MULTIPLE MINI INTERVIEW (MMI)

Book Excerpt

TSM Guides

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MULTIPLE MINI INTERVIEW (MMI)

WINNING STRATEGIES FROM ADMISSIONS FACULTY

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FROM THE AUTHORS OF THE SUCCESSFUL MATCH

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Dr. Samir Desai serves on the faculty of the Baylor College of Medicine in the Department of Medicine. He has educated premedical students, medical students, residents, and international medical graduates, work for which he has received numerous teaching awards. He is an author and editor, having written 18 books that together have sold over 250,000 copies worldwide.

He is the co-author of the *Medical School Interview: Winning Strategies from Admissions Faculty*, a highly acclaimed book that has helped thousands of applicants deliver a compelling and powerful interview performance. He has spoken about interview success at universities across the country and leads the medical school interview workshop at Rice University.

His book *Success in Medical School: Insider Advice for the Preclinical Years* provides preclinical students with detailed knowledge and guidance to excel in medical school. To help students lower the cost of attending medical school and position themselves for residency match success, he wrote the book *Medical School Scholarships, Grants, & Awards*.

He is also the co-author of *Success on the Wards: 250 Rules for Clerkship Success*. This book has helped students make the difficult transition from the preclinical to clinical years of medical school. *Success on the Wards* is a required or recommended resource at many U.S. medical schools.

He is also the co-creator of Medical School Interviewing 101, the course that helps premed students quickly and confidently prepare for their medical school interviews, using before-and-after videos and a step-by-step approach.

As a faculty member, he has served on the medical school admissions and residency selection committees. His commitment to helping premedical and medical students reach their professional goals led him to develop the website TheSuccessfulMatch.com. The website's mission is to provide medical school and residency applicants with a better understanding of the selection process. Applicants interested in partnering with Dr. Desai to elevate their interview performance can learn more about his medical school mock interview service at TheSuccessfulMatch.com.

After completing his residency training in Internal Medicine at Northwestern University in Chicago, Dr. Desai had the opportunity to serve as chief medical resident. He received his M.D. degree from Wayne State University School of Medicine in Detroit, Michigan, graduating first in his class.

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Rajani Katta, M.D.

Dr. Rajani Katta is an award-winning educator who is deeply passionate about patient, medical student, and physician education.

She served as Professor of Dermatology at the Baylor College of Medicine for over 17 years, and founded the Baylor College of Medicine Contact Dermatitis Clinic. In 2015 she left to establish her own practice dedicated to allergic contact dermatitis.

She has authored over 90 scientific articles and chapters, and has lectured extensively both nationally and locally on dermatology and contact dermatitis to students, residents, and physicians. On a national level, she has worked closely to advance the mission of the American Contact Dermatitis Society, serving on the Board of Directors.

She has been deeply involved in medical student education. She served as Course Director for Dermatology for 15 years, and previously served as Clerkship Director of Dermatology.

She is also the co-creator of Medical School Interviewing 101, the course that uses before-and-after videos and a step-by-step approach to help applicants go from good to great to unforgettable. Having advised many students over the years regarding the dermatology match process, she was determined to become an expert in this area. She co-authored *The Successful Match: 200 Rules to Succeed in the Residency Match.* The book quickly became the best-selling title in this field. It has been recommended as Suggested Reading in the AAMC Careers in Medicine Student Guide and identified as a high-value resource by the AAMC Group on Student Affairs.

She has authored a total of 7 books. One of these books, *Success on the Wards: 250 Rules for Clerkship Success*, has helped thousands of medical students make the difficult transition from the preclinical to clinical years of medical school. *Success on the Wards* is a required or recommended resource at numerous US medical schools.

She has a strong interest in preventive dermatology and has written frequently on the link between diet and dermatology. She maintains a blog at KattaMD.com, with the goal of helping foster better dietary choices by emphasizing the effects of diet on the skin. She has been interviewed frequently on this topic, and has been featured in or quoted by all of the major news networks and many media outlets, including CNN, the New York Times, Oprah magazine, Today.com, and many others.

After graduating with honors from Baylor College of Medicine and completing her internship in Internal Medicine, she completed her dermatology residency at the Northwestern University School of Medicine.

