

Addressing Disparities in the Care of Patients with Non-Valvular Atrial Fibrillation



CMEO Podcast Transcript

Geoffrey Barnes, MD, MSc:

Hello, I'm Dr. Geoffrey Barnes. And on behalf of CME Outfitters, I would like to welcome you to today's educational activity, addressing disparities in the care of patients with non-valvular atrial fibrillation. Today's program has been sponsored by an educational grant from Bristol Myers Squibb and Pfizer Alliance. Now, this is a CME activity brought to you by CME Outfitters, an award-winning jointly accredited provider of continuing education for clinicians worldwide. Again, my name is Geoffrey Barnes. I am a cardiologist and vascular medicine specialist at the University of Michigan, and it's really my pleasure to be here with two of our really expert panelists. And I'm going to ask them each to introduce themselves.

Lauren A. Eberly, MD, MPH:

Awesome. Thanks so much Dr. Barnes. Hi everyone. My name's Lauren Eberly and I am a third year cardiology fellow at Penn, and will be coming on faculty here in just a few short months as a noninvasive cardiologist. I'm also an associate fellow at the Leonard Davis Institute of Behavioral Economics and a health services researcher. My research interest really focuses on investigating inequities in cardiovascular care and outcomes with a focus on racial equity. So it's a true pleasure to be here with you guys today. So thanks so much for having me.

Utibe R. Essien, MD, MPH:

And my name is Utibe Essien. I'm an assistant professor of medicine at the University of Pittsburgh School of Medicine, and I study health disparities in cardiovascular disease with a special focus on atrial fibrillation. And it's really a pleasure to be here today.

Geoffrey Barnes:

Well, Dr. Eberly, Dr. Essien, it is wonderful to have you guys here and I really look forward to our discussion. So why don't we jump in with our first section and our first learning objective. At the end of this particular activity, our learners should be able to recognize the social determinants of health and their connections to disparities for care in patients who have non valvular atrial fibrillation, with a particular focus on diverse and underserved populations. I think one way to help us get through this conversation and make it particularly salient will be to actually frame this around a case study. So I'd like to tell you about the case of Nema. Nema is a 76 year old African American woman who immigrated here to the United States from Equatorial Guinea about 15 years ago. Now she speaks primarily Spanish, which is one of the predominant languages in her home country.

And she has fairly rudimentary English language proficiency. She does have some family in the area, a niece lives about an hour away by bus. And she currently works in laundry services for a motel where she makes about \$14 per day. Now she lives alone, and in her community, it's a relatively high crime neighborhood. And because of that, she's often a little bit hesitant to get out and do a lot of exercise or activity. She also has fairly limited access to public transportation. Now from a clinical perspective, she's been experiencing some mild

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dizziness on and off for the past three months or so. She's also had some fatigue and shortness of breath that's particularly prominent at the end of the day. However, she's been somewhat reluctant to seek care because she has fairly high copay costs associated with visiting doctors. Yet in discussing this with one of her coworkers, they strongly suggested that she go ahead and see a doctor just to explore what may or may not be going on.

Now, I want to use Nema's case here to help us dive into a couple important topics. And as we get through the evening here, we're going to talk about a number of sometimes challenging and sometimes confusing topics. And so I want to make sure that we have a good understanding for exactly what these are. We're going to try and delve into the disparities of care that patients with atrial fibrillation have, especially around the goal of stroke prevention. We're going to try and understand what social determinants of health are and how they impact care for patients with atrial fibrillation. While also understanding what structural racism is and how implicit bias and structural racism are informing the way care is often being delivered. These are some really candid questions that we have to ask, and we're going to have some pretty frank answers. So I'm really grateful to have both Dr. Eberly and Dr. Essien to join me today.

But before we get into defining some of those terms, I'd like to ask an audience response question. I'd like to get you all involved. So why don't you go ahead and help me answer here, which of the following is a social determinant of health? Is it ancestry and inherited genetic factors? Is it any social intervention, specifically tailored to an individual patient? Is it the neighborhood and the built environment in which people live? Is it targeted small scale social mediation? Or are you not sure and that's why you're here with us this evening? So why don't you go ahead and log in your answer. We'll give you a couple seconds. Okay, great. So we've got actually quite a spread of answers. Now, the most commonly chosen answer was the neighborhood and built environment. And that is the correct answer here, but we have a number of people picking other choices. Dr. Essien, I might pitch this to you, and we're going to go into more depth in just a few minutes. But at a high level, can you help us understand, what are social determinants of health? How do you define that?

Utibe Essien:

Absolutely. So this is a new important part of our medical lexicon often shared during medical school. This phrase was really ever used, at least for me, I imagine both of you would feel the same. But there are a number of definitions out there, but this is one that we like to use from the World Health Organization. Which describes the social determinants of health as the conditions in which people are born, grow, work, live, and age, and this kind of wider set of forces and systems that end up shaping those conditions. And these are conditions of daily life, such as economic policies and systems, developmental agendas, social norms, social policies, and political systems. So kind of some of those are being reflected in this figure here. And we'll continue to dive into those in this talk.

Geoffrey Barnes:

Yeah, exactly. We're going to get into some more of the details here. But I think some of the other terms that people often hear in this space that maybe they don't fully understand exactly what they mean. We should spend a couple minutes defining, Dr. Eberly, I'd like to turn to you. When people talk about the term health equity, what does that mean to you and how should we be thinking about that phrase?

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Lauren Eberly:

Yeah. Thanks so much Dr. Barnes. Just as you mentioned, I think this can be complex and I think it's really important for us to really have some shared definitions and shared vocabulary to talk about some of these complex topics, just to make sure we're on the same page. So health equity is simply for every patient, every person to have the opportunity to achieve their full health potential. And if you go to the next slide, to achieve health equity, this really requires us first to acknowledge then really work to understand, and then work to rectify historic and ongoing injustices in order to eliminate health inequities.

And to that same point, we really need to understand the difference between equality versus equity. And this is a great picture that I'm sure some of you have seen before, but equality as shown on the left means that every person or every group is given the same treatment or resources. However, as you can see on the picture on the left, although every person is given the same resources, in this case, the same height box, some people are still excluded. And you can see that some people still can't see over the fence and they can't see the baseball game. And therefore there's not an equal outcome for everyone. This is in contrast to equity, which is shown on the right. And equity really acknowledges that everyone is starting from a different starting point. Groups of people, particularly those who have been systemically marginalized by systems and structures of oppression are starting from a different starting point, are starting with different levels of disadvantage.

And so equity is going to really strive to give every person, every group, the resources that they need to achieve that same outcome. So as you can see on the right, there's different box heights given so that everyone ends up on the same level, everyone can see over the fence, everyone can see the game and everyone can participate. And this is really important as we think forward and we discuss today because this is really shows us why colorblind and gender blind approaches often really don't work. Because giving everyone just the same box height, the same treatment, really doesn't achieve the same outcome because people are starting at different starting points. So really we have to be intentional to really prioritize those who've been marginalized by our healthcare system. And we really can't enjoy equality until we first ensure equity and get everyone to that same final outcome.

This is another really important definition that I think is important just to distinguish. So inequities versus health disparities, they're often used interchangeably, although they are different. So disparities are differences in health outcomes between groups within a population. Whereas health inequities are differences in health outcomes that are usually systematic, they're avoidable or unjust. And for example, we know that women have higher rates of breast cancer than men. That's a disparity. And I think most of us would say, that's not particularly unjust. But when we look at, for example, the overwhelming burden of cardiovascular disease, the worst cardiovascular disease outcomes among the black population in the US, that is an inequity, because it is unjust.

Geoffrey Barnes:

That's really helpful to go through and define some of these terms. And I don't know about the two of you, but I can remember when I was a kid, my mom would always talk about being equal and fair to me and my siblings. If one of us got a toy, then we all got a toy or this or that. And I think sometimes it's hard for us to shift our frame of reference when we think equal is good for all. And that sort of should be our goal to say, no, we really need to think about what people need to get them to the same ending point. And I wonder Dr. Essien, if I could turn to

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you, when somebody says, my goal is to make sure that everyone gets the same thing because equal is sort of fair. How do you shift that conversation slightly to help them understand that difference between equity and equality? And do you have sort of phrases or things you often use?

