Welcome to another episode of Central Line. I'm Adam Striker your host and editor. Today, we're turning our attention once again to the important topic of diversity and inclusion. To help us unpack the important topic of diversifying the healthcare workforce, we're joined by Dr. William McDade, Chief Diversity, Equity and Inclusion Officer for the Accreditation Council for Graduate Medical Education. Dr. McDade, thanks for joining us today.

Dr. William McDade:

Dr. Striker, it's a pleasure to be with you today.

Dr. Striker:

Well, before we jump into the topic, I'd like to learn a little bit more about you and your experiences. Maybe just give us a brief overview of how you got to where you are now.

Dr. McDade:

Well, I started out in medicine thinking I was going to be a physician scientist. And after I finish my training at Mass General, I came back to the University of Chicago where I've been both an MD and PhD student in the Medical Scientist Training Program and started the laboratory. What I recognized very early on is that in the problem that I studied on sickle cell disease there weren't very many anesthesiologists who were studying that issue. And I also was in a practice at the University of Chicago, which is on the South side of Chicago, a largely African American community. So I became very interested in the idea of the fact that I was the only African American medical student in my class the year that I started. And so I tried to start from the very outset figuring out
ways of trying to help to open the doors to, to bring more people in, because I recognized the problems that my community had with having a doctor who look like the folks in the community. And so I got interested very early on and working with the, the Dean’s office that, when I was a student, and then when I was back on faculty the dean, Norman Wagner, came after me and said well, Bill we’d like you to be on the Admissions Committee. And so recognizing and starting a new laboratory and starting a new practice and really being involved in teaching of, of residents and medical students was a lot, but to take on the additional responsibility of trying to, to increase the number of underrepresented minority people in, in medical school was still important to me and now I took out that on his that as a major responsibility.

So few years later, I was invited to become Associate Dean for Multicultural Affairs at the University of Chicago, Pritzker School of Medicine, and then subsequently I was asked to be Deputy Provost for the University for Research and Minority Issues.

I, I left the diversity field for just a brief period of time when I went down to the Ochsner Health System in New Orleans to be the Chief Academic Officer and lead the medical school, the graduate medical education efforts, all the research efforts that were, were being done at the Academic Medical Center and the Allied Health Group. In fact, while we were, we were able to get a, a school for public, for physician assistants underway.

But when the opportunity came to really be involved in graduate medical education because I’d formally set on the Board of the ACGME, I chaired a task force at the request of Tom Nasca, the CEO on Diversity in Graduate Medical Education. And then I saw some very startling things and I felt you had to really have someone who could drive the initiative and who felt very strongly about wanting to make a change. And so when Tom asked me to then Chair the, the new Department on Diversity, Equity, and Inclusion of ACGME that was formed out of the report that our task force did, I was very happy that now I could return to Chicago and take that work on.

So, so that’s the pathway that I, I came to, to find myself at ACGME again, now as a worker instead of just a Board Member, but the work is really so important and it really furthers the, the things that I’ve been doing my whole career. I’ve been involved in helping young people think about careers in medicine, through inviting them to become involved in, in really first tier R1 research from very early time.

I, I was a grant recipient from the National Institute of Diabetes, Digestive Disease, and Kidney Diseases to start the program we called the Young Scientist Training Program which allowed high school students to come into the University of Chicago and really become involved in research efforts that got them motivated. And, and students who were in that program come from Chicago area high schools, South side mostly, and
many of them, now, have, have completed medical school. Some are in progress. This has been going on a long time.

We also ran a program that was sponsored by the Robert Wood Johnson Foundation and The Association of American Medical Colleges, which was called the Minority Medical Education Program, then the, the Summer Medical and Dental Education Program, which was responsible as, as a pipeline program or pathway program to really open the eyes of the people who were poised to go to careers in medicine to, to think about how you go about doing it, and how to better prepare yourselves as candidates.

And then when I got to the Provost Office, I was in charge of a lot of programs with respect to diversity on campus which involved post doctoral programs and young faculty programs. And so it seems that my whole life, although as a physician I have really been in, in the HR business, and helping to develop careers and, and move people into, to the medical field. So, so that's the, the longer story.

DR. STRIKER:

Well, you've got quite the path here and it's certainly a lot of experience to draw upon and so that being said, let's dive right in. Typically we use the words diversity, equity and inclusion quite a bit. And I wonder if you can disentangle those words, for all of us actually, on what each of those truly means.

DR. MCDADE:

Well diversity is an interesting concept because it's really more from other things. I mean, when I started in the Dean's Office at the University of Chicago, I was the Dean for Multicultural Affairs because people recognized that people of different ethnicities and backgrounds had different histories that came into the, the situation that we're in right now. And it was based in culture. And that morphed to other areas as well, so that you could have ability, or you could have gender, or you could have, you know, any sort of other sort of parameter that people could all described themselves as, because everybody has a culture, everybody has an identity. And, and so the idea of diversity really has now morphed into a, a much larger sort of comprehensive goal.

