

Edith Mitchell:

Hello, I'm Edith Mitchell, and on behalf of CME Outfitters, I would like to welcome you to today's educational activity titled "Root Cause Analysis: Examining Structural Racism and Social Determinants of Health to Combat Inequities in Cancer Care." Today's program is supported by an educational grant from Bristol Myers Squibb and Merck Sharp & Dohme Corporation. In support of improving patient care, CME Outfitters is jointly accredited by the Accreditation Council for Continuing Medical Education, the Accreditation Council for Pharmacy Education, and the American Nurses Credentialing Association. You can follow us on Twitter, or at CME Outfitters, as well as upcoming CME CE opportunities in health care, news, and others. I'm Edith Peterson Mitchell, MD, and I am a Clinical Professor of Medicine and Medical Oncology in the Department of Medical Oncology. I'm also Director for the Center to Eliminate Cancer Disparities, and Associate Director of Diversity Affairs at the Sidney Kimmel Cancer Center at Jefferson, in Philadelphia, Pennsylvania. I'm also the 116th president of the National Medical Association.

Let me introduce some faculty for tonight. I've introduced myself, and the next faculty member is Dr. Narjust Florez Duma, MD. Dr. Duma is Associate Director of the Cancer Care Equity Program, and thoracic oncologist at the Lowe Center for Thoracic Oncology at Dana-Farber Cancer Institute. She is Assistant Professor at Harvard Medical School, Boston, Massachusetts. Our next faculty member is Dr. Brian Rivers. Dr. Rivers is Director of Cancer Health, and Professor and Director of Cancer Health Equity Institute at Morehouse School of Medicine in Atlanta, Georgia. Our learning objective for the evening is to analyze causes of disparities in the quality and delivery of cancer care. This is very important, because there are differences in the outcomes of racial and ethnic groups in cancer care. And this results in the number of new cases, the number of deaths, and other cancerrelated health complications, survivorship, as well as quality of life in regards to cancer care and cancer care delivery.

Clinical care has minor effects on outcomes. And when someone is sick, it's very important to know what are the consequences, but what are the factors that affect an individual becoming ill while on cancer treatment? So that is very important. So healthy outcomes are determined by the individual's pre-illness care, as well as the outcomes that occur as a result of care. But in 80% of individuals with a healthy outcome, it's not really determined by clinical care, but by other factors. There are social determinants of health that can influence the results. And consequently, this is very important, not only the cancer care, but the individual's location and zip code. So where they actually live, whether inner city, or rural, or in areas that are desolate in terms of drug stores, in terms of supermarkets, in terms of the education offered in the community, and other factors related to the geographical and community setting. So very, very important. And what I'd like to do at this time, is ask Dr. Duma to give us more information regarding the social determinants of health, and how this can affect an individual's performance in terms of health care delivery.

Narjust Duma:

Thank you, Dr. Mitchell. It's always an honor to work and present with you, because I don't think I would be here if it wouldn't be for you creating a pathway for many of us. So when we talk about social determinants of health, we talk about things outside of the disease, and how they negatively or positively impact patients' outcome. And as you mentioned, Dr. Mitchell, access to food, access to transportation is essential. One example I use for trainees, is that the patient can have a PD-L1 of 100% for their tumor, but if they don't have a way to get to the



cancer center for treatment, then the response rate would be 0%. So how important is this value, or how important is this PD-L1 level when patient cannot get to the cancer center? And we cannot forget the impact on language and cancer care. Can we move to the next slide?

So when we see patients, I want you to, I want everybody to see patients as the results of the interactions with their society and with their environment. As humans, we are the results of the interaction with our environment and the resources we have. It is important to understand that we have social needs as individuals, and the community needs, as well as systemic causes, or all the disparities that we're going to talk about. So the social needs include socioeconomic status, health literacy, language, social determinants of health. How far is the next cancer center for you? And the systemic links, that we're going to talk about it, is the structure racism, and how the healthcare system was designed to exclude the most vulnerable patients. There are multiple factors that affect social determinants of health. Economic stability. And COVID 19 have brought attention to this particularly, as many of our patients lost insurance due to the loss of employment. Neighborhood, physical environment.

Do you have somebody who will provide if you're sick? Do you have access to transportation? Do you have access to safety? Is it safe to walk around your neighborhood? I think sometimes I tell my patients to walk a block or two, but we need to ask "Is it safe for you to do that?" And education is very important. And I'm not talking about my patients having an MBA. I'm talking about understanding health and understanding sickness. And all of this are associated with health outcome. That is no one that's more important than another. All patients need food at their tables. Next slide. So the social determinants of health, the disparities are many. But these are the top ones. And we have to talk about the lack of insurance, but we need to talk about exposure to risk factors. Minority patients, or immigrant patients, are patients are the most likely to have these jobs that have high exposures, risk factors, work in construction, work in the port as fishermen, or other activities that expose them to high-risk carcinogens.

