a technician and a consumer of medical expertise. Each metaphor for the relationship has some descriptive failings and some serious normative failings.

Needless to say, the paternalistic model of health care has been severely criticized in the past half-century or so. Paternalistic doctors may provide no worse care, but they provide it at a very serious price: patient autonomy rights. This brings up an important distinction in this OSCE: that between consequentialist and duty ethics. Consequentialists judge actions by consequences; if the consequences are good, the action is good, and vice versa. Many consequentialists would see little wrong with Blair's behaviour in this case because only good is done to the patient – the doctor is probably right in his assessments, and is probably even choosing treatment that brings the best results in the shortest time.

Judged, then, strictly by the consequences of his actions, he has been acting ethically. But duty ethicists would argue that the doctor has not been treating his patients as fully rational, capable people, and hence has been acting unethically. Resolution of these viewpoints might happen if we take a long-term perspective. It may be the case that giving placebos has more harmful than beneficial consequences if we consider the damage done to the medical profession. If Dr. Blair's patients were to become aware of their deception, they might come to doubt the honesty and usefulness of doctors.

Paternalism, while no longer considered a good model of interaction, is necessary under certain circumstances. A paternalistic attitude is, of course, the only possible relationship in cases where a patient is incompetent, and it is sometimes recommended when the knowledge of a diagnosis might cause more harm than good. Paternalism and deception (both of which must be justified if we are to allow placebo use) might be allowable when the doctor cannot treat the patient as a capable person, when no harm will be done to the reputation of the profession, and when the benefits outweigh the harms. It is difficult to decide what action the applicant should take. Some options are: reporting Blair to the college, speaking to him in private, and ignoring this minor transgression. In their quest to appear ethical, though, and especially in a trying environment such as this, people sometimes suffer from excessive piety (this is the endless political capital of everything from anti-drug campaigns to oil wars). Applicants should, I think, have a more measured and considered response, one which is neither zealous nor laissez-faire. Perhaps the best solution is further consultation – the applicant, being relatively inexperienced, should probably seek out more professional opinions.

Short answers:

- A. Dr Blair is treating all of his patients paternalistically. This is acceptable in rare circumstances (when the patient is mentally incompetent), but not in most.
- B. Dr. Blair presumably does it because it leads to the best (short-term) consequences with the fewest difficulties.
- C. Recommending a placebo should probably only be done when no real medicine is suitable and:
 - a) the doctor can't treat the patient as a capable person.
 - b) no long-term damage to her reputation will result
 - c) the benefits will outweigh the harms
- D. Obvious
- E. Measured and considered response—maybe more consultation.

Place Applicant Sticker Here

ADMISSIONS MMI SCORE SHEET

Applicant's Name: _____

Interviewers Name: _____

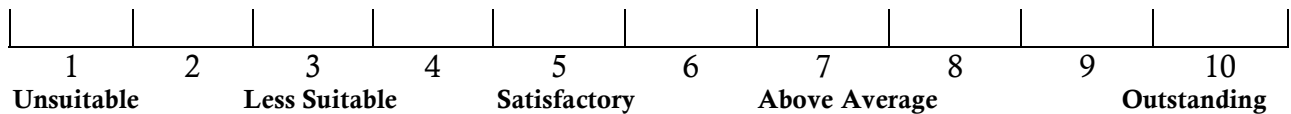
Potential Conflict of Interest?: **Y** **N** **If "Yes," Why?** _____

Dr. Blair recommends homeopathic medicines to his patients. There is no scientific evidence or widely accepted theory to suggest that homeopathic medicines work, and Dr. Blair doesn't believe them to. He recommends homeopathic medicine to people with mild and non-specific symptoms such as fatigue, headaches, and muscle aches, because he believes that it will do no harm, but will give them reassurance.

Consider the ethical problems that Dr. Blair's behaviour might pose. Discuss these issues with the interviewer.

Please rate the applicant's **overall performance** on this station *relative to* the pool of all applicants you are rating. You may adjust your scores as necessary before turning them in.

Consider the applicant's: **Communication skills**
 The strength of the arguments displayed
 The applicant's suitability for the medical profession.



Comments:

Admissions MMI – Sample Station 2

INSTRUCTIONS FOR THE OBSERVER

1. Ensure that the student has read the scenario

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.

2. Observe the applicant and be prepared to assess the communication skills displayed. Some background information is given on the following pages.
3. The student 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 student, 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.

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

1. Listens well.
2. Remains supportive.
3. Avoids making light of Sara's concerns.
4. Normalizes concerns, noting that these feelings of anxiety have become quite common.
5. 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)
6. Helps Sara separate the intellectual response of low danger from the emotional response of anxiety.

Place Applicant Sticker Here

ADMISSIONS MMI SCORE SHEET

Applicant's Name: _____

Interviewers Name: _____

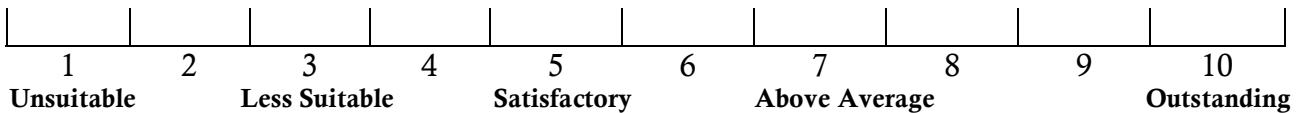
Potential Conflict of Interest?: **Y** **N** **If "Yes," Why?** _____

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.

Please rate the applicant's **overall performance** on this station *relative to* the pool of all applicants you are rating. You may adjust your scores as necessary before turning them in.

Consider the applicant's: **Communication skills**
 The strength of the arguments displayed
 The applicant's suitability for the medical profession.



Comments:

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.

Interviewers may **NOT** ask applicants questions related to:

- *race*
- *national or ethnic origin*
- *colour*
- *religion*
- *age*
- *sex*
- *marital status*
- *family status*
- *sexual orientation*
- *disability*
- *conviction for which a pardon has been granted*

unless they have been raised by the applicant, and **if they are relevant to the issue under discussion.**

[Revised January 20, 2010]