But let me focus with what we were trying to do with ACGME. Our, our goal was to improve healthcare and population health. And one of the biggest problems that I think we face in our society here in the US is health disparities, racial and ethnic health disparities. That is the premature death and the, the excess burden of disease that occurs in some communities on the basis of race and ethnicity. And this really was pointed out to us in 2002 when the Institute of Medicine, then now the National
Academy of Medicine, published a book called Unequal Treatment. It's about 600 pages and it detailed, a, a broad expanse of disease categories in which minority people in general, were, were outstripping the majority population with respect to disease burden. And it really impacted almost every entity in healthcare from hospitals, to clinical situations, to all over, with respect to the, the diseases that people face. And so, if, if you'd like to try to think of the disease burden carried by minority people as the disparity.

When we think about diversity at ACGME, we’re thinking about building a workforce that’s more likely to help us to eliminate those health disparities. That was really the goal of Healthy People 2010 that started Healthy People 2020 now. And, and one of foci, of, of that was to try to create a workforce that's going to be more likely to serve to reduce those disparities. Well, you ask yourself, well, what group is that? And, and so, it turns out that there’s a disproportionate rate of minority physicians who see minority patients. And if you look across disciplines, you'll see that if you're an African American physician, you're about 23 times more likely to see an African American patient than as a white physician. If you’re a Latin-X doctor, you're about 19 times more likely to see a Latin-X patient than a white doctor. If you're an Asian physician, you’re about 26 more times likely to see an Asian patient than a white physician. And if you speak only Spanish in your home, then you’re about 18 times more likely to see a Latin-X physician then if you are a white physician.

And why would this be? Well, William Julius Wilson the sociologist at Harvard would argue that it's because in fact, we live in hyper-segregated communities in the United States and that the tendency to see a physician of your same race is that strong, that powerful, in, in primary care. A, a group studied this and saw that the tendency to see a, a Black primary care physician if you’re Black, is about 40 times greater than a primary care physician who is white seeing a Black patient. And, and because of the way that we live, and the barriers that exist between communities, even if there aren’t fences there, it stops people from being able to, to see that physician who’s different than them because of other things like trust, or the ability to communicate, or the ability to, to follow through on medical advice in racially incongruent relationships, discordant relationships.

And so, the diversity we are seeking is to try to figure out who’s going to more likely serve that community and is going to help us to improve health care. And the answer to that, to some extent, is, is people who bear that great burden of disease and who share the same sort of backgrounds as those individuals who are suffering from those, those diseases.
So, I'm looking primarily at racial and ethnic disparities, but that doesn't mean that's the entire panoply of diversity. We, we have fields in medicine, say orthopedic surgeon, where only 14% of orthopedic surgery surgeons are women. And, and so if you look at all of the specialties, there's an axis of diversity I think, that pertains to everyone. If we collected data on LGBTQ, I am confident we would find that there are disparities that might be improved and, and if we had a workforce that was more likely to serve LGBTQ communities. People with disabilities, or differently abled people, certainly have an impact on healthcare and considerations around healthcare that could be improved by enrichment the workforce in those individuals.

And so the way that we are interpreting this at ACGME, is that diversity is defined locally by the hospital, or the academic medical center, or the sponsor institution that's around it. And whatever that institution sees in their community as a need to try to increase diversity to address a healthcare disparity, that's the group I think that we need to focus on. So it's a little different. In, instead of thinking about the identity around what we'd like to describe ourselves, or like, what we like to call ourselves, we're thinking about the functionality of the physician that's produced that will really eliminate any issue in, in disparity. And that's how I'd like to really think about diversity.

Now let’s go on to equity. So, equity really is best envisioned. So imagine there’s a baseball game and everyone wants to look over wooden fence in order to see it. But you got three people of differing heights. You got someone who's very, very small, someone who's kind of intermediate size, but still can't see over the fence, and then you have someone who can really see over the fence very well. Imagine if you gave each one a box that they can stand on. So you give the shortest person a box that she can stand on, the, the intermediate person a box, and the tallest person a box. That would be referred to as equality. Everybody gets the same box, but the little one still can't see over the fence, the intermediate now can just get his head over the fence and see the game. The tall person didn't need the box in the first place but still stands on the box because it's all equal.

Equity means giving people what they need to be successful. So the tall person didn't really even need a box in the first place. Don't give him a box. The intermediate person needed just one box in order to, to see over the fence, but the shorter person needed two boxes. And now with two boxes, she can see the game, the intermediate person can see the game and now the tall person can see the game and everybody benefits.

Now, let’s imagine instead of having a wooden fence, we had a chain link fence that everybody can see the game from where they stood to begin with. And that's what we refer to as Liberation. You remove the barrier, you’ve taken it completely away so that you don't need a box in order to see the game. So that's what I think of in the term
equality, equity, and, and liberation. They are spectrum of what one needs to be successful.

And the last thing is inclusion. Inclusion in, in my way of thinking, is really just a way to make sure that diversity works. That if you bring people into an environment that's not inclusive, they're not going to be successful. If you have to figure out ways of order, in order to make people feel welcome, and belonging in an environment, then that's what inclusion is there for. So what do you have to do? You have to mitigate the, the biases, the, the thoughts that, that really worked against an individual and discrimination, the acts that actually work against an individual. You have to remove micro aggression or those elements that really are toxic to the environment of somebody who is different than other people in the organization.