Communication can be very challenging. And we know for studies done from my own lab, that if you're a woman of color, you're less likely to get subsequent follow-up calls for a clinic. Screening guidelines, a lot of the screening guidelines were determined or decided in a majority white population. So when we are trying to, we're trying to learn now, and we're modifying a lot of the screening guidelines. We saw that in the colorectal cancer screening guidelines, which it was moved to 45, and we have seen changes in lung cancer screening with the hope of fixing mistakes that we did as a health care system, to set up guidelines that were excluding the most vulnerable patients, and the patient that they need screening the most. And we need to also take into account, hereditary risk and generic determinants. Black women are most likely to have triple negative breast cancer, as an example of particularly effects, and so, in cancer health disparities.

Language barrier is a big, big social determinants of health. I can tell you, I have patients that face significant delays in diagnosis when they initially were stage one or stage two cancer. But that language barrier was what didn't help them understand what was important to follow up, and didn't communicate with the health care provider. And we haven't... We can go back to the other slide. And we have been doing a lot of talks about telemedicine, but telemedicine has provided a digital divide. A database, a data plan for cell phones are quite expensive. And if you don't speak the language very well, telemedicine removes the context and from books, the one on one that allows patients to understand. And this same language barrier is why some patients are labeled as "non-compliant," or lack of understanding. But more than poor compliance, is we haven't taken the time to explain things in a language they'll understand. Next slide.



So how we address social determinants of health, and one of the very important aspects of social determinants of health, is that we need to practice cultural humility as we address this. And it can be very triggering, and it can be very uncomfortable if it's not done appropriately. So instead of asking our patients, "How many packs do you smoke?" Why if we practice the principles of culture of humility, and ask, "Have you ever smoked? Have you ever used cigarettes?" So trying to understand that a lot of these aspects of health can be quite embarrassing for some patients. I don't have enough food, enough money for food, is something that patients may not feel free to share. At least we ask. And what is the point of doing these very fancy cancer treatments, if your patients are going to die of other things? Or they're not having a good quality of life because we haven't explored that? We can move to the next slide.

As a result of the intervention, to understand that many oncology physicians and providers have received none or very limited training on how to assess social determinants of health, ASCO-President Dr. Peters, created these series of podcasts in which I host one of them, to use cultural humility and how to address social determinants of health in a right way, or in a way in which you feel more comfortable. Next slide.

But the question is, how do we measure systemic racism and discrimination? When my patients go and Google their rashes, most of the rashes don't include them. I remember being a medical student trying to Google, I was bitten by a tick when I was hiking, trying to look for the characteristic Lyme's Disease rash. And of course, I was a medical student over a decade ago, but I couldn't find any picture of somebody with my skin color, which I won't have the characteristic rash because I'm not Caucasian. So a lot of things discriminate patients and limit the information. We have seen the consequences of systemic racism in medicine, how patients are skewed for clinical trials, how they're not treated with appropriate pain medication, how they are undermined and their concerns are invalidated.

And as a consequence of this systemic racism and discrimination, we have seen a large exodus of physicians of color from the medical workforce. Some of them have left academia as a whole, and some of them have left clinical practice as well. So it is important that we understand that it's not only us, but it's the environment that holds our patients every day. Next slide. There are many, the previous one, there are many things that we do in medicine that are race-based. And I'm only going to touch on some of them. Some of them includes EGFR, GFR, sorry. I'm a thoracic oncologist, so EGFR is more common. GFR measures. We are base, race-based measures for renal function. Pulse ox, or pulse oximetry. So here's a guideline that was presented by Dr. Cerdeña and this paper in *Lancet*, and which how we can identify these race-based assessments, and trying to modify it.

Follow the research. Provide the medical education for trainees. Or how several of these assays or interventions are race-based. And they only propagate inequalities. I only have mentioned two, but I want to invite you to this paper, in which many of them are reviewed, including fracture risk for osteoporosis, pain management, all of those were tested and evaluated in a majority white population. But unfortunately, that is extrapolated and used to treat patients across the board, generating disparities and lack of understanding of the disease itself, and over 30% of the population. Next slide. The one before.

So what are we doing to change some of these race-based assessments, or the studies that haven't been validated in people like me and *mi gente*. As we change lung cancer screening, from 55 to 80, to 50 to 80. And instead of requiring 30 packs a year smoking history, we're requiring 20. That benefits the most of minority



patients, lung cancer screening, 45 is the new 50. And this part of the lung cancer, the Colon Cancer Commission, in which are trying to promote colon cancer screening in populations of color. And what is sad, is that we learn to modify these guidelines after we miss and lost many patients of color. So it's time to change all these race-based testing, and try to reevaluate all of our guidelines that were majority tested on a population that don't look or sound like me. Next slide.