Utibe Essien:

Great question. I think one of the important points to think about here is really bringing in the historical perspective and thinking about years, decades for certain communities who have been left out of that conversation. Who has had access to whether we're talking about access to the baseball game or in our conversation today, access to medications that are lifesaving based on the color of their skin, based on their income, based on their sex or gender, et cetera. And I think when we bring in that historical perspective, folks kind of have a little bit more of an aha moment. Yes, I was not there during the centuries of slavery or Jim Crow segregation, but I'm appreciating that some of those legacies are affecting the way we live and the communities we live in today. And that's been really key for me to learn that history on my own, but also be able to bring that into some of the conversations around why we can't just say everyone should have equal access. It's like, hey, there's actually been a really unfair advantage over the last several decades, if not centuries, as Dr. Eberly alluded to.

Geoffrey Barnes:

Yeah. And Dr. Eberly, I love how you talked about, it's not necessarily having everyone have the same equal starting point, but it's getting everyone to the same ending point. And I think that figure that you highlighted really brings that out. One of the other terms that I hear brought up in this conversation a lot is implicit bias. And recognizing that that is not the only driver of health inequities and disparities, but is a clear contributing factor. Can you help us understand what implicit bias is and how it manifests, because it's something that we all have. Right?

Lauren Eberly:

Yeah, absolutely. I think it's just first important to note that we all have implicit bias and to, I really encourage everyone on today to go to Project Implicit, which is shown here. Which is a project through Harvard, which has free implicit association testing and there's tons of tests, but you can really take multiple ones to really uncover some of your own biases that are implicit. And so these are really just automatic reactions, usually negative to a group of people. And often we're unaware of them, but they can really impact how we treat other people, especially as clinicians, how we deliver care and often we're not aware. And so I really encourage you guys to try this. I was surprised at some of the ones that I found. But I think the first step is to uncover them and know what biases you might have when you walk into an exam room, because then you can be more conscious to work to really mitigate those biases that we all have.

Geoffrey Barnes:

Yeah. Dr. Eberly, like you, I've taken a few of these tests and it really has been eye opening and shocking. I pride myself as somebody who tries not to be biased, but yet these are things that are just innately a part of us. And Dr. Essien, I wonder if I could turn to you for a quick question. Once you take this test and you sort of uncover that

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these biases exist, is the goal to get rid of the biases or is the goal to recognize that you have them and so then you think about how you are going to react in certain situations? How should we use the information from a test like this?

Utibe Essien:

Yeah. I think that question is one that's going to unfold in a lot of our conversations today when we capture the social determinants of our patients or communities. Now what? What's the prescription, so to speak, that we provide once we uncover these, whether they're biases or social determinants? For me, similar to the both of you, I've also been surprised that I had biases against African American individuals as someone who was raised as a black man for 30 plus years. But I think that was really critical. And I took this test back in medical school to be able to train my mind around how I was interacting with patients and what biases I was bringing in to the conversation with my patients, especially as Dr. Eberly mentioned, when prescribing medications and treatment. And so I don't think there is going to be a cure to eliminate the biases that we've spent decades being ingrained with literature, television, media, et cetera. But really acknowledging that those biases exist and working hard to try and use that information in the way that we care for our patients is going to be critical.

Geoffrey Barnes:

That's helpful. You both have brought up that while race is not the only driver of this, it's obviously a big piece of this. And I'm wondering Dr. Eberly, could you walk us through a little bit of how you define the term race and the associated term racism? And what do they mean, especially as we're putting this into a health context and through a healthcare lens?

Lauren Eberly:

Yeah. Great. So I think there's so many important takeaway points from today, but I think one hope of mine personally, is if everyone could leave here today feeling comfortable defining race, because I think so often it's misused. I like to use the definition from Dr. Camara Jones, who's really a revolutionary in this space. She's the former president of the APHA. And this is the definition that I use. And it really defines race as a social construct. It is a social classification based on how one looks or what we call phenotype, and it governs the distribution of risk and opportunities in our race conscious society. And race itself has meaning due to sociopolitical factors not biological factors. And race really itself captures the impact of racism rather than innate biologic differences. And that's a really important distinction, because this is as opposed to ancestry, which does have a genetic basis and does have a biologic basis where race does not.

And then racism itself, this is also from Dr. Camara Jones, is a system of structuring opportunity and assigning value, again, based on how someone looks or what we so call race. Number one, I think we focus on this a lot as we should, but it unfairly disadvantages one group of people, but it's also important to acknowledge that it also unfairly advantages other individuals and communities. And most importantly, it affects everyone because it really saps the strength of the whole society through the waste of human resources. That's why really, we all stand to benefit from efforts to address and dismantle racism.

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Geoffrey Barnes:

So you've talked a little bit about race and obviously racism, but my understanding, and I'm really curious to learn more from the both of you, is that racism isn't a single thing. It exists in many different forms. And I think that's what this slide is really trying to get at is there's some of the overt or interpersonal racism that we see very visibly. That's what's on the news, that's often what's highlighted, but it seems like there's probably a lot more that's there. Dr. Eberly, do you want to sort of walk us through a little bit about how you think about the different elements of racism as they are existing in our society?

Lauren Eberly:

Yeah. Just as you said, they're definitely different levels of racism. And the first interpersonal racism just as you mentioned, is usually the most overt. It's the most perceptible oftentimes, and that's really between individuals. And I think that's often what people first think about or what comes to mind when they think about racism. And then structural racism is a term that also is being used more and more often nowadays. And what it really is just simply differential access to good services and opportunities of society based on race. And I think by defining it like that, I think people are much more comfortable using this term.

There's oftentimes a lot of hesitancy to kind of name racism as a major driver of health inequities. But if we really define it as differential access to good services and opportunities, as we'll talk about, we know that that is true in our country. And I think it allows for more productive conversation. And oftentimes when we're trying to unpack inequities in care, a lot of times we aren't talking about interpersonal racism and really focusing on, there's a lot of structural elements that really need to be addressed, I think can also help people kind of dive deeper into the conversation and really move forward.

Geoffrey Barnes:

And Dr. Essien, I wonder if I could turn to you for a quick minute. The figures that we see on TV or we read about in the news, they often highlight more the interpersonal racism. I'm wondering as healthcare professionals, we think about, the healthcare system. Are there some bigger general examples of how you see systemic racism maybe manifesting? And I know we're going to get into some of these here in our case, but are there just some big general groups or categories that maybe you could highlight for us to help us think through this over the next hour?

Utibe Essien:

Absolutely. I think one critical example we can kind of hone in on is around insurance access. So we know that over the last decade, for example, there have been policies put in place to really increase insurance. Over tens of millions of individuals were able to get new insurance access through the Affordable Care Act. But we know, unfortunately that there's still 30 million individuals who are uninsured. And right now in our country, those individuals tend to be, more likely to be African American or Hispanic. And that's not because these individuals just don't want healthcare or don't live in the same country and states who have been able to provide the Affordable Care Act provisions. But a lot of that is because in our country employment really is a big driver of

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healthcare access and in turn health insurance. And so individuals who are more likely to be employed are also less likely to be African American and Hispanic due to some of the disparities in employment that we've seen.

And that gap is also related to the disparities in education that we've seen. Again, no fault of many individuals, but due to decades of segregated schools, poorly funded public education, et cetera. And so as we go from health insurance over here all the way back to K-12 education, I think that's where we start to see the systems playing out. It's not just one person at the HealthCare.gov who has a bias towards individuals. It's not just one employer who has a bias towards who they're employing, not just one educator. But it's really the systems in place within our country that end up having these health insurance disparities that ultimately result in healthcare and on poor healthcare access for certain communities. I think that's one critical example here for us. And again, we're going to dive into it as we talk about some of these other social determinants of health.

Geoffrey Barnes:

Well, that's really helpful. And I appreciate both of you taking the time to help us walk through and really understand some of the language and the definitions. Because it's helpful to have that framework as we think then about how these social determinants of health really do impact care for patients and in particular here, care for patients with atrial fibrillation. So I want to move us to our next section here. And this is where we're going to look at how we assess those social determinants of health. And maybe think a little bit about how some of those implicit biases that we talked about from those tests we all have done, how they maybe influence the way screening and risk stratification, and whatnot are enacted for patients with atrial fibrillation. So let's go back to our case. Remember Nema, she was the lady who had been having some of that lightheadedness and dyspnea.