You have to figure out how to remove stereotype threat which is a way in which society has said that this person should be viewed. And that person actually internalizes it and believes it himself. Camara Jones would actually refer to that as internalized racism. The, the individualized racism that exists in society is, is really the racism that everyone thinks about. It's the acts of bad people. And we're not really so much focused on that. We're focused on really, the acts that are just built into the system as norms, they're part of the normal structure, and, and that we don't really see them because they're woven into the fabric of society. Getting rid of structural racism is really the most important thing that we can do. When we find a things disparately affect one group as opposed to another and advantage one group, the dominant group, as opposed to marginalized groups, that's something that we have to work on as a society to remove. And that makes our environment more inclusive when we take down those, those unspoken rules or those barriers that persist that keep people down, the headwinds that marginalized people face.

And, and so when were thinking about diversity, equity and inclusion it's about finding, you know, the, the broadest group of people with whatever they bring to the equation that's going to improve health care. We we're thinking about equity to make sure that they get what they need in order to be successful. If they don't need so much then, then, then don't give him as much as they otherwise could be given but those people who need more you give more to. And then inclusion, make the environment welcoming so that they feel a sense of belonging so they can be the most successful they can be in achieving their goals.

DR. STRIKER:

There's a couple things I want to get to here. The first question I have, related to diversity or disparity in healthcare. Do you think that that is a major hurdle for the
medical community to understand? That this is about approaching it from the patient's perspective and getting everyone the access to healthcare that they would otherwise not have without the diversity in the workforce. I, I get the sense, and maybe this is wrong, that perhaps a large percentage of the medical community feels that this is simply about making everything look the same and that we're just doing it because we want to make sure we're representing every group but not really approaching it from the patient's perspective.

DR. MCDADE:

No, no, that, that's not it at all. So, one of the things, that I, I did to look at this problem was, I looked at the American Medical Association Health Workforce Mapper, which is a tool, a geotool, that allows you to put a dot where every physician practices in the United States as a function of zip code. And so if you look at Chicago, for instance, since you'll see a nice cluster of cardiologists and blue dots around the University of Chicago, and you'll see another cluster around Northwestern and you'll see across the North shore line of Lake Michigan in Chicago a number of Cardiology practices. And then you'll see some sprinkled through the North Side Chicago, but when you look at the South side of Chicago, not so much. And, and so the idea is, in a community like Englewood, which is just west on the other side of I-94 from the University of Chicago, people don't actually go from Englewood East to the University of Chicago for their care.

And you say, well why? Well it gets back to the idea of trust, of having a physician who cares about your community and wants to work in your community, and, and it's about access in general, that the insurance that I have be accepted by the physicians who are just on the other side of I-94? No one has a cardiology practice in Englewood. And if you look at the life expectancy of the people who live in Englewood as in the New York Times article back in September, you'll see the life expectancy is 60 years old in Englewood, compared to Streeterville, the community that's just around where Northwestern is on the, the near North Side Chicago, where it's 90 years old. So a 30 year mortality gap exists between two communities that are a short train ride apart and it's because of the access that people have and it's because of the willingness to see physicians who are different than you or the willingness of physicians to actually see patients from those communities, in part.

So here's the problem. I can teach everybody who goes to medical school about cultural competence or cultural humility or all the things that we think are necessary to eliminate healthcare disparities in their practices, which are things that ACGME wants you to do. But the problem is that if you don't co-locate in a place where people who have these marginal life expectancies live, then you won't have much of an impact on the health
care disparities exist in, in our society. So what you have to do is find individuals who are more likely to practice in these underserved areas in order to make a dent.

And so if you ask first-year medical students as a double AMC does in their matriculating student questionnaire, whether they're going to practice in a community that's underserved when they graduate, 60% of African American medical students will say that, 50% of Native American indigenous medical students will say that, around 44% of Latin-X physicians in training will say that in their first year medical school. Then you ask them again at the medical student graduation questionnaire whether you plan a practice in underserved area. Native Americans still at 50%, African Americans down around 45%, Latin-X individual down around 32%, whites and Asians around in the teens. And so, when people graduate where do they practice? Well, they practice in areas that have a, a large number of people who look like them and because of the hyper segregation that we talked about it’s, it's really easy to, to, to put yourself in those communities, if you're an African American or Latin-X or an Indigenous physician. But sometimes it's harder despite the fact that the numbers are larger to find white and Asian physicians who want to practice in those areas.

So, the answer is, can you fix the health disparities that exist in our country simply by teaching everybody about the things that you should do right when caring for people who are different than you? And, and the answer is no. That you still need to make people who are more likely to practice in those areas and serve those people on a regular basis in order to make the dent that we need to make. And so the author and activist Bryan Stevenson who wrote the book Just Mercy, and runs the Equal Justice Initiative down in Alabama who spoke to the double AMC annual Learn, Serve, Lead Conference last fall and what he suggested is that there’s an empathy gap in our society, that we allow health disparities to persist because of the separation that we have between communities in the United States. That because we live and, in, in enclaves with people who are much like us, in, in this hyper segregated environment, we don't see the people who are really carrying the greatest burden of disease and so they don't exist to the reality that we would otherwise know if we experienced them directly on a regular basis. And because we aren't proximate to the suffering, Brian would actually say that we don't really appreciate the urgency that we have to put behind getting rid of these disparities. And, and that's the problem.