She and her husband Dr. Samir Desai (her co-author) have two children and one frog and reside in Houston, Texas. They enjoy hiking, and love to hear about great hikes.

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Please see our companion book for the traditional medical school interview:

The Medical School Interview: Winning Strategies from Admissions Faculty

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Chapter 1

Introduction

"Finally!" The patient, visibly frustrated, continued loudly with his complaint. "I'm in so much pain. That last nurse did nothing for me. I kept calling for her, and it took an eternity for her to come. That went on all night long. I couldn't sleep. I couldn't rest. It's like she was watching TV or something. I hope you can do better."

This is the type of exchange that could occur in any hospital. However, this particular encounter took place, not in a hospital, but during a medical school interview.

Playing the role of nurse was Sarah, a 25-year-old applicant who had desperately wanted to become a physician ever since childhood. Her chances of success hinged on her ability to interact effectively with an actor playing the role of an angry patient.

Early in college, Sarah had suffered from a variety of symptoms that left her weak and tired. Multiple visits to specialist after specialist failed to yield a diagnosis, and Sarah's grades suffered. One year later, with diagnosis finally in hand, she was appropriately treated and made a full recovery. By that time, however, the damage had been done and her GPA had plummeted.

Determined to reach her professional dreams, Sarah persisted and excelled in her remaining courses. Hopeful that medical schools would understand her situation, she applied as a college senior. She failed to receive even a single interview. After meeting with an advisor, it was clear that her biggest obstacle was a low GPA.

Following graduation, she enrolled in a two-year post-baccalaureate program. Several months into this new program, she applied again to medical school. Sadly, the outcome was the same. Although initially shaken, she persevered and maintained a 4.0 GPA.

In the fall of her second year as a post-baccalaureate student, she opened an email. "Thank you for applying to…After careful review of your application materials, our admissions committee would like to invite you for an interview…" It was her third attempt, and she was

elated to see that her hard work and determination had finally paid dividends. Now all that remained between her and a seat in medical school was the admissions interview.

At this particular school, a relatively new and innovative interview technique, known as the multiple mini interview (MMI), was in place. To understand why, it helps to trace the origins of the MMI. In 2001, on the west end of Lake Ontario, in an area known as the Golden Horseshoe, a small group of medical school educators at the Michael G. DeGroote School of Medicine at McMaster University initiated an interesting pilot project. Eighteen graduate students were recruited to act as "medical school candidates." These students were asked to participate in a series of brief interviews. Each interview station was designed to measure a certain non-cognitive quality or skill deemed important in future doctors. Interviewees interacted with a different interviewer or rater at each station.

Promising results led to a larger, more robust study in 2002, this time with real medical school candidates. As the data was analyzed, it became clear that the educators were on to something big. The new interview technique showed high overall test reliability.[1] Subsequent research demonstrated that it was superior to the traditional interview as a predictor of medical school clinical performance.[2]

Just two years later, in 2004, McMaster University introduced the MMI to the world of medical school admissions. Since then, the MMI has been adopted by numerous medical schools. Its reach has expanded beyond medical schools to include veterinary, dentistry, and pharmacy schools. In 2008, the University of Cincinnati College of Medicine became the first medical school in the United States to adopt this new interview technique. Since then, interest in MMI has exploded among allopathic and osteopathic medical schools. At the time of this book's writing, over 30 U.S. medical schools utilized the MMI in the admissions process.

For medical school applicants, the MMI's arrival represented a major change in the medical school admissions process. Change, especially in the high stakes world of admissions, often causes great anxiety for students, parents, and advisors, and the MMI was no exception. For years, medical schools had utilized the traditional interview format, a one-on-one or panel-based interview experience where applicants answered questions, such as "Tell me about yourself" and "Why do you want to be a doctor?"

Many students spent months preparing for the traditional interview, and there was a plethora of books available to help guide preparation. There were also numerous advisors skilled in mock

interviewing. With enough practice and the right guidance, students could feel confident in their interview skills.

With the arrival of the MMI, everything changed. To maintain validity and objectivity, medical schools began requiring interviewees to sign forms preventing release of MMI information to others. On discussion forums, medical students who had taken part in MMIs were relegated to delivering generic advice such as "Be yourself and try to enjoy it."