And so as we mentioned, her coworker encouraged her to go ahead and get evaluated. So she actually goes ahead, takes this bus ride, goes to visit a doctor and really asks the doctor about her dizziness and fatigue. Now, the physician, like me, doesn't speak Spanish very well and so chose to keep the English conversation really short and simple as a way to try and compensate for Nema's more limited English language proficiency. On exam, Nema ended up having a normal blood pressure, pulse rate was pretty normal, heart sounds, all sounded pretty normal. And so the physician recommended that Nema eat more nutritious meals and drink more water, and think about getting some exercise by walking before or after work, as different ways to try and address some of her symptoms. So Dr. Essien, I'd like to turn back to you. And you've talked a little bit, you helped us define social determinants of health. Help us take a deeper dive into this, in particular, how social determinants of health really are manifesting in the space of atrial fibrillation diagnosis and management.

Utibe Essien:

Absolutely. So we started the conversation giving definitions for social determinants as well as for health equity and around race and ethnicity, and racism. So I think that really is the focus kind of as the top of this figure we have here that brings in all of the other social determinants. And the five that we're talking about in this section are race, ethnicity, financial resources, rurality and neighborhood literacy, and social network. So we go into race and ethnicity. So how does that specifically really drive atrial fibrillation care? How does structural racism, bias and discrimination, poor access to specialty care, so is Nema more or less likely to be referred to a cardiologist like Dr. Barnes and Dr. Eberly for her symptoms versus a different type of patient? And some of the understudied

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pathophysiology, who is more likely because of genetic ancestry, because of biological differences, to have worse outcomes with atrial fibrillation? That's where race and ethnicity start to play a role.

So what about the other social determinants? What about financial resources, for example? And again, how does that influence atrial fibrillation? We see that healthcare related cost. We already saw how Nema was worried about her copayment potentially driving and influence her decision to show up to the doctor. And then we think about unequal or in adequate access to healthcare and medical treatment. Again, where you receive your care in several diseases, not just in atrial fibrillation can ultimately determine what type of care you receive. And that where really does depend on the type of neighborhood you live in, how much money you're able to afford for rent, et cetera. Limited access to clinical trials is a super fascinating area. And so again, thinking about what it means to enroll in a huge study, where you're going to come into the clinic every month, get multiple blood draws, take off your morning from work or your supportive childcare.

What does that mean for certain populations versus others? And how finances and access to finances really influence myriad risk factors, clinical risk factors, such as the ones that drive atrial fibrillation incidents, but also outcomes. So that's really what we think about when we bring up financial resources. What about when we move to rurality and neighborhood? When we think about neighborhood, one of the studies that we have done is showing how the very neighborhood you live in actually influences whether you are more likely to have a stroke with atrial fibrillation or not due to pollution.

And so neighborhoods with high levels of pollution result in individuals with higher level of stroke. And that's something that, again, we can't provide a prescription for. We prescribe you to live in a less polluted neighborhood. But these are some of the factors that we want to start thinking about as we start to think about how we can advocate for our patients and communities. And I think when we transition to words rural areas, these are communities that tend to have individuals with high risk factor burden, individuals who have high rates of under or uninsurance, as we briefly talked about earlier.

Individuals who have transportation barriers. So I'm also a doc in the VA here in Pittsburgh, and I see patients who are coming two, three hour drives in for their 8:00 AM appointments, having to take multiple shuttles, having to rely on a friend to bring them into these visits. And that's just something that many individuals aren't able to, a decision many individuals aren't able to make on a regular basis. So again, thinking about how these communities and how these decisions these communities have to make in terms of accessing care. And then thinking about who they can actually access within those communities as well. Health literacy, Dr. Barnes mentioned his kind of limited challenges in speaking Spanish, myself included. What does it mean when we can't have patients who actually have an interpreter in the room with them who speak languages that may not be easily accessible for all of our providers? And how that influence both the decisions that we can make together in terms of accessing care, but also just their understanding of what atrial fibrillation is.

What are all these kind of risks that you're telling me about that I'm going to have because of this condition? And in one, we actually do get to prescribe the medications. How should I take this medication when I am supposed to get blood draws because of this medication that I'm on? Just the real confluence of challenges for anyone, but especially for folks who have limited health literacy. And lastly, thinking about social networks, I think this is an area that really has a lot of opportunity to grow in. Who are the support systems that you have

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around managing this really chronic and complicated condition? How connected are you to those individuals? What is the integration like within your communities? Who are the caregivers that you have to help support you?

And as we move towards a more digital age in treating atrial fibrillation, what are some of those tools that we can use to start to access our patients perhaps a little bit quicker than we are able to when we don't have them come into our clinic or our offices every single day? So again, this is a broad scope around some of the social determinants of atrial fibrillation, more of which we'll get onto as we move forward. But I hope it's a helpful overview for folks who are thinking about how the social determinants actually intersect with this condition.

Geoffrey Barnes:

Yeah. I think this was really helpful and it seems like this is both specific to atrial fibrillation as you highlighted, but many of these elements really apply to a broad span of health conditions. And these same issues are present, whether we're talking about atrial fibrillation or coronary disease, heart failure, diabetes, you name it. These are sort of the underpinnings. And I'm wondering Dr. Essien, from your perspective, are there things here that really jump out to you? So for an atrial fibrillation patient, like if you had to hone in on one or two, do they sort of jump out or are these just all equally important and we have to think about how they all interplay?

Utibe Essien:

Yeah. I think absolutely need to think about all of them together. The two that really stand out for me, again, a bit biased because of my research, but I think there's still so much room to explore around this issue around race and ethnicity. And when you start to weave in genetic ancestry and some of the other factors. We've spent decades trying to find out, what are some of the reasons why despite having higher risk factor burden, African American individuals specifically have low rates of atrial fibrillation? Are there certain genes that are playing out in certain communities? And I think we spent maybe too much time there as opposed to really thinking about some of these social factors. And I think my second point here is that financial resources point.

When an individual is having to pay anywhere from two to \$300 for their prescriptions, for one type of prescription, just for stroke prevention, much less the other medications, if they may have diabetes, obesity, heart failure, which is really increasing in patients with A-fib. What does that look like at the end of the month when they're having to make those decisions between paying rent, paying for food, paying for childcare or paying for their meds. So those are the two that really stand out for me. And I'd love to hear what perhaps Dr. Eberly's is thinking as well.

Geoffrey Barnes:

Yeah. Dr. Eberly, I'm curious to know which of these stand out for you when you think particularly about a patient with atrial fibrillation and trying to just even explain what it is or how we diagnose it. And anything stand out?

Lauren Eberly:

Yeah. Great. Thank you Dr. Essien, and it's just so nicely outlined there. I think I totally agree though. The intersectionality of all these is really important and it's really hard to pick out one, and I think they're so

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intertwined. Obviously like we're talking about with structural racism and this differential access to goods, which oftentimes I think is really getting in the door of our office for me as a cardiologist and oftentimes seeing these barriers to accessing appropriate care. And we'll see patients years after they've had a stroke and have been undiagnosed or misdiagnosed, and referred to a cardiologist and never quite made it because of financial resources and barriers to care. And so I think taken together, really working to address those will have a huge impact, but they're all really important and really intertwined.

And so we really have to think about all of them. And then as Dr. Essien mentioned, there's really excitement in the social network and new tools to maybe improve access. But we also have to be intentional as we move forward with really exciting technology and remote monitoring, et cetera. And people now have their Apple watches to diagnose and detect A-fib. We really have to pause and say, are we helping or hurting in terms of an equity standpoint and how can we use some of these tools to really lessen inequities and make sure we're not actually perpetuating them?

Geoffrey Barnes:

Well, this has been great discussion. Let's come back to our case of Nema and think a little bit about that framework that Dr. Essien put out there for us. So Nema follows the physician's instructions, tries to improve her diet, but she doesn't have ample access to fresh nutritious foods in her area. She's uncomfortable walking through her neighborhood alone. And we talked about how it's an area where crime is certainly a concern. She does try to do some exercise going up and down the halls and stairs. And of course, where she works at a motel is a very physically taxing job. And so she's often getting some exercise there. But despite all of these efforts, she continues to have these intermittent dizzy spells and actually now is even having some episodes where she can feel her heart racing. So I want to turn to our next audience response question here.