Vaclav Havel actually said the same thing. Sometimes we have to be willing to, to, to get into those, those difficult situations to be proximate to, to the suffering of individuals to really want to change it. And I think we're now seeing it to a large degree. This past summer with the racial unrest that took place after the murders of George Floyd and Brionna Taylor and Ahmaud Arbery. Now it's coming into our view, that we see that people are being treated differently on the basis of race. And then we see COVID that
overlaps with this that shows that, that COVID has had a disproportionate impact on people who have underlying health disparities. And because of those two synergistic relationships, we are now seeing even more clearly that the disparities that we have existed with in health for such a long time have a greater impact than we otherwise would have thought because now we see people who are dying in disproportion. In Chicago, of the first hundred people who died of COVID, 70 of them were African American. So, it, to me, it’s right here for us to see, and, and we really have to be intentionally ignoring it in order not to see it.

DR. STRIKER:

But do you feel that the current medical community understands all this? Or is that a hurdle that needs to be overcome? That it’s, it’s noble and necessary, but are the current physicians understanding of that?

DR. MCDAADE:

Well, I will tell you after the George Floyd situation in Minnesota this summer, a number of healthcare organizations had people who came out en masse, holding signs that, that said they were in support. A, a number of organizations wrote statements that, that really decried the current system and demanded equal justice in terms of health care access and, and the ability to, to eliminate health disparities through whatever means that we can marshal in order to do that.

Are there people who have lagged? Yes, and we have to work with them to help to bring them along. But the ACGME has started to really move in that direction. For the last 10 years, we’ve been looking at ways to reduce health disparities through educating the C-Suite on the necessity to do that. And we’re seeing some movement there. And then a year ago, we started program requirements that enjoined residents in partnerships with other sponsoring institutions to engage a mission-driven ongoing systematic approach to increase recruitment and retention of an adverse work force and provide inclusive learning environments. And that diverse workforce included residents and fellows, faculty, other GME staff and other academic folks who might be involved in the GME effort. Now every program has that as a requirement and so my hope is that medicine will learn along the way that these are important things to, to strive for. And that the people who we educate in graduate medical education programs in the ACGME now is a soul accreditors of all the residencies and most of the fellowships in the country. So, everyone’s going to come through a program where this was required of it. We hope to be able to move the needle on this in ways that we never could before when this didn't exist in graduate medical education. So you can come through a, a domestic medical school, and the LCME has a similar requirement but, you know, you recognize that 25%
of the physicians who trained in America didn't come LCME accredited schools. And so now, everybody is going to have this as a goal in their training programs and hopefully they'll carry it with them long into their practice.

DR. STRIKER:

Is there anything that's holding you back from making any further progress?

DR. MCDADE:

Well, obviously with structural racism in an existing society is a barrier. Because structural racism is one of those things that unseen, it's, it's racism without racists. It, it really looks at outcomes, it looks at processes, as opposed to acts of individuals. You know, things that have become normative, things have become usual, the standard, the way that we interpret things. The myth of meritocracy, that's all built into, to structurally racist sort of concepts that have been built up that have really caused the differential that exists between education, between the wealth gap that exists between Blacks and whites in society here, and, and a number of the barriers in healthcare that prevent good health. I mean, obviously, the social determinants of health are all predicated in structural entities that are historical in are persistent because of the way that our society works. Those are the targets of the things that we have to try to change in order to really advance healthcare equity. And, and that's really the goal, is to try to, to make sure that everybody has what they need in order to achieve good health.

DR. STRIKER:

And what would you say to people that might say, okay, well, I understand what you're saying, but ultimately, you know, we're talking about physicians, and physicians that need to be able to do the job and be competent and to have aptitudes in math and science. And I, I get we're trying to do, but I want to make sure that we have people that actually can do the work of, of being a physician. Have you gotten that question before? And what would you say to that?

DR. MCDADE:

Well, you know, there was an unfortunate article that was published in the Journal the American Heart Association that has since been retracted. And what is alleged is that by lowering standards, quote unquote, by looking at other parameters other than the standardized exams that have been historically used to say that there's a, a person who did well on the exam is of higher quality than the person who didn't do so well. The, the
problem with thinking like that is that the tests actually measure the competence and the outcomes of physicians who have those sorts of scores.

So David Ash performed an important series of experiments of studies back in 2009 published in the Journal of the American Medical Association. And what he looked at was the practice outcomes of OB-GYN doctors with respect to their complication rates. And he looked to see whether or not their USMLE score, or their MCAT score, or their passage on the ABMS Certification Exam varied with respect to their care for patients in practice. And what he found is that the thing that actually made the most difference in what the quality was, or what the complication rate was, of an, a practicing obstetrician-gynecologist for the next 17 years of their, their practice, was where they trained. If they trained in an institution that had a low complication rate, they maintained a low complication rate relative to their peers the next 17 years. If they trained in a place that a high complication rate, what they found is that they practiced with a high complication rate for the next 17 years. The idea that individual qualities on, on aptitude tests, or on placement exams, or on standardized exams actually tells you how good a physician you're going to be, how low your complication rate's going to be in practice, didn't correlate it all.

And, and so, if you're trying to produce physicians we're going to give the best care to patients, who are going to have lowest complication rates, who are going to serve people who aren't served right now, I think we may be looking at the wrong sorts of things, and that we measure the things that we can measure because they're easy for us to measure. That to have an exam that allows us to say that somebody does better on a, on a, on a quantitative exam or, than, somebody else, means that they've had more time to practice. They had more access to practice. They've taken more practice tests. They paid, they paid the five or seven thousand dollars that you need to do a, do review courses, that many people can't afford who come from more disadvantaged backgrounds.