Advisors and applicants turned to the Internet for more specific information. At the websites of those schools utilizing the MMI format, little could be found beyond basic information about its structure and the reasons why schools chose to adopt the new technique. "The strongest advice is to understand the basic structure, time limit, and number of stations," wrote one school in the South.[3] "It is not recommended that you try to prepare for specific MMI questions," wrote another school.[4]

Sarah faced these challenges when she prepared for the MMI. With a dearth of specific information to guide her preparation, she felt understandably nervous on her interview day.

How did Sarah handle the opening scenario?

Prior to entering the room with the actor playing the angry patient, Sarah was given the following information:

> During shift change, your nurse colleague informs you of a "problem patient" that you will be taking care of. She reports being "harassed" all night long by repeated requests for more pain medication. "I followed the doctor's orders, and there was no extra pain medication I could give." As the night progressed, their encounters became increasingly tense and hostile. "I gave him pain medication about an hour ago. He's not due for more for another two hours. Good luck with this one," she says. "You're going to really need it." Enter the room as the patient's new nurse.

Patient: Finally. I'm in so much pain. That last nurse did nothing for me. I kept calling for her, and it took an eternity for her to come. That went on all night long. I couldn't sleep. I couldn't rest. It's like she was watching TV or something. I hope you can do better.

Nurse Sarah: Well, I can promise you that she wasn't watching TV. What can I help you with?

Patient: Haven't you heard anything that I've said? I need some pain medication. How about getting me some? The other nurse told me to try some breathing exercises. Can you believe that? We're talking about real pain here. Eleven out of ten, do you hear me?

Nurse Sarah: I'm sure it's eleven out of ten. Now, we've already…

Patient: I don't like your condescending tone.

Nurse Sarah: I wasn't being condescending. What I was trying to say when you interrupted me was that you've already been given pain medication. You're not due for another dose for another two hours.

Patient: Are you kidding me? I'm trying to tell you that I'm in pain. And you're telling me that I have to wait for two hours. Do you know where the doctor is? Why don't you call him? You and that other nurse – I don't get it. Why did you go into nursing? You're supposed to help people.

Nurse Sarah: The pain medication that's been ordered has been given to you. I really think you should calm down. Maybe if you do, your pain would be more tolerable.

Patient: How dare you tell me to calm down? I demand to talk to your supervisor. I'm going to tell her that you're refusing to give me pain medication.

Nurse Sarah: I've already told you. There's no medication that anyone's holding. You've gotten what's written for.

Patient: Just call the doctor. And bring the nurse supervisor in too.

Analyzing Sarah's answer

Sarah left the encounter frustrated. What went wrong? How could she have avoided this outcome? The angry patient or person scenario is frequently part of the MMI circuit. As you read through Sarah's dialogue with the patient, were you able to identify the factors that led to this unsuccessful encounter? I've listed and described these in the following box.

It was obvious that the patient was upset but Sarah **did not acknowledge** the patient's emotions or feelings. "You seem very upset" would have been one way for Sarah to do so.

Sarah never invited the patient to **share his story** and fully vent. It was clear that the patient had much on his mind. Sarah needed to make the patient feel that he was being heard.

Sarah **failed to show sympathy** or regret for the patient's situation. "I'm really sorry you had to go through all this" would have been effective.

Sarah **lost her composure**. At one point, the patient commented on her condescending tone. At another point, Sarah asked the patient to "calm down." Setting limits when someone is angry is seldom effective. In such situations, it's important to keep your cool.

Sarah **never explored any other solutions**. A particularly effective technique is to ask the patient for his thoughts on possible solutions. "Do you have some suggestions on ways to solve the problem?" Through this process, Sarah may have been able to **find an acceptable solution**. "Here's what I suggest…"

The angry patient is a common scenario in the MMI because it's such a common scenario in medicine. Patients, when faced with the stress of illness, sometimes act in uncharacteristic ways. They may lash out at their doctors and nurses for many reasons. Being sick enough to be hospitalized is frightening for most people. Patients commonly feel afraid, confused, and powerless. They feel that they have no control over what's happening to them. Physical factors, such as acute or chronic pain, may also play a role. Dealing with bad news that impacts prognosis, dealing with the risk of a disability, and the realities of living with a life-threatening illness: all of these are obviously severe stressors.