And as we think about the most recent United States Preventive Services Task Force, the USPSTF, their recommendations on screening for asymptomatic atrial fibrillation, which of these statements is correct. Do they say that all patients, all folks 50 and over should be screened for A-fib? Or do they say, only folks 65 and over should be screened for A-fib? Do they state that the evidence for screening asymptomatic individuals for A-fib is lacking? Do they comment that the benefits of screening outweigh the risks in asymptomatic patients over the age of 45? Or, hey, I'm not sure. Show me the answer and let's jump into it. So I'll give you guys a few seconds to answer this question. Okay, great. So it seems like almost half. So the number one choice here was the correct one that evidence for screening asymptomatic individuals is lacking.

That was the statement by the USPSTF. But we did have some folks answering a few of the other responses. Let's dive into this a little bit. So the most recent USPSTF statement on this said that the prevalence of atrial fibrillation does increase with age. So they recognize that age is a really important driver for developing atrial fibrillation. And that about 20% of patients who have had a stroke associated with A-fib that's when they get their first diagnosis of A-fib. So it's often not until they have the complication. They also talk about folks 50 and older, who have a diagnosis of A-fib without a history of stroke. And that's really the group that they were trying to address in this particular statement. And they felt that there was lacking evidence because the benefits and harm balances cannot really be determined.

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However, I think an important point, and Dr. Eberly, I'd like to turn to you for a comment here, they were really focusing on asymptomatic screening. Meaning somebody who doesn't have any symptoms. As you hear about Nema's story, she's had these lightheaded episodes. Now she's even having some of these episodes of heart racing. Does she fall into this asymptomatic group? And does this statement even apply to her? Should we be thinking about her differently? What are your thoughts?

Lauren Eberly:

Yeah. I mean, I think she definitely has symptoms that are concerning for diagnosis of atrial fibrillation. And I think there's probably been some missed opportunities to uncover atrial fibrillation during her initial visit. And I think we'll dive deeper into this, but oftentimes taking the time to get a translator, especially for non-English speaking patients, or to really listen to our patients who might, I think she had some classic symptoms. But oftentimes I think with language barriers, if we don't take the time to really understand the symptoms, we might kind of misinterpret the symptoms and we can miss a chance to make a correct diagnosis.

Geoffrey Barnes:

Yeah. That's a really great point. So let's jump back to her case again. So she goes ahead, she sees her doctor actually a second time because these symptoms are worsening and she almost had a fall when she was at home. This time through conversations with her physician, she's actually fitted with a wearable monitor, one of these cardiac monitoring devices, which does actually reveal paroxysmal atrial fibrillation, sort of this coming and going of A-fib. However, after the visit, the doctor confides in one of the doctor's colleagues that it's really hard because the doctor chooses not to use phone-based translators. They just take so much extra time. And so for non-English speaking patients, it really creates a burden. And so Dr. Essien, I wonder if I could come back to you and thinking about that framework for social determinants of health, thinking about A-fib. Now, let's really narrow in on Nema's case. Help me understand where you're seeing some very explicit examples of how this played out in her case and things that we need to be aware of.

Utibe Essien:

Absolutely. So again, this is a perfect case to kind of unpack these social determinants. The big one just came up from our physician colleague here about the language barriers. I spent time in a community health center that was largely Spanish speaking, 50 to 90%, depending on your panel. And though I had enough of a Spanish speaking background where some of my patients were like, "We don't need the interpreter. Let's just do this thing together." There were a lot of patients that were really difficult to understand. And it's really the reason that I went into this work was a patient that I had who we really struggled to kind of manage his atrial fibrillation care and he ultimately was diagnosed with a stroke. And so we have this language and health literacy barrier as one of the key social determinants in this case.

We know Nema struggle with getting into the appointments, living an hour away from her social network. And I think that transportation barrier and structure is a big driver here. We often, like I'm sure all of us have said, eat healthier, exercise more. And we could just see in Nema's case how challenging that is for her, what she's able to actually be able to afford, what foods are available within her community, and feeling safe to be able to exercise at home or in her community. There's really incredible research coming out by some of Dr. Eberly

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colleagues in Philadelphia around how just having green space is really influential to your health, just because of that point around exercise.

And again, limited income to be able to afford healthier foods. And I would also argue that perhaps race and ethnicity might play a role here. Perhaps in that first visit, there may have been a little bit more ease in understanding and accepting Nema's symptoms. And maybe she would've gotten that implantable loop recorder or a Zio patch earlier to be able to diagnose her paroxysmal A-fib. And so who we are seeing for their symptoms compared to who we may push back a little bit more, I think could potentially be playing a role here as well.

Geoffrey Barnes:

I want to follow up on one of the first points that you made, which was the importance of the language barrier. You commented how in your prior experience some patients would say, hey, I'm comfortable enough with English that we can have the conversation. In my practice, I'll often find that patients who don't speak English will come with a family member who'll offer to translate, maybe it's a child or a sibling or somebody. Is that a good strategy? Is that something that we should be relying on? Or should we really be leaning more into these professional translators? How do you think through that from a practical standpoint, from just a, how do you get through clinic standpoint? Those things. What are your thoughts there?

Utibe Essien:

Yeah. So I'm PCP at heart. And so I feel my colleagues who are experiencing just the practical challenges of being able to make it through the day. My dad's a PCP and lots of struggles with getting him home at night for dinner because of his long visits. But I think we absolutely must emphasize using our professional interpreters in clinical care. One of our colleagues, Dr. Jorge Rodriguez really wrote a beautiful piece a couple years ago about his experience translating as a child. And the doctor asked him to translate sputum for his mother and he just couldn't do it. He had no clue what the word was. He was being shamed by the doctor. This experience that he held onto for decades in his practice now.

And I think, yes, as awesome as it is to have the child, the sister, the sibling available, we must be able to continue to use the professional interpreters. And again, practically, I think that's really making sure they are available in all of our sites. Having the reimbursement that we need to make so that interpreters are being reimbursed both at the hospital and the clinical level. Because our community, our nation is changing and the language as being spoken in the hospital is not always going to be the language of our providers, especially as we see some of the differences in who's taking care of our patients versus what our population looks like.

Geoffrey Barnes:

Yeah, no, those are really great points. Dr. Eberly, I wonder if I could turn to you for a minute. One of the other things Dr. Essien highlighted was the environment in which Nema lived and how that often limits the ability to get those fresh fruits and vegetables, or get that exercise. And as cardiologists, we're always talking about the heart healthy diet and the 30 minutes of exercise a day. And I'm wondering in your opinion, how do you have that conversation when maybe folks don't have access to those safe spaces or safe foods? Do you just skip over it and

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make the assumption that they don't have access so we shouldn't talk about it? Do you talk about it in a different way? What kinds of strategies do you use in your clinic visits?

Lauren Eberly:

Yeah. That's a great question. And I think we'll dive a little deeper into it later, but I think the first thing just as you mentioned, is to really ask and to go there to really understand that built environment and that neighborhood context. Because it is so important because we want the advice that we give to be tailored to the patient. We want them to be able to be as healthy as they can and to really find strategies that work for them. And so giving everyone the same advice really doesn't work here. So really understanding, in her case, could we find any options to get her fresh fruits and vegetables that other places I've worked with, worked with a prescription program to get that accomplished. She doesn't feel safe to exercise outside.

So are there any options that we could find for her, or could we get her to put on music and climb the stairs in her house? Which I've had patients do for exercise. Can we make a plan that really works for her? Because that's, at the end of the day, the most important. But just as you mentioned, I think the first step is to really go there with our patients and to really understand where they're coming from, their local context, the things that make it hard for them to be healthy so we can really work together to address them.

Geoffrey Barnes:

Yeah. I think that's helpful. One of the tips that I was told when I was in training is, rather than assuming that we, as the physicians have the answers, sometimes it can be most helpful if we simply ask the questions and let our patients come up with the answers and think about ways and strategies that work for them, because they'll often come up with much better ideas than we would necessarily throw out. And so that's at least a strategy I often try and keep in the back of my mind, and it won't solve everything, but at least it's a good starting point. Well, I'd like to move us on to the next section here and transition to our third focus area, which is really getting more into the treatment plans. And how do we think about tailoring those individual treatment plans for our patients who have non valvular A-fib. In particular, how we think about the social determinants of health interplaying with some of the treatment decisions that we make.

So if we go back to Nema and think about her story. So after we have this diagnosis of paroxysmal atrial fibrillation, her physician goes ahead and prescribes a beta blocker for rate control and chooses to put her on warfarin for anticoagulation and stroke prevention. Now, a direct oral anticoagulant or a DOAC was never really discussed with Nema. The physician provided actually some Spanish language brochures, trying to help address the language barrier that we talked about, and gave her some general instructions about A-fib and management.