Jordy Cohen an article also in JAMA on the premature abandonment of affirmative action in medicine showed a graph that I thought was very telling, that for underrepresented minority students, income matters the most for your MCAT performance, and that the lower your parental income, the lower your MCAT score, the higher your parental income, the higher your MCAT score. And that the difference was greater for African-American, Latin-X and Native Americans, then it was for whites and Asians. So what we're saying, is that the, the historical wealth gap that's generated because of slavery and in subsequent oppression that really causes this difference in wealth is really responsible, at the core, for the difference in performance on standardized exams. Yet, the communities that are suffering from greatest health
disparities are also the ones where the people who are the victims of, of this oppression need to go back and practice in order to help to eliminate health disparities.

So that's the, the, dichotomy that we're really looking at in this, is, is that there are other things that matter other than the performance on a standardized exam. And that you can actually be a really good doctor, but maybe you don't score well on standardized exams. There is a phenomenon that the psychologist Claude Steele referred to as Stereotype Threat. It's reinforced in environments that really are, are not inclusive, where people are made to doubt that they belong in the environment, something we refer to as imposter syndrome. And stereotype threat is really one of those things that, that generates the performance that you see people have on standardized exams. What it best is shown by is women who are in their sophomore year of college and are asked to take the math portion of the SAT. You can take half of the group of women and tell them that women typically under perform on these math exams compared to men, and then you can say absolutely nothing to the other group. And you'll find that consistently the women who are given the message before the exam that women don't perform as well as men, underperform on the exam. You can reverse that phenomenon by telling women at the beginning of the exam that women typically outperform men on these types of exams. Women show no difference in performance that the women were told absolutely nothing.

If you try to do this with a cognitive exam and race where you have a, a marginalized group, African Americans say, and you tell them that African Americans typically outperform non African Americans on a cognitive exam, they don't believe you. It's internalized with those individuals so much by everything that's seen in society that just by giving the mere suggestion that their thoughts about this will be different doesn't affirm them. It doesn't help them.

So what happens during the course of a test for somebody who's the victim of stereotype threat? Well, you engaged in something called rumination, which is you start thinking about all of those parameters that are involved with your not doing well on that exam potentially, and what would happen. So you're thinking, if I don't do as well on this exam as my, as they expect me to, they're not going to give me another chance. They're not going to let another person in this program who looks like me. I know, I'm not supposed to be here cuz I'm the only African American my program, I'm the first African American this program. You know, if I don't do well on this exam my whole family is going to be the out of money because I'm going to be the person who everyone looks to for money. Now, you're thinking all of this while you're doing question one, meanwhile everybody else has moved on to question four. And so in a speeded exam, those people who engage in rumination don't perform as well as those who don't have
stereotype threat and who aren't engaged in rumination, and who are just objectively answering the questions.

So nobody thinks about this as why people underperform on exams unless you really understand what stereotype threat's all about. And that's why inclusiveness is so important. You can reduce those sorts of barriers. And what I find in residency, as I refer to residency as the great equalizer, because only in residency, are you really working closely with other folks in, in collaborative learning environments. In medical school people are excluded, marginalized from study groups. In pre-med it certainly happens. But once you get to residency program, the cohorts are so small and people work together so well because you're exchanging information, you're, you're, you're handing off the people who care for your same patients that you have to develop an esprit de corps.

And, and what happens with that is you learn something that is really important, and that is, that the internalized racism that, that said that whites and Asians are, are superior intellectually to you as an African American isn't true. They present and you think of things that they could have said better. You understand a little bit more about the clinical problem that they did. They have the same questions that you have. And so what you see is by working closely with people shoulder-to-shoulder over the course of a residency, you dispel the notion of racial superiority. You teach as a senior resident junior residents who are of a different race than you. That dispels myths that they may have about white superiority. That may dispel myths that you have as the fact because you now teach people who look up to you and that sort of thing is something that many African Americans never get a chance to experience. And, and by, by having this, this, this dynamic broken, you can actually perform on, on standardized exams much better than you could before when you were ruminating and dealing with stereotype threat.

So, so its really an important concept to understand that performance isn't just about, you know, knowledge and, and quality and all the rest of that. There factors that transcend that. And the importance of what those individuals will do once they graduate and commit to a career in medicine, I think far out, exceeds what marginal differences that may exist on standardized exams.

DR. STRIKER:

Well, are medical schools getting that? Those are compelling arguments. Are the medical schools getting that messaging? Are they able to actually take that messaging and operationalize that in some fashion?

DR. MCDADE:
I think that many medical schools are moving to holistic admissions and situational judgment tests that are trying to tease out these things. The MCAT 2015 is now putting in social science questions and, and questions that, that really test the ability of individuals to think about things more broadly than just the biology, chemistry, physics and inorganic chemistry. The, the, the idea that other things matter, that the psychological sciences and, and that biostatistics makes a difference.

You know, when I, I looked at the breakdown of individuals as a function of race in which residency programs that they predominate in, and African Americans and Latin-X individuals are over-represented in, by their numbers, in the primary care fields as you might expect especially in areas that are greatly under represented. But one of the things that shocked me about African Americans is that they represent 12.5% of all the people who are in preventive medicine programs. That means that those are people who are thinking about public health issues, and occupational health issues, in, in areas that really transcend just the practice of medicine per se, but are thinking about the larger social context of medicine. Those things that the disparities and care that are related to social factors play a role in are the things that, that people understand when you come from these sorts of communities are, are important.