Sometimes the healthcare system itself can be the cause, as in long waiting times for a test, or an intrusive procedure, or denied insurance claims. At other times, the patient-physician relationship will cause a patient to lash out, such as when a physician is perceived as arrogant or disrespectful. Understand that there may be a number of factors at play when a patient lashes out at you, and that, in most cases, you shouldn't take it personally.

Sarah clearly didn't perform well during this scenario. Fortunately for Sarah, this wasn't a real admissions interview. This was a mock interview experience in which I played the role of patient. After I analyzed her performance, Sarah was able to better understand where things went wrong. She was then able to implement several strategies to effectively handle this type of situation, as you'll see in the following encounter.

You are the nurse manager on a busy hospital floor. One of your nurses is upset after a difficult patient encounter. The patient was in considerable pain but the nurse was unable to give him anything because the next dose of pain medication was not scheduled for another several hours. As she tried to explain the situation, the patient became quite angry and questioned the nurse's dedication to her profession. Hurt by this, the nurse lost control of her emotions, and the situation escalated, with the patient requesting to speak with the nurse manager. The patient is now waiting for you in the room. Enter the room.

Nurse Manager Sarah: Hello Mr. Smith. I'm the nurse manager on the floor. I understand you wanted to speak with me. How are you feeling?

Patient: Terrible. I'm in a lot of pain and no one seems to care.

Nurse Manager Sarah: Can you tell me what happened?

Patient: I just want some medication to help me with this pain. It's now so bad – nine out of ten. I've just been sitting here hoping and waiting for medication. The nurse told me that if I calmed down, that I might feel better. Can you believe that? I need some pills or even a shot. I need something. I'm really hurting.

Nurse Manager Sarah: So let me see if I've understood the situation. You're in a lot of pain, and you don't feel like the current pain medication is providing you with enough relief.

Patient: Yes, that's what I'm saying. I need something stronger than what I'm getting. I told the nurse this, and she kept telling me to calm down. I asked her to help me, and she kept telling me that it wasn't time for the next dose. I asked her to call the doctor, and she didn't look too happy about that.

Nurse Manager Sarah: I'm sorry that you're in so much pain. It sounds like you would find it helpful if I reached out to your doctor. That's something I can do. I'll call and let him know that your pain medication is not keeping the pain under control. Perhaps he can make an adjustment to the medication or stop by and take a look at you.

Patient: I would love that. I don't know why it's so hard to find the doctor.

Nurse Manager Sarah: Let me go and call the doctor. Let's see if we can come up with a plan to address this. How does that sound to you?

Patient: That sounds wonderful.

Nurse Manager Sarah: Before I take care of that, I wanted to see what else I can do for you. I know you're uncomfortable, and I apologize for that. Is there anything else I can do to help you? Are you cold? Do you need a blanket? How about a snack?

Patient: Would you mind turning the TV on for me?

In the following pages, you'll learn how to create this type of response.

A response that confirms that you have the qualities that this medical school seeks. The type of response that confirms to the interviewer that you are the perfect fit for their medical school.

In the next 400+ pages, we'll review, in depth, the multiple mini interview. You'll learn how critical the interview is in the admissions process. The Association of American Medical Colleges (AAMC) evaluated the importance of 12 variables on admissions decisions.[5] Of these, the MCAT score was rated sixth. Cumulative science and math GPA was rated third. What was the most important variable?

The most important factor in admissions decisions was, in fact, the interview.

You'll learn why the MMI is so important to admissions officers. It's widely recognized that the best physicians have more than just great scores and grades. The most effective physicians display a number of non-academic attributes. These traits are difficult to evaluate, and admissions officers rely on the MMI to help assess these traits. "Our school intends to graduate physicians who can communicate with patients and work in a team," writes Dr. Cynda Johnson, Dean of the Virginia Tech Carilion School of Medicine. "So if people do poorly on the MMI, they will not be offered positions in our class."[6]

How can you tell which qualities will be measured during your MMI? Unless you're privy to inside information at that school,

you can't know for sure. However, every school will create its MMI to assess for those qualities or skills that it has deemed important in its future students. In Chapter 3, we'll show you how to determine those qualities and skills.