But at the end of this, Nema is left still a little bit confused, not entirely sure exactly why she's taking the warfarin, what it means. And really at the end of the visit has a sense that maybe the doctor's just trying to move on to the next visit. It's obviously a busy day. And I'm wondering, Dr. Essien, if I can turn to you. We're providing this story of Nema, we've talked about how we are selecting warfarin and providing limited education. Is this a unique situation, or is this really quite a common situation? I know you've done some research in this area. I wonder if you could walk us through that a bit.

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Utibe Essien:

Absolutely. This is a passion area of mine, as I mentioned, from some of my clinical experience back as a trainee. And there's been myriad studies now, as was mentioned, not just in atrial fibrillation, of course, but across the clinical continuum that shows that provider interactions with patients of color are less patient centered, fewer requests of patient input about treatment decisions. Black patients perhaps are not giving their voice to be able to make their preferences around their treatment choices. And my research really focuses on the treatment choice of anticoagulation or stroke prevention. So are you more likely to get any prescription, either warfarin or the direct oral anticoagulants or DOACs, which over the last decade have really been the leading and preferred choice for stroke prevention? And so within that decision point, we've led several studies to kind of examine whether there are racial and ethnic differences in how we prescribe stroke preventative therapies to our patients.

And the study being highlighted here was a study using Medicare data. So we examined, now 43,000 patients enrolled in Medicare and really looked at racial, ethnic, and some sex differences between anticoagulation choice. On the top part of the figure here, we see that black patients are about 16% less likely to be started on any blood thinner medication. And here we adjusted for age, for CHADS VASc stroke risk score, for income level, as well as neighborhood and region of the country you lived in. We also interestingly saw that individuals who identified as female were about 41% less likely to be started on any blood thinner. And then when we moved on to looking at DOAC prescribing, we saw really significant differences only between black and white patients, at about a 25% lower chance of getting these medications. And again, this was something we found in Medicare enrollees.

We saw a really similar finding when we looked in an atrial fibrillation registry. So patients who are enrolled in this registry to get their AF treated, and then some of my work in the Veterans Health Administration, again, really similar findings. About 25% lower chance of being started on this newer really guideline directed DOAC therapy compared to white patients. And so what does that mean? Is this just a DOAC problem? We like to argue that really we're seeing these disparities cut across the care continuum in atrial fibrillation and where we have increased risk of prevalence, increased prevalence of risk factors rather, among racial and ethnic minority groups. Lower awareness of atrial fibrillation. So again, like our case of Nema, that first visit, she left not really knowing she had this diagnosis and even after her second visit. It wasn't until the results of the monitor.

And so what does it mean? And we see some of the ways, she's really having a tough time understanding this diagnosis. We see differential access to treatment, as well as we shared about in anticoagulation. And I'd love to hear from my colleague around what we're seeing around antiarrhythmic therapies as well. And again, unfortunately, this is resulting in higher rates of complications. And unfortunately prior work has shown that black patients specifically have two times higher rates of stroke, two times higher rates of death when diagnosed with atrial fibrillation. And so that is such a shocking and concerning number that we must do something to fix that.

Geoffrey Barnes:

Yeah. You brought up, obviously there's a lot of focus and you've led a lot of this work on anticoagulant prescribing, and it's so important that we try and prevent stroke for patients with A-fib. But Dr. Eberly, I want to turn to you. This is not just an issue around anticoagulant prescribing or which anticoagulant they get. Could you walk us through some of the work you've done and sort of some of the other therapeutic spaces for A-fib?

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Lauren Eberly:

Yeah, absolutely. I think anecdotally, we were seeing as a group a lot of inequities, it seemed in referral for antiarrhythmic and specifically for catheter ablation. So this study really was born out of that to really further investigate if there were in fact inequities present in rhythm control strategies and catheter ablation. And especially with EAST-AFNET 4, and a lot of the more recent data that has shown such a benefit for early rhythm control, we really wanted to better understand who was getting treated with rhythm control and who was ultimately getting catheter ablation therapies for their AF. So this was one study that our group did. And this was only on patients with new or incident paroxysmal atrial fibrillation. And importantly, for this study, we used Optum Data Mart. And for those of you who aren't familiar, this is a large administrative claims database of those with commercial health insurance, in this case, UnitedHealthcare and Medicare advantage.

And therefore this database is 100% commercially insured. And I think that's just important to note because insurance, as Dr. Essien mentioned, plays a huge role in inequities. But often inequities and care are blamed solely based on insurance and that's definitely, you're not always fully responsible. And so to try to eliminate some of that confounding by insurance, we looked at a population that was 100% commercially insured. And we looked at just over a 100,000 patients, as I mentioned with new-onset paroxysmal atrial fibrillation. And we looked at over time, what were the rates of antiarrhythmic drug use and catheter ablation. And as you can see on the left, rates have increased over time for ablation. They've increased from about 2% to 4% and, not shown here, but for heart failure with reduced ejection fraction of population, that there's been a lot of data on with CASTLE-AF that they stand to probably benefit.

As a particular group, the rates of catheter ablation have also increased over the last few years from about 1% to 4%. But as you can see on the right, the rates of catheter ablation for new-onset atrial fibrillation are lowest among black and Hispanic patients. And that was similar results in our HFrEF population, who as I mentioned, the data would suggest benefit the most in that population. And then what we did is we put multiple covariates into a model to really see what is this association with race, ethnicity, and socioeconomic status with antiarrhythmic use, with catheter ablation, even after adjusting for several socioeconomic clinical factors. And what we found, which isn't shown here, but as kind of predicted, black race was associated with an 11% lower rate or odds of a rhythm control strategy for paroxysmal A-fib onset and lower median household income was also associated with lower rhythm control use.

And that was when adjusted for numerous factors, which included not only measures of socioeconomic status among black patients, but also seeing a cardiologist and interaction with a cardiologist as well. And then when we looked at catheter ablation, we found that Hispanic ethnicity, and again, lower median household income, were independently associated with catheter ablation use, even when adjusted for a lot of potential confounders. So we felt that this kind of showed what we were seeing clinically that these inequities definitely exist in access to rhythm control and catheter ablation. And that we really need to do better and kind of better understand what those barriers might be to getting in for these treatments.

Geoffrey Barnes:

Yeah. So clearly a lot of work yet to do to try and address these inequities. I want to go back to Nema's case here. So she was prescribed warfarin, and as we know, one of the key tenets of warfarin is having reliable access to INR

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so that you can adjust the dose, because it's a fairly narrow therapeutic window. Nema struggled with that. She's not always able to get to the clinic to get her INR checked. So often she was found to be out of range and having to adjust doses, hold doses, things like that. Lucky for her, she actually, one day at the pharmacy was able to interface with a Spanish speaking pharmacist who took some time to talk with her about her history, learned why she was on warfarin. And said, maybe switching to one of these direct oral anticoagulants could be a good option for her.

So during that discussion, he learned a little bit more about her family and realized she actually had a bilingual niece who was unaware of her condition. Nema hadn't even shared that with the family and maybe this person could actually help in helping to coordinate some of the care and navigating some of those language barriers that we talked about. One of the questions of course that comes up is that direct oral anticoagulants are fixed dose medications. And so some people have asked, well, is it safe to use these fixed doses in some of our most elderly patients? Are there any concerns? Nema herself is 76, but maybe even in some of the older patients, are there issues there? So I'd like to invite everyone here to join us for our last audience response question. And this really gets around the use of direct oral anticoagulants versus vitamin K antagonists, like warfarin in our elderly patients.

Let's think about those as age 75 or greater. Which of these statements is true, is there less bleeding with DOAC in the patients who are greater than 75 years old, but they are not recommended for patients 90 and older? Or is there more bleeding with DOAC, but the efficacy outweighs the risk? Or is there no difference in bleeding between the vitamin K antagonists and the direct oral anticoagulants no matter your age? Is there reduced stroke and major bleeding risk with the DOAC across the spectrum? Or again, I'm not sure. Show me the answers and let's look at the data. So let everyone take a couple seconds to lock in your answers. Okay, great. So it seems like the largest group of folks chose the right answer, which is reduced stroke and major bleeding with DOAC as compared to VKAs, even in those patients who are elderly.