So, so I, I will just say that medical schools are getting it. And, and what you see now is, is really unfortunate and, and one of the things I think is important about understanding standardized testing is, is that when you look at MCAT performance African American mean score of MCAT’s in the lowest 13% of everybody who takes the MCAT. Right? If you imagine that once those people are, are seen and reviewed by admissions committees, they're not going to get into medical school if you're in the lowest 13%, what we see is that the: the, the tail of that distribution may go all the way to the top. That it’s a really thin tail. The majority of people are down by that mean score. And then if you look at the people that are admitted to medical school, and this is data out of UC Riverside that I just saw not too long ago, that the mean African American scores in the lowest 0.7 percentile of individuals who are admitted to medical school, so I think that medical school get it. But the problem is that if you say we're going to wave parameters on admissions test to get you into medical school, but we're not going to waive those sorts of parameters when you get to residency, you can then see how people who don't have very many opportunities to test, and, and don't have the resources to provide you with the background that will help you to supplement your performance on these exams may suffer. And that's exactly what we see. They will see that USMLE Step One scores are much lower for African Americans than they are for majority students. And that Program Directors use those scores as a measure of quality, keeping people out of programs that, or types of programs, on the basis of having a threshold because they can be more selective of performance on a standardized exam,
then you're going to be underrepresented in those fields. And so we have to look very carefully at that.

One of the things I was very pleased to see is that USMLE, the committee, said that they're now going to remove the three-digit score and look at a pass-fail score for USMLE Step One. And many Program Directions would say well, that's to our detriment because we don't have the ability to go through applications and, and figure out these sorts of a differences, that, that might be nuanced without a three-digit score that allows us to, to do what's easy in order to sort. And what I would argue is that, maybe it's not supposed to be easy. Maybe you're supposed to have to read some of these essays and really look at the applications and, and try to figure out ways in which you can actually change the way that the field has functioned in the past so that we can try to eliminate these health disparities that we've been so unsuccessful at remedying over the last several generations.

DR. STRIKER:

That actually brings me to a, another question. Are there other barriers that the medical schools have identified with regard to sorting out all their applicants? You already answered the point about having a numerical test score versus pass-fail. Are there other logistical barriers that they are citing?

DR. MCDADE:

Well, I, I will tell you that of the people, going back to African Americans again, of the African Americans who take the MCAT, half do not actually apply to medical school. And you say, well why is that? And, and in part, it's because it's the counseling that people get before they get into medical school or they're in the application process. There are countless stories of individuals who've been discouraged by college counselors to apply to medical school based on an MCAT score or a grade in organic chemistry. And yet we've seen examples of individuals who still went ahead and applied who have been extraordinarily successful subsequently, for all the reasons I talked about before.

Anthony Abraham Jack published a wonderful book called the Privileged Poor which really talks about the plight of underrepresented minority students who come from what he refers was doubly disadvantaged communities, as opposed to similar individuals who are given access to elite pre-college opportunities and then compared those people from upper income levels who, who are very familiar with the things that occur on elite campuses. And medical schools still draw many of their students from these elite campuses, so it's very important to look at this. And so what he showed, is that if you
don't understand how to navigate the college pathway, understanding what office hours mean, understanding that, that you may have to work but there are certain jobs that you can work that actually pay you but you don't have to be disengaged from academics at the same time that you're doing those sorts of jobs. Those are the sorts of, of things that it takes someone who understands the college process coming into it, who's had a parent, or has had a sib, or has had some exposure in, in the environment to understand how to best navigate. And the doubly disadvantage people who didn't go to an, an elite pre-college high school don't understand it and perform less well. And so we lose those individuals in the first couple of years of college, and, and they're, they're discouraged from applying.

One of the things that I think would be essential to do that has not yet happened is in the medical school admissions requirements book, now websites, that talk about the parameters of medical schools. We often look at the data there, and, and say well, I'd never fit in that medical school because the data that shows up in MSAR is really the average MCAT score or the average GPA of a medical school student. But as I just told you on the MCAT score, African Americans are in the lowest 0.7 percentile. So it's the range that's really important in making decisions about whether you should apply to a medical school or not. And unfortunately that data is not made available to us. I think it should be, because it would help people to think about not counseling themselves out of a career in medicine when the otherwise could.