We also review, in detail, other important aspects of the MMI. You'll understand who the raters (interviewers) are, how they'll interact with you, and what they're looking for. In Chapter 5, you'll also learn about their pet peeves, as well as the behaviors and attitudes that would lead them to flag you as an unsuitable candidate. Will your interviewers challenge you? They absolutely will, and I'll show you how to respond to these probing questions in a compelling manner. What else do you need to be concerned about? In one study, researchers described the concerns raised by interviewers who had been tasked with asking applicants certain interview questions. A major concern involved "assessor fatigue." What is it, and how could it affect your performance?[7]

You'll also hear from interviewees. In one study, 10% of participants rated the MMI as worse than the traditional interview.[7] What were the problem areas cited by interviewees? What caused them the most difficulty? How can you avoid their mistakes?

"There are no right or wrong answers," writes one Midwestern U.S. medical school.[8] Is that true? Are there really no right or wrong answers? As reassuring as this sounds, there are clearly wrong answers. In Chapter 7, we'll present the types of answers that can remove an applicant from consideration. You'll see how such answers can easily surface in the high stakes setting of the MMI. You'll learn how to avoid these responses, and deliver answers that yield high interview scores.

We break down the process of developing and delivering powerful answers to MMI questions in chapters 8 – 12. You'll then be able to utilize these strategies with our example questions. This will help provide the practice needed to elevate your performance. With each question, task, or scenario, we provide a sample answer with a thorough explanation of what makes the response so effective.

The recommendations in this book are based on multiple sources. Throughout the book, you'll see quotes from many different admissions officers. Although the MMI is a relatively new interview technique, there's been a substantial body of research on the topic. We've included the results of these research studies, which have shaped and guided our recommendations. Lastly, the recommendations are based on extensive discussions with applicants as well as admissions faculty. Dr. Desai served on the admissions committee at the Baylor College of Medicine for over 10 years, and has interacted with admissions officials at numerous medical schools. Dr. Katta served on

the residency selection committee for over 15 years. We now provide interview preparation services, and have worked with numerous medical school applicants. (To see where our students have been accepted, please see our website www.TheSuccessfulMatch.com. Our student acceptances cover almost every state in the United States.) In this book, as in our previous books, we've applied a combination of evidence-based advice and insider knowledge.

We've seen where students have excelled in interviews, and we've seen where they've failed. In the next 400+ pages, you'll learn how to apply these lessons to your own interview preparation. It's taken years of intense work for you to reach this point, and receiving an invitation to interview is a strong vote of confidence from the medical school. In the following pages, you'll learn how to make the most of this opportunity in order to reach your goal: medical school.

References

[1]Eva K, Reiter H, Rosenfeld J, Norman G. An admissions OSCE: the multiple mini-interview. Med *Educ* 2004; 38: 314-26.
[2]Reiter H, Eva K, Rosenfeld J, Norman G. Multiple mini-interview predicts for clinical clerkship performance, National Licensure Examination Performance. *Med Educ* 2007; 41(4): 378-84.
[3]Duke University School of Medicine. Available at: http://dukemed.duke.edu/modules/ooa_applicant/print.php?id=9. Accessed May 12, 2015.
[4]University of Nevada School of Medicine. Available at: http://medicine.nevada.edu/asa/admissions/applicants/selection-factors/applicant-interviews. Accessed May 12, 2015.
[5]Dunleavy D, Sondheimer H, Bletzinger R, Castillo-Page L. Medical school admissions: more than grades and test scores. *AIB* 2011: 11 (6).
[6]New York Times. Available at: http://www.nytimes.com/2011/07/11/health/policy/11docs.html?_r=0. Accessed May 3, 2015.
[7]McAndrew R, Ellis J. An evaluation of the multiple mini-interview as a selection tool for dental students. *Br Dent J* 2012; 212 (7): 331-5.
[8]Michigan State University College of Human Medicine. Available at: http://mdadmissions.msu.edu/applicants/mmi_faq.php. Accessed May 4, 2015/

Case #4

You are the leader of a large healthcare system. As vaccines developed to protect against complications of COVID have been shown to be safe and effective, your organization made the decision to institute a vaccine mandate. All employees will be required to receive the vaccine, with a few medical and religious exemptions.