Let's actually look at some of the data. These data come from a meta-analysis of those seminal phase three clinical trials, where we compared each of the different direct oral anticoagulants, apixaban, dabigatran, edoxaban, and rivaroxaban, individually against warfarin or vitamin K antagonists. And what you can see here on this slide, this is showing you the outcome of stroke or systemic embolism. So this is the efficacy outcome broken down by our elderly patients who are greater than equal to 75 on the top. And those who are less than 75 on the bottom. And you can see for both groups overall, as a class, the direct oral anticoagulants had lower rates. There was a lower risk or a risk ratio of having stroke or systemic embolism than for the patients who were randomized to receive warfarin. So overall efficacy is good no matter if you're in that younger or older age group.

Now, if we look at the outcome of major bleeding, what you'll see here is that for the younger patients, again, that's the bottom group, those less than 75, there's clearly less bleeding with the direct oral anticoagulants. The picture's a little bit more mixed in the older age groups. Some of the studies, the ARISTOTLE and ENGAGE AF did show a reduction in major bleeding, even for those older patients. That was not the same for RE-LY and ROCKET AF studies. And so on the whole you'll see that while the point estimate is below or to the left of the line there, it crosses the conference interval. So it's at least a safe, probably more efficacious for patients across the age spectrum. Now, what about the most elderly, those patients who are greater than or equal to 90? And again, this has got some more limited numbers.

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There have not been a lot of these patients enrolled in trials, but you can see overall from an efficacy standpoint, seems to be pretty efficacious. The key here, however, is there's a significant reduction in the risk of intracranial hemorrhage. And of course that's our most feared complication from being on a direct oral anticoagulant. So even in our most elderly patients, those in whom we're probably most afraid of bleeding, we can see that intracranial hemorrhage risk is reduced with the DOAC and at the bottom major bleeding really was the same between the DOACs and warfarin. So really good outcomes there. Dr. Essien, I wonder if I could kick this to you, I just talked about these three seminal trials and how they age and obviously another group there is race that we want to think about, how that plays into the outcomes. You've done some work looking at how well diverse our clinical trials are in general, and talk us through a little bit of what you have found there.

Utibe Essien:

Absolutely. I think some of those leading trials as are highlighted in this figure here, unfortunately just weren't as diverse as we had hoped that they would be. And you know why that matters. I think we've talked about this already, hearing that your colleague, your neighbor, your friend was on this medication and this clinical trial, perhaps that actually motivates you to take or stay on these medications or ask your doctor about these medications. Individuals want to know if people who look like them were actually tested in some of these clinical trials as well. And so in our report, in our review, rather, we looked at the last decade of atrial fibrillation studies from some of these seminal DOAC trials to some of the more recent trials around anti-arrhythmic therapies, such as catheter ablation.

And again, you can see white participants represented in the purple color and racial, and ethnic minority are underrepresented individuals represented in that light orange. And you really see the range across the decade in terms of underrepresentation. And it's with a total about a third of individuals within these trials coming from underrepresented backgrounds. I think, again, this is an area of opportunity for us as we move forward in atrial fibrillation to enroll and diversify our clinical trials again, so that our patients can really see themselves in these studies and ultimately just feel more comfortable on the medications that we're prescribing.

Geoffrey Barnes:

Yeah. I think that's so helpful. If we don't have the data, it's hard to have those conversations and we need to work on enrolling patients in these studies so that we understand how the findings apply to our full population of patients. Well, let's come back and sort of close out Nema's case here. She was able to engage her niece. So her social network that we talked about. She thankfully was able to leverage this pharmacist who spent some time in helping her understand her different options. And actually a shared decision discussion with her physician to switch from warfarin over to a direct oral anticoagulant. It just addressed a number of barriers and issues that she was having. And through that coordination of care and her continuity of care hopefully improved.

And so I think, the end of the day, we ended up with a good outcome for her. But certainly there were a lot of speed bumps along the way that influenced her care. Dr. Eberly, I wonder if I could turn to you. We often talk about the issues of social determinants of health, but practically speaking as physicians, as nurses, pharmacists, healthcare workers, how do we start to explore these social determinants of health? What are the kinds of questions that you tend to use in clinic when you want to understand what barriers patients may be

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having and how these social determinants of health are influencing the care that you're trying to provide for them?

Lauren Eberly:

Yeah. It's such a great question. And I know it can be really difficult to talk about, but it's so important. And I've really taken some framework from the Southern Jamaica Plain Health Center, which is a health center associated with Brigham and Women's in Boston, and they've done some amazing work that they call liberate the exam room. Which is really trying to get at a lot of these issues and especially, issues around perceived discrimination in healthcare, which is so important as well. And so with their framework, I often will ask, I don't want to assume anything about your identities. Can you tell me how you identify racially, ethnically, culturally? And I'll ask my patients, what are their pronouns. And then I try to normalize it and say, many of my patients experience racism or discrimination in their healthcare, are there any experiences that you've experienced you would like to share or anything that you think would be helpful for me to know as I care for you?

I also really like to ask, what has been your experience interacting with the health system so far? What are the things that have prevented you from achieving your health goals? After kind of figuring out what is important to them for their health. And then I think it's just really important to normalize with our patients, as we all know that our health system is fraught with a lot of issues that health insurance can make it really difficult for us to get other patients on the medicines we want to. And I try to normalize that and say, I want you to always let me know if you have a medicine that is too expensive and we can work to find another one. And I acknowledge that sometimes we can't tell exactly what the coverage will be like to go to the pharmacy. But to really normalize that this happens to everyone and there's issues that we will have to overcome together. But to try to open up that communication so they feel comfortable talking about some of these barriers.

Geoffrey Barnes:

Yeah, no, that's really helpful. And I know there are some systems that actually use standard forms or questionnaires. And Dr. Essien, I wonder, is this something that you have seen used? I don't know if this is used in your clinics or not. What are your thoughts on sort of having these standard forms that patients fill out before they come into the clinic? And if you're at a system that uses it, how might you integrate it into your clinic visit?

Utibe Essien:

Absolutely. I think this is a great example. On the screen here we had a similar one to what Dr. Eberly used, excuse me, during residency and our residency across the town in Boston. And now I'm working in the VA, as I mentioned, and this is similar to the one that we offer all of our veterans. And so annually, some of these questions are being asked. And I think what's been awesome about working in the VA is that it doesn't have to be asked by the physician or the advanced practice practitioner. These are baked into our systems of care. And so whether it's the person who's screening the patient before they come into the room, getting the blood pressure, getting the vitals, and also getting these social determinants of health questions answered while they're waiting in the waiting room. I think that's so helpful so that we can, again, normalize some of this process. Hey, we are getting your weight, you're getting your height and you're getting your SDOH screen.

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But really, I think the question is, okay, what do we do with that information moving forward? And more and more we're seeing individuals like us who are researchers in this space, but also we're seeing some of the folks who are in the operations and administrative side really using some of the data that they're finding to create electronic medical record templates to be able to forward patients over to a social worker within our clinic or the community that supports housing or communities that support issues around food and security. So really weaving all of that in into our clinical spaces. And again, in certain institutions, in certain practices, that can be really challenging, but I'm hopeful that questionnaires like the one we have on our screen here start to provide those of us who may not have some of those wraparound services within our clinical spaces just start to ask the questions and we never know what information we'll get.

Geoffrey Barnes:

That's great advice. Thanks for sharing. Well, I want to wrap up the presentation portion of this session. And before we move on to the Q&A, I want to review some smart goals, some really specific measurable achievable things that we all as healthcare providers can do to try and help address some of these social determinants of health. First is, reflect on your own practice and think about some of your own implicit biases. Go ahead and take some of those tests at the website there. I think that just recognizing them is an important first step here. And then engage in some shared decision making with patients while integrating some of these social determinants of health factors into that conversation. And be open and direct, and being able to ask questions about this and how these determinants really influence some of their opportunities in their healthcare delivery.

Think about following guidelines, especially as we think about when we should be screening and how we should be diagnosing atrial fibrillation. And of course, as we've seen, think about the evidence base and the guideline directed therapies for atrial fibrillation, such as using direct oral anticoagulants as our first line therapy, really across the entire age spectrum for patients who require stroke prevention in atrial fibrillation. So I want to now move, we have about 20 minutes or so, and we're going to transition into our question and answer portion here. You can go ahead and submit your questions by selecting on the Ask Question tab. We have several of them in there already, and we're going to get through as many as we can.