The Association of American Medical Colleges put together website, several years ago over a decade ago now, called aspiring docs, docs.org, and it really talks about some of those other barriers that cause people to self select out. That is the idea of generating $200,000 in debt when your family may be a rental family because you can't afford a house. Only 40% of African Americans actually own houses in the United States because of the wealth gap I spoke of before. So how could you possibly think about going into $200,000 in debt if you're from a family that doesn't have a house, or a family that has a, a house that maybe only cost fifty or sixty thousand dollars? So, so that's the sort of mentality that has to be overcome in order to get people in the door to consider careers medicine. So that once you get them in to a pre-medical program or our college program. Now once you get them in to a, a pre-medical program or, or college program, you've got to think about the things that they need in order to be successful. This idea of giving someone what they need to be successful, equity, is something that doesn't happen in very many colleges. And so what medical schools look for are, are, are individuals who have had those sorts of, or privileges, I suppose. Those, those things that are able to allow those students to compete. And, and there a lot of them out there and we've got to get more of them into the practice of, of medicine. And, and so that's another one of the parameters.
The other thing that I think we have to go back to is think about the humanistic level that individuals show when we're thinking about who belongs in medicine. If you tell me, and, and I interviewed a few thousands of medical school students because I was on the Admissions Committee at the University of Chicago 17 years, and I used to Chair it. You ask people why they want to be a doctor. What is it they want to do with their careers? Who is it they want to serve? Those answers have to make a difference to you as an Admissions Committee. If someone tells you that they want to come into medical school because they want to serve the underserved. They want to make a difference in health disparities. They wanted helping communities thrive. That to me, there's a lot of weight.

If you tell me you want to do research on a, on a disease or, or on a complex that impacts a, a, a community that doesn't have very many people studying that, that particular phenomenon, I'm going to say that's, that's a person we need in medicine because we need to have somebody who's going to be thinking about those sorts of things as research projects when they get into medical school and beyond. So, so those are the sorts of parameters that we can look at in the holistic view of an individual. People with leadership who will drive an agenda, people who can teach. One of my favorite questions when I used to interview medical students for medical school positions was, you know, what's the, the Latin translation for the word doctor? It's teacher. So, so go ahead, teach me something. Because you're going to have to teach patients later on how to take care of themselves. So go ahead, teach me something that you think I need to know. And, people would get stuck at that position trying to figure out what it is they're going to teach me and how to teach me. But then you'd see people who loved that, and could go right into a description of something that you really had no idea about and now you know a lot about because they were able to communicate, they were able to reach you and understand, and that's what we need doctors to do and those are the sorts of things that we need to look at when we're at many medical school classes.

DR. STRIKER:

Well, let's bring this to, towards anesthesiology a little bit. What can organizations like the ASA do to foster more diversity and inclusion?

DR. MCDADE:

Well only about 3% of anesthesiologists are African-American, for instance, yet we need African Americans in all of those safety net hospitals, all those community hospitals and those communities where there is a predominance of underrepresented minority people. We think that people communicate better with anesthesiologists of their same race. We,
we see that there may be differences in the treatment of pain as a function of race and we need people sensitive that. In my own field of sickle cell disease as a, as a clinician, I was very much focused on what we could do to mitigate pain in people with sickle cell disease and to believe patients when they came in to the emergency room complaining of pain and discomfort.

As anesthesiologists, one of the things we need to focus on is reaching out to individuals early in their careers to think about how to be an anesthesiologist. What does it mean to be an anesthesiologist? What can you do to make a difference as an anesthesiologist? Many anesthesiologists that I, I know are both conditions as well as scientists, they’re leaders, they’re teachers. They’re people who can really change the lives of individuals not just for the clinical medicine they do, but by being who they are. And I think we need to have more leadership in anesthesia to really reach those younger people and say the careers in medicine are really there for you. You can do this, and we need you.

I, I live down the, the alley from a young man and I was passing by, he was shooting baskets. And as I stopped by he asked me what I did. And I told him, I'm, I'm an anesthesiologist and he got this huge smile on his face. And he said that's what I want to be. And I said well what do you know about being an anesthesiologist? And because you aren't really exposed to it. It's not something that you really see on television or that people talk to you about and because they're so few of us that there aren't that many people to tell you about it. And so his mother, as it turns out, works at a local hospital here and just happened to have allowed him to have a conversation with an anesthesiologist and he then learned about it and said that that's what I want to be.

When I was a professor at the University of Chicago, I will tell you they were a disproportionate number of people who were African-American who chose careers in anesthesia. And I am not saying it’s because I was necessarily a role model, but it didn't hurt that there was an African American at the University who was involved in trying to develop the careers of young people who just happened to be an anesthesiologist. So if we're anesthesiologists on faculties, really think about getting involved in the medical school. Thinking about how to, how to run a pipeline program or pathway program of individuals. How to get involved with the STEM programs in your communities.

When I was the Chair of the Minority Affairs Section for the American Medical Association, a, a, resident who was part of that, that group, Sheila Roundtree, created something that we now call Doctors Back to School. It really allows people to get into the schools and help the students think about careers in medicine. Alice Coombs who’s now the Chair at the Virginia Commonwealth University is really one of the biggest proponents I’ve seen in the country of that, and she’s an anesthesiologist critical care
doc. And everywhere she goes, where she's with other physicians, she tries to bring them together to go to a local high school and talk about careers in medicine.

We have a lot that we can contribute as anesthesiologists and as the ASA. We can drive a Doctor's Back to School program similar the American Medical Association at the American Society of Anesthesiologists. That would be a fantastic thing to do for anesthesiologists to reach out on their post-call days and go to local school and, and talk to them about science concepts or biomedicine in general. And then what it's like to be an anesthesiologist in the operating room or in whatever clinical setting that you happen to find yourself.

Perioperative cares is, is hugely import. We see so many people, you can impact someone just in conversations in the preoperative clinic or on a post-op check. So there are opportunities that we have all the time as anesthesiologists to try to influence the lives of young people and I think we should seize upon that opportunity to do so.