How would you present this mandate to your workforce?

Sample Answer	Analysis
This is an important mandate, and it is truly a medical miracle that safe and effective vaccines have been developed and are now available for anyone in the United States.	
However, we all know that there are many people in the United States who have declined vaccination, and my approach as the leader of my healthcare organization is to try to reach as many of those individuals as I can.	
I would progress with a several stage approach.	This clearly describes the applicant's approach.
First, I would institute weekly emails to all of our employees. I would make these short and targeted. The first set would focus on incentives for vaccination, such as paid time off or free meal vouchers. Next, I would include photos of employees proudly showing off their vaccinations. I would also make sure to include statistics of how many of our employees were vaccinated, in order to make it clear that this is "normal" behavior for our employees. I would also advertise employee Town Halls, where we would answer any questions about vaccine development and safety.	The use of transition words such as "first" and "next" is helpful in structuring the response.
At the same time, I would start a public relations campaign talking about how our employees are health heroes. I saw this kind of poster when I visited the hospital last month, and it had a big superhero picture with a caption saying that their vaccinated employees were health heroes because they were protecting their patients. I would really double down on that message that we are healthcare professionals and health heroes, and we get vaccinated because we are	The applicant describes a tactic used by another hospital.

protecting our immunocompromised and vulnerable patients.

In the final stage, I would move onto information about our upcoming vaccine mandate. I would point out that our hospital system has always required vaccinations, such as hepatitis B vaccinations for all of our employees and the flu vaccine every year, and that the COVID vaccine will similarly also be required. I would make sure to tell any employees who were still hesitant that we had a special page on our website to answer any questions that they had. Finally, I would make it clear that our vaccine would be required by this date, and anyone who objected would be asked to leave the organization.

In the conclusion, the applicant summarizes her proposed systematic approach to the vaccine mandate.

Ultimately, I would work with my team to outline our timeline for this progression, going from vaccine information, to incentives, to honoring our vaccinated employees as health heroes, to finally implementing our vaccine mandate.

This is a strong argument supporting the legality of vaccine mandates for employees.

Promotion of COVID Vaccination Mandates for Healthcare Workers: Three Main Points

- First, we have a general ethical duty to protect others.
- Second, as healthcare workers we bear special ethical responsibilities that come from caring for patients.
- Third, there is a clearly established use of vaccine mandates for healthcare workers, such as for Hepatitis B and influenza.

Case #4: Key Points

All of us have a general ethical duty to protect others. This duty is even more imperative when the risk from vaccines to us is minimal, but the benefit to others is significant.

Second, anyone who works in the health professions, whether a front-line worker or behind the scenes, has a special ethical responsibility to protect the health and well-being of others.

Working in a healthcare setting means that these workers are more likely to interact with individuals who are vulnerable to COVID-19. For example, some of my patients receive certain immunosuppressive medications, and this may affect the protection offered by vaccines. One of my patients told me that she had her antibody titers tested after two doses of the Pfizer vaccine, and she did not produce antibodies. Studies have also shown that elderly adults may mount a less robust immune response. Finally, at the time of this writing, no vaccine has been approved for children under the age of 12 years.

The third main point is that requiring vaccination for healthcare workers is an established policy. Years ago, when I entered medical school, I was required to show proof of vaccination against hepatitis B as well as multiple other vaccines. This proof of vaccination has been a requirement for every job and at every hospital at which I have worked. The hospitals on which I serve as staff require flu vaccines every year for all of their staff members (with certain religious and medical exemptions).

Organizations that promote vaccine mandates have made it clear that vaccine mandates are legal. “As the US Equal Employment Opportunity

Commission has made clear, employers have the right to require vaccination as a condition of employment. This right extends to vaccines under emergency use authorization as well as those that have been fully approved by the FDA."

Organizations have also pointed out that mandates work. The Houston Methodist Hospital, where I am proud to serve on medical staff, was the first in the nation to require its employees to be vaccinated. It received backlash in the media, but in a message to all its employees, emphasized its commitment to "leading medicine." As the leadership explained, sometimes leading medicine can lead to uncomfortable situations, but it is important to do what is right for our patients. After the mandate, over 99% of employees received the vaccine, with only a small percentage resigning.