You can also go ahead and email us @questions@cmeoutfitters.com or go ahead and tweet [@cmeoutfitters](https://twitter.com/cmeoutfitters), and we'll try and build those in as well. So I'm going to go ahead and move into some of our questions. And the first one, Dr. Essien, I'm going to direct to you because you've talked about this a bit. This really gets to the language barrier issue and the use of translators. And somebody here asked, okay, if I have access to a translator, whether it be a phone base or an in person, how do you use them in a way that doesn't slow down your clinic? You've got a busy clinic, you've got a lot of people to see. What's the best way to use them and still be efficient? Do you have any tips or tricks you can share?

Utibe Essien:

Yeah. I think the first point is we need to use them just like we can't listen on our cardiovascular exam without the stethoscope. I think we really need to normalize the fact that the interpreter is critical to our patient's care if we don't speak their primary language. That being said, I think just like we struggle and clicking through our various EHRs, we can really kind of optimize work with interpreter. Whether they're, making sure that they're on time and timely for our visits, making sure we're on time with our appointments as well. Really weaving in their

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conversation, as they're explaining our question, we're typing up whatever we needed to type up from the prior question and kind of making that process as fluid as possible.

I know some clinics and communities around the country are starting to invest in Scribe so that there is a little bit less of that typing while I'm asking, while I'm listening to an interpreter going on. And we can really focus on that via that diad rather, as we're speaking with our patients. But at the end of the day, this is really challenging. This is going to be a bit different from our usual practice and it's going to take some time. But the long-term investment that we'll get from both our patient satisfaction and more importantly, their positive health outcomes, I think outweighs some of the pains around time.

Lauren Eberly:

Yeah. I think just to piggyback on that, that there's definitely room for improvement to make it easier. And one of the things that we learned early on in the pandemic with telehealth is that there are inequities in access for our non-English speaking patients. And so our group as a response to that integrated translation services into kind of our EHR platform that we were using for telehealth. So that allows us to click on the visit and then with one click, have a translator with the video visit for our telehealth. And so it made it so much easier to actually use translation services and just integrate them into the visit. So we're now exploring, are there easier ways that we could do that within person visits so that we can decrease some of that time? Because the harder it is, we know the more barriers that there are, that the less likely it is to use them and we really need to work to make it as easy as possible.

Geoffrey Barnes:

Yeah. Dr. Eberly, you talk about sort of integrating these services into the way care is delivered. And there's another question from somebody in the audience who asked actually about some of those social determinants of health questions that we showed and in fact, that questionnaire. Does it matter who's obtaining that data? Meaning should it be a medical assistant or a nurse who's asking the question? Does it need to be maybe a form that a patient fills out on their own? Does it matter how you collect that data and how has that been operationalized in some of the clinics you've worked in?

Lauren Eberly:

Yeah. I think the most important thing is, does the data get to you as a clinician to use it? I think oftentimes we give patients forms and they fill out and circle all these things. And then oftentimes we, as the clinicians don't even see the form. And so I think as long as we're able to see the data, it could be flagged in a way that's effective so that we know, oh, they're high risk because of this social determinative of health. It can be helpful to save time, to have someone else do it. I know it's really hard. We're so pushed for time already with our visits, but I like to at least ask the questions that I mentioned and basically because I think it helps try to build some trust with the patient.

And a lot of our patients, especially for marginalized backgrounds have understandably a lot of mistrust in the healthcare system, but to try to open up a conversation. And I think that having at least a question or two yourself as a clinician, if you have the time, which I know is hard, but I think it can be really helpful for establishing

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that relationship. So in a few weeks, if they go to pick up a prescription and it's too expensive, that they do feel comfortable letting you know, whereas if they just fill out a form in the waiting room, that that relationship and line of communication might not be there.

Geoffrey Barnes:

Dr. Essien, one of the questions that's come in has to do with sort of access to laboratory studies. So in the case that we discussed, whether you were going to put her on warfarin or you're going to use a direct oral anticoagulant, there's at least some baseline labs and the periodic, maybe at least the annual lab that needs to get checked to make sure that things are being done safely. Can you talk a little bit about access to getting those lab studies, what barriers exist and maybe different strategies that we can think of for our patients who aren't always able to get labs as conveniently as maybe we would like?

Utibe Essien:

Yeah. It's such an excellent question. I think again, that care continuum, perhaps we do need to add a access not just to pharmacy or specialty, but access to labs. Whether in A-fib we see the INR being a key lab, but when we think, move to some of our other conditions that we manage. When you're starting the new diuretic who can come in and get that chemistry check. And so absolutely I do think that we need to have that conversation. And I don't know if there's been enough written around racial disparities or ethnic disparities as socioeconomic status disparities and access to lab visits and how that influences treatment. But I think that's definitely a welcome opportunity. Again, just thinking about the cascades of care and all the different places where there are opportunities for inequities really open themselves up to future research and more importantly, future ways we can change the way we practice.

Geoffrey Barnes:

One of the barriers, and this is less of a racial barrier, but more of a sort of the way people's lives are and how busy they are and access to getting labs. When you're on warfarin, of course you need those frequent INR checks. And so, one of the things that I hear in the many patients I manage with warfarin is, I can't get to the lab. I can't get there while they're open, or I have the transportation issue or whatever. And for many patients getting a home INR meter is actually a great way to address that. If it's somebody who understands how to test, they're comfortable doing the finger prick, getting the result and then communicating that back to you, if they have access to those tools, then that can be a great way to overcome the access to the lab.

Maybe it's a transportation or, I actually have some of my business, people who travel so much that they're not in town reliably to get it. And that can be a great strategy. Of course, the flip side is they have to be comfortable using it. They have to know how it interfaces and can they call those results in or do they have a phone where they can get them transmitted? And of course, can they pay for it? And so it is often dependent on access to insurance that will pay for the test strips and the meters, and all of that. So it's a great tool, but it's not a one size fits all tool. And I think part of what I've heard in our discussion tonight is, there often aren't one size fits all solutions to any of these issues. But we have to think creatively and try and come up with the best solutions for individual patients.

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And that's certainly one of the major issues that's been discussed. Dr. Eberly, I want to turn to you. There's a question that we got, I think maybe early on in our presentation as we were going through some of those definitions. And as we think about, specifically the terms, systemic racism and structural racism. Somebody asked us if we could go back and help to differentiate those two a little bit more. Could you help us think about what's similar and what's different in those two terms?

Lauren Eberly:

Yeah. That's a great question. Structural racism, I think really actually falls under systemic racism. So as we talked about that structural racism is just that differential access to goods, opportunities or service by race. And then that's kind of under a broader category of systemic racism, which then incorporates all of those big systems, whether it's political, legal, economic, healthcare, educational, or criminal justice, that then within it, in those systems have differential access to good services or structural racism. So a lot of times they are used interchangeably, which I think is fair. But usually we think about structural racism, just being kind of a tenant under an overlying systemic racism. Where that's really saying that we have this differential access to goods within these larger systems that really our society upholds, whether it's education, healthcare, et cetera. If that makes sense.

Geoffrey Barnes:

Yeah, no, that's helpful. I appreciate you helping us dig into that a little bit more. Dr. Essien, I want to jump to you. There was a question I think that was triggered by your slide that showed the white versus non-white populations in all those different trials. And the question that was raised is, how do we address this? How do we recruit more minority populations into studies? And in particular, how do we recruit more of our black Americans into some of these studies? Are there things that are being talked about? What have you heard or what have you seen done that may be effective?

Utibe Essien:

Yeah. So the first thing I always talk about here is a common theme that comes up is the US Public Health Service Syphilis Study that took place in Tuskegee, Alabama, and highlighting that history is importantly not the solution. I think so much of a legacy around this topic has been like, that study took place back in the 30s to 70s, and that's just why black people aren't getting into research. That's been done, that's taken place. There's huge, huge implications to that around the issues around trustworthiness like Dr. Eberly alluded to. But now is a time for us to start being a bit more creative and nuance. And A, realizing that there's so much more to that history. For folks interested, the book *Medical Apartheid* by Harriet Washington, really unpacks just significant study after study that really has driven some of this issues around trustworthiness, especially in African American communities.