DR. STRIKER:

Those are fantastic ideas and I, I am glad you brought those up cuz these are mechanisms that, on the Society side, we've started to look into to try to actually mechanize and take advantage of because you're absolutely right. These opportunities are really endless for so many individuals to learn about our field, not only going into schools, but also highlighting the, the limited time you have with a patient to make a large impact. Couldn't agree more.

DR. MCDADE:

… Dr. Warner's idea about smoking cessation, that just talking about it for brief period of time in the pre-op visit, is that it actually has a positive impact. And you reach people at a moment when they're really open to hear, open the listen, open to change, and that's the perfect time for an anesthesiologist to intervene, and, and really talk a little bit about what they do.

DR. STRIKER:

Well, and anesthesiologists are, we're probably the best physicians at making a large impact in a short amount of time. I mean, that's what we do every day on the, on the actual medical side and there's no reason we can't make those kinds of social impacts and communication impacts in that limited time as well.

DR. MCDADE:
I agree with you Dr. Striker.

DR. STRIKER:

Well, wrapping this up, circling back to your personal experiences. We haven’t really touched about on, on the topic of mentors, and wondering if you had any mentors or professionals that, that were key in your journey?

DR. MCDADE:

Well, I’ve had several. I, I’d go back to college and, and I think that one of my very early mentors, like, I can go back to High School and think of a mentor. My, my, my biggest mentor in high school was my Band Director. And my Band Director really reinforced with me the idea that practice really makes a difference and that I had a course that started 4th period when I was a first-year student and he said well, we’re here three periods before you start. If you get here during 1st period, you can come and practice before you start your school day. That idea of putting in a little bit of extra work to get a lot of benefit from it, really played in, in, in my life to, to be all that I am right now.

When I got to college, I took a job washing glassware in the organic chemistry labs after school. I had a mentor who was physical chemist, I hadn’t taken physical chemistry, I’m just in general chemistry as a first year student, who, who came up to the fourth year, fourth floor labs, it was four flights of stairs he had to walk in order to get there, and his name is Avrom Blumberg. And Avrom told me, he said Bill, we pay you as much money to do research as we pay you for washing glassware. Why don’t you come down and, and work in research in my laboratory? So, so that’s the start that I got in research.

I got into the MD/PhD program at the University of Chicago. I met with another mentor, a fella named Dr. James Bowman who was a pathologist who studied sickle cell disease and it turns out, he was a geneticist as well. And when I told him I was trying to choose a laboratory in which to, to go into for my PhD phase of the Medical Scientist Training Program, Jim suggested that I study sickle cell disease at the molecular level. And the rationale for that was that there were no other African Americans who were trained at, at that point to be able to study that sort of a problem. And so my, my PhD thesis, thesis was on the, the interaction, the molecular interactions that form fibers between sickle hemoglobin molecule and a kinetics thereof.

The PhD in biophysics really helped me to think about how you might apply this in anesthesia when I saw the, the best role model in anesthesia that I’ve ever encountered a fella named Dr. Jonathan Moss, who is, was my office mate as it turned out at the University Chicago when I started the faculty there. And what John pointed out is that
you can read science and nature every week and think about how to imply, apply biomedicine to clinical medicine in anesthesiology.

So those are the sorts of role models and mentors that I had guiding me in the career in anesthesia. And then once I got there, I obviously met a, a plethora of individuals who really were involved in both the teaching, the education mission of anesthesia as well as a clinical care mission and, and provided wonderful examples of that, as well as researchers. So, so that's how, how my mentors played out for me, and I hope I've been able to mentor other folks along the way.

DR. STRIKER:

That's fantastic. Thank you for sharing that. And before we leave is there any more advice that you would like to give to our listeners?

DR. MCDADE:

Well, I, I'll give you some advice that, that Arthur Ashe gave. Arthur Ashe once said, you've got to do, start where you are and, and do what you can. So, if you can't do it every, at all, you can't build a program, you can't be a PI on a, on a RWJ Grant. You know, work where you are. Work with what you have to try to make a difference. You, you don't have to change everybody. I often think of be the, the old starfish question where the little girls walking along the beach and she's picking up starfish and she's throwing them back in the ocean. Somebody comes up to her and says, you know, you're not going to make a, a lot of difference by just throwing one starfish, you know, there are starfish all over the beach. And she looked at him and she looked at the starfish and said, well, I'm going to make a difference for this one, and she throws it back into the ocean. Well, that's what you can do as an individual physician. If you can't run a large program, if you can't impact a lot of lives, impact one. And try to make a difference for that individual by really guiding them and mentoring them and letting them become the successes that they can be, that we need them to be in society, in order to try to change things that we see that need to be changed to improve the healthcare and lives of, of all.

DR. STRIKER:

Well stated. Well, Dr. McDade, thank you so much for joining us today and for such an informative, informational eye opening and fascinating conversation. I really appreciate you taking the time.
DR. MCDADE:

Dr. Striker, it was a pleasure to be here, and to, to talk to your audience.

DR. STRIKER:

Well, this is Adam Striker signing off on another episode of Central Line. Please join us again next time. Thank you.

(SOUNDBITE OF MUSIC)

VOICEOVER:

Tap into the collective experience of the ASA community for real conversation, meaningful connection and valuable support. Continue the conversation at community/asahq.org.

Subscribe to Central Line today, wherever you get your podcasts or visit asahq.org/podcasts for more.