Vaccine hesitancy has been a major obstacle in the fight against COVID. In speaking to patients and employees, it is important to point out that this vaccine was not developed overnight. Just like many actors, the vaccine was not "an overnight success." Instead, basic science researchers have been performing the underlying scientific research for over a decade to support these vaccine platforms. That's the reason this vaccine appears to be an overnight success: it was over a decade in the making. Once the threat was clear, thousands and thousands of dedicated individuals came together to produce and make the vaccine accessible. Now, literally hundreds of millions of people have been safely vaccinated.

Importantly, this vaccine has dramatically reduced the risk of severe disease, hospitalization, and death. With that combination of vaccine safety and protection against a deadly disease, healthcare organizations are rightfully using every tool at their disposal to protect their employees as well as their patients.

References

Emanuel EJ, Skorton DJ. Mandating COVID-19 Vaccination for Health Care Workers. Annals of Internal Medicine. https://www.acpjournals.org/doi/10.7326/M21-3150. July 30, 2021.

U.S. Equal Employment Opportunity Commission. EEOC Issues Updated COVID-19 Technical Assistance. 28 May 2021. Accessed

at www.eeoc.gov/newsroom/eeoc-issues-updated-COVID-19-technical-assistance.

Case #11

Hospitals are expected to comply with a new law about pricing transparency, effective as of 2021. Because of this law, hospitals must publish their prices for 300 common procedures, such as the price for childbirth or a colonoscopy.

Discuss the issues and implications of this law.

Sample Answer

I remember hearing about this law in the news when it was passed, and how patient rights advocates were so happy about it.

I think the intent of the law is a very important one, but one major point is that we need to make sure that the law is working for the purposes that it's intended. In other words, we need to make sure that pricing information is easily accessible to patients. At the same time, it will be very important to study the implementation of the law and its effects. One major concern is that we need to make sure the law doesn't have unintended consequences, such as patients and hospitals prioritizing price over quality.

I've read multiple stories in the New York Times and other media outlets about individual patients who have received outrageously high medical bills. This is one extreme, where certain hospitals or healthcare systems charge extreme prices, and patients only find out about it after they receive a medical bill. I've also read about how many bankruptcies are due to high medical bills. With more patients having insurance that mandates high deductibles and high-cost sharing, it's more important than ever that patients are prepared for the price of their medical procedures.

From that standpoint, this law is a very important one. Our goal in healthcare is to care for our patients. Part of that care means limiting their financial side effects.

Beyond individual patients, we also need to think about the effects on employers, hospitals, and the nation. Since many employers provide healthcare insurance, it's

Analysis

In discussing the issues and implications of this law, the student begins with a strong positioning statement. She clearly lays out the main issues that she sees with the law.

She describes what she has read about this issue and makes it clear that she has some knowledge about the topic, introducing the information about high deductibles and high cost-sharing medical insurance.

also very helpful for them to have more knowledge about the price of healthcare. Because our nation spends so much on healthcare, efforts to reduce healthcare spending overall are important. The hope is that if hospitals must be transparent about their pricing, perhaps they will be less likely to charge extremely high prices.

She describes the impact of the law on other stakeholders. "Beyond individual patients, we also need to think about the effects on…" In discussing issues around a topic, it's important to consider the perspectives of all of those who will be affected.

Having said that, we need to make sure that we study the effects of this law. Healthcare quality must not suffer.

She transitions here to discussing the other potential implications of this law.

For patients, we need to educate them that cost is definitely not the most important thing about healthcare. While price is very easy to report, quality is harder to measure and report. Patients of course recognize that, and many may still be likely to choose healthcare based on their doctor's recommendation or the recommendations from their friends and family.

For hospitals, it's of course very important that they stay financially healthy. We know that the closure of a single rural hospital can affect thousands of patients' healthcare, so we need to study the effects on hospitals. One issue of concern is that we need to ensure that hospitals do not start cutting prices at the expense of healthcare quality, just to be able to say that they are the lowest price in town. Healthcare is not a commodity, and hospitals are not Walmart, so low prices should not be the only consideration.