Secondly, that there are systems and structures that we can put in place so that communities have access to trials. That when the pandemic began, for example, and various health systems were having to shift their resources towards the pandemic, many of those communities and health systems ended up losing some of their clinical trials and they weren't able to enroll patients into them. And those communities tended to come from underrepresented, racial, ethnic backgrounds. And so really having the investment and commitment to having our communities be able to engage in clinical trials is critical across the various care systems where our patients

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get their care. And lastly, and I alluded to this a bit in my earlier remarks, is really removing some of the financial barriers. We know, unfortunately that they're income and wealth disparities across racial and ethnic groups in our country.

And so to be able to ensure that patients can take that time off of work, that they are able to get appropriately compensated for involvement in these trials. Whether they need childcare, they need parking, they need vouchers to be able to come out and participate, I think will be critical. And we're seeing some of those policies take place. Medicaid, I think, is starting to really support their enrollees in participating in trials. And I think once we look at this broader overview, we'll be able to start to see some of those enrollment numbers pick up.

Lauren Eberly:

Yeah. And I think just to add, when we look at our group here has done some work looking at clinical trial sites and the patients served by those trial sites. And just as you mentioned, as another kind of form of structural inequity, that as many of you on the call today know, is the sites for clinical trials tend to be, tend to, the data shows serve more wealthy white patients. And so just to your point, also thinking about how can we get out in the community and really get to places and reach patients that might not be coming to this coronary care center where a trial takes place most of the time.

Geoffrey Barnes:

Yeah. If they don't even have the trial at the center where they're at, it's hard to then get them to agree. That's such a great comment. Dr. Eberly, I want to come to you. There have been a couple questions in this space. I'm going to try and bring them together into one. A lot of research focuses on issues of disparity, issues of health equity, issues of social determinants of health. And they take a fairly broad, maybe a national view, or they look at data from sort of a wide swath of America. Dr. Essien, actually, when he sort of broke down the social determinants of health, you talked about some of the differences in urban versus rural settings. And I'm wondering, you practice in a very urban setting there in Philadelphia, but you also practice and are going to practice in a much more rural setting as well. Can you talk a little bit about how you see differences in social determinants of health and health equity in those two settings and how they maybe affect A-fib or just cardiovascular care in general?

Lauren Eberly:

Yeah. It's really interesting because there's certainly inequities in both, but they're very different. And here at Penn and in Philadelphia, oftentimes we see inequities and the hospital is down the street from our patients. And so geographically the access should be there, but oftentimes isn't for a lot of our patients. So thinking through whether it's structural, insurance coverage, financial, transportation, how can we get people in the door and get care, a lot of times those questions are different. Because the geographic proximity is not so much an issue, but still a lot of those barriers. And rurally it's often a lot of inequities as well, but confronted with access issues as well.

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But oftentimes a little bit more of, where is the nearest place for care? How do we get patients there? Can we engage with telehealth or digital health solutions to still get care? And so to your point, I think it's really important to think about these differently and not take kind of a blanket approach when we think about inequities. And really understand what the drivers are in terms of barriers to access to really appropriately target solutions. Because they're really stark inequities, but they are so different when we look at all different places, whether it's urban and rural, whether it's different groups or not.

Utibe Essien:

Yeah. And I think we talked about this, sorry to interrupt.

Geoffrey Barnes:

Yeah. Please.

Utibe Essien:

With the social determinants intersecting. I think whether it's race and ethnicity intersecting with income, we have to kind of reimagine who we picture when we think about the urban medical center versus the rural medical center. And I think we have colleagues in the oncology space really starting to unpack that there are black urban individuals and there are black rural individuals and their needs, and their experiences with care are very different from individuals from other racial and ethnic groups. And again, I think that's going to be one of the mantras from this conversation is that, yes, we need a structural approach, but we also need to individualize our care to both the patients and the communities they're living in.

Geoffrey Barnes:

There've been a couple other questions that actually take us back to the beginning of our conversation here. Which is, how do we define terms and what language do we use? And Dr. Essien, and I'm wondering if you can shed some light on this, or maybe just give your thoughts and opinions. There has been, I think, an evolution in some of the language that we use to describe certain populations, especially certain minority populations. Are there right or wrong terms to use? And I'm thinking here in particular, black versus African American, or we're starting to hear a lot now this BIPOC abbreviation, black and indigenous, people of color, referring to groups as communities of color or people of color. Are any of these okay? Are there reasons to sort of move one way or another? What kind of advice would you share for people who want to be conscious of the language they're using?

Utibe Essien:

Yeah, no, I appreciate that. I'll add, capitalizing the B in black versus not. As researchers, we're very precise in our language and I'll argue as physicians, we're also super precise. It's one of the points I love making in these talks is that when we think about small cell lung cancer versus squamous cell, we don't just throw lung cancer around. We're very precise in our language. Dr. Eberly mentioned HFrEF earlier, that 35% ejection fraction really matters in terms of what we're diagnosing, what we're coding. And so I think just like that with language around these

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issues of race, racism, health equity, and these different populations and communities, we should be precise. I think phrases like communities of color, people of color BIPOC, are ways to kind of help just with easing the ability to sneak in a 3000 word manuscript, for example.

But when we are thinking about these communities and populations, I think that we should be as precise as possible. If you're thinking about black populations and their experiences with care, I think we need to appreciate and acknowledge that that's a very different experience from Asian populations in the US, from American Indian populations in Southwestern US from recent immigrants from South American countries. And so, yes, there are certain marginalized, underrepresented groups that all experience very similar social determinants, but there are absolutely different experiences and different groups. And so as much as we can be precise when talking about these communities, I would push us to do so.

Geoffrey Barnes:

Yeah. The other thing that I'm reflecting on from my clinical practice and I help to take care of a sizable transgender population, it's sort of a different group that experiences disparities, is I've really learned to ask, how would you like to be referred to? So if I don't know or if I'm unsure, showing that respect and saying, what language would you like to use? Is often a great way to open and make sure that you're using something that people feel comfortable with. And I think that can sort of play out into many different groups as we want to talk about individuals and individuals within larger groups.

Utibe Essien:

Absolutely.

Geoffrey Barnes:

Dr. Eberly, I want turn to you. There are a number of questions here that are getting a little bit more specific about A-fib and treatment of A-fib. And in particular, we've talked a lot about how direct oral anticoagulants really are our guideline recommended therapy. That's what we want people to be on, but there's a major cost barrier. And while there's the hope of generics that are coming, we know they're probably still several years away, at least for the two most commonly used direct oral anticoagulants in the United States. Are there strategies that you are seeing being used in your clinic to help patients overcome those financial barriers? Do they have access to patient prescription assistance programs? Do you have access to pharmacists? How do you have that conversation with patients in clinic when it's appropriate?

Lauren Eberly:

It's such a huge problem. And I wish we could get better coverage for all our patients. I know everyone on this call has struggled with this. I'm really fortunate in our clinic, we started having a pharmacist integrated in our clinic who's a resource and is very helpful to help us get some financial assistance for a lot of our patients. So I know that's a resource that our clinic is lucky to have, but there are programs out there for financial assistance. So whether it's Entresto or DOAC, I've been able to, in most cases, at least get prescriptions for most of my patients down to a more affordable cost, although it's definitely not the case than everyone. And it's something I know we

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fight with all the time and something that frustrates us daily, but there are programs available. And so we really lean on our pharmacist to help us kind of navigate that, but there are those programs available, but I wish it were easier for sure.

Geoffrey Barnes:

Yeah. And I find sometimes connecting them with a pharmacist or a social worker who can help them fill out the forms in access can be a great way to address that, but still deal with the, you're in clinic and you're trying to get to that next patient. So at a system level, ensuring that your system has those resources can be really useful. Well, there are a bunch more questions and I wish we had a whole other hour to keep talking about this. This has just been a wonderful conversation, but we really are almost out of time here. So I want to start by thanking both of my colleagues, Dr. Eberly, Dr. Essien. This has been such an enlightening and really an insightful and frankly, a fun conversation to hear from both of you and learn from both of you.

So I want to thank you for joining me. This is an important discussion, and I hope that everyone on this call has found it useful for self-reflection and thinking about how they're going to improve patient care. I encourage everyone who's attending here to find out about additional CME Outfitter upcoming events, as well as to view of previous ones. You can go to the CME Cardiology Hub. The link is actually on your screen so that you can see that and learn more. Lastly, if you want to receive CME or CE credit for today's program, you need to complete the posttest and the evaluation. You'll be able to download those and then print your certificates immediately upon completion. Again, thank you to Dr. Eberly, thank you to Dr. Essien for joining me. This was a wonderful and important conversation, and I hope everyone has a wonderful evening.