This is where I think it's so important to measure outcomes. We need to study the effects of this law not only on healthcare spending but also healthcare quality.

Overall, I think this is a very important law and will help protect patients from sticker

shock and financial hardship. However, this law will only be helpful for patients if it is implemented well and if this information is easily available to patients and easy to understand. At the same time, it's very important to measure the effects of this law. Ultimately, we don't want the pendulum to swing from one extreme of outrageous prices to the other extreme of low prices at the expense of healthcare quality.

She ends with a strong concluding statement, stating that this is a very important law but laying out her concerns about potential negative effects of the law. Her last sentence is a very strong one, summarizing her major concerns in one sentence.

Centers for Medicare and Medicaid Services (CMS)

Beginning January 1, 2021, a new regulation was put into place by the Centers for Medicare and Medicaid Services (CMS). This regulation is centered on hospital price transparency. Every hospital in the United States as of this date is required to provide clear and accessible pricing information online. This information is required to be provided in two different ways.

- First, as a comprehensive machine-readable file that includes all items and services provided by the hospital.

- Second, as a display of shoppable services in a consumer-friendly format.

This list will cover 300 different services, such as childbirth care, x-rays, and joint replacement surgeries. Importantly, the hospital must also provide estimated minimum and maximum costs.

The agency states that this will make it easier for consumers to compare prices across hospitals and to be able to estimate the cost of their healthcare before going to the hospital. The CMS is planning to audit a sample of hospitals, and hospitals that do not comply may face civil monetary penalties.

Case #11: Key Points

If you're not familiar with the way hospital pricing traditionally works, this may be a surprise.

Why is it such a big deal that hospitals are required to publish their prices?

For decades, this information has been kept secret. Hospitals would negotiate with insurers for prices for different medical procedures and items, and those prices would vary from insurer to insurer. Patients would only know about these prices after they received a bill from the hospital.

Proponents of this rule believe that this will result in lower costs and better quality of care for patients. They make the argument that healthcare in America is a free market, and as such, consumers need to know the prices that they will be paying in this market.

Right now, consumers do not know the price of a certain service or procedure. Surprisingly, the physicians themselves typically don't know the price either. Although there may be a published price, that price is typically much higher than the negotiated prices with different insurers.

Prices also may vary significantly between different hospitals in the same community. One study found that the highest and lowest sticker prices nationwide for the same healthcare services differed by almost 300% on average.

In one example described by NPR, one man in Florida experienced wildly different prices for two abdominal CT scans. The first scan cost close to $300, while the second scan cost close to $9000.

Do these price differences matter? Absolutely, even for patients with insurance. In the case described by NPR, the patient had insurance, but after insurance paid their share, the patient still was responsible for over $3000.

One major concern with this new requirement is that healthcare quality may suffer. Critics are concerned that patients may choose a lower priced (and lower quality healthcare provider) to save costs.

Researchers have begun to study the effects of this rule, and this research will continue. One study looked at a random sample of hospitals and found that 83 (of 100 hospitals studied) were non-compliant with at least one major requirement of this rule. Only 30 hospitals reported discounted cash prices in a machine-readable file.

In another study, researchers evaluated the public websites of 20 honor roll hospitals and compared prices. They found that cash prices for an MRI ranged from $464 to over $6000. Prices for joint replacement surgery ranged from $22,000 to over $71,000.

References

Gondi S, Beckman AL, Ofoje AA, Hinkes P, McWilliams JM. Early Hospital Compliance With Federal Requirements for Price Transparency. ***JAMA Internal Medicine***. Published online June 14, 2021. doi:10.1001/jamainternmed.2021.2531

Availability of Prices for Shoppable Services on Hospital Internet Sites. Accessed August 4, 2021. https://www.ajmc.com/view/availability-of-prices-for-shoppable-services-on-hospital-internet-sites

Hospital Price Transparency | CMS. Accessed August 4, 2021. https://www.cms.gov/hospital-price-transparency

A Florida man got 2 CT scans, one in an outpatient facility and another in an ED. The latter cost 33 times more. Accessed August 4, 2021. https://www.beckershospitalreview.com/finance/a-florida-man-got-2-ct-scans-one-in-an-outpatient-facility-and-another-in-an-ed-the-later-cost-33-times-more.html