So racial disparity, what is the consequences of this? With the racial disparities also, we end in the system for curative treatment. Disparities in lung cancer surgery has been described since the times of Henry Ford for black men. So Dr. Marjory Charlot created an intervention. Use an EMR to create some of the equity that we are missing when it comes with curative surgery for a very, for a fatal disease like lung cancer. So this included reminders from the EMR, accountability, why patients were not getting to surgery within eight weeks. Real time evaluation and patient navigation. So it is possible to eliminate disparities as soon as we have individual and system change. Next slide.

Edith Mitchell:

So Dr. Duma, what are the roles of other members of the health care team? It's more than just the physician? What are the, what can other people do?

Narjust Duma:

Everybody has a role in cancer care equity. From the person that welcomes our patients, the greeter in the lobby, to the CEO of the hospital. Practicing culture, humility, making our patients feel welcome, creates trust. Already an environment that you don't feel like trusting. Having several members of our team that represent the population we treat. Also, we provide on the standard of their unique needs. And I always use the example of *remedios*. So in the Latin cultural community, we use a lot of natural naturopathic medication. So we don't call it "supplements." We don't call it "vitamins." We call it "remedios." And having staff that understand that that's part of our health care, that's part of our health care beliefs, not only builds trust, but it helps understand if the patients have side effects because they started a new *remedio*. So everyone has a role in cancer care equity, Dr. Mitchell. Everyone.

Edith Mitchell:

So thank you so much. We do have a, some additional talks, but we do have a polling question that we would like to ask. So for this question, how confident are you to offer clinical trial options to all your patients? And the choices? Not confident at all, somewhat confident, confident, or extremely confident. Please select your choice. So most of our members in the audience say that they are not confident at all, are somewhat confident. And we hope that some of our information tonight, might allow you to become more confident in the ability to provide information to patients. I'd like to bring Dr. Rivers into the discussion, to talk about racial and ethnic diversity in precision medicine. Please go ahead, Dr. Rivers.



Brian Rivers:

Thank you, Dr. Mitchell, and good evening. And it is delight to join this conversation. And so, as the slides are being pulled up, it was very interesting in terms of the responses related to those individuals who said they would not feel confident, or somewhat confident, in being able to offer clinical trials to their patients. So again, as Dr. Mitchell stated, hopefully this evening, we will be able to share some insight, as well as some best practices for how that approach may ensue in clinical, as well as in non-clinical settings. And so, we know clinical trial enrollment has been at the forefront for decades now. Ever since the NIH released the Revitalization Act in 1993, they really called and mandated for the adequate representation, or inclusion of women and minority populations in all biomedical research, and more specifically, on clinical trials. We also saw this really come to the forefront during COVID 19, in terms of, again, representation of diverse groups in biomedical research, especially in clinical trials. And so, there's been a quite a bit of movement, as-

Edith Mitchell:

So Dr. Rivers, let's do another polling question-

Brian Rivers:

... Okay.

Edith Mitchell:

... for the audience.

Brian Rivers:

Sure.

Edith Mitchell:

Why is ethnic diversity important in precision medicine? And these are the choices. Ethnic diversity in genomic sequencing efforts, is important to the generalizability and availability of genomic-based treatments or preventions. Next, improved access to precision therapeutics by ethnically diverse groups will lead to better outcomes. Our understanding of disease processes will be increased by incorporating racial and ethnic diversity. Analyses of different ethnic populations will lead to lower cancer rates and improved screening rates. And what I'd like for the audience to do, is select your choices. So we have quite a diversity of answers from the audience. And Dr. Rivers, we will go ahead with the next on precision medicine.

Brian Rivers:

Thank you, Dr. Mitchell. And again, very interesting responses related to just the perspectives around precision medicine. So we know that there's been quite a bit of interest, and a lot of activity around advancing precision medicine, probably for about the last 15 years now, in the realm of cancer care, and now, cancer prevention. We know that precision medicine looks to transform how cancer care is delivered, by really tailoring treatment to



individuals, based on their genomic profile, as well as the genetic basis of their tumor. But then, also, the environment, exposures that they may encounter, as well as their lifestyle, which is inclusive of their behavioral patterns. And we see that many new medical advances, that are really advancing precision medicine, are shrinking the gap, as relates to cancer disparities. And it is critical for us to continue on in these efforts. Next slide, please.

And so, in a recent study by Spratt and her colleagues, they did analysis of the data in the Cancer Genome Atlas. And basically, what this slide sums, is that there was not enough samples for minority populations to really detect the difference, in terms of mutational frequency rates. And this is important, especially as we attempt to better understand some of the key drivers of cancer disparities, and how best to intervene on those drivers. But when we don't have enough samples represented in the studies such as the Cancer Genome Atlas, then it hampers not only discovery, but then also validation of those discoveries among all groups, that really then, ultimately, hampers generalizability of the findings. And it really questions the efficacy of the treatment, that protocol that is being established. And so, again, I think this study really highlights the need and the importance of ensuring that a lot of the precision medicine initiatives, these initiatives that are generating in this big data, are representative of all groups, especially those who are disproportionately impacted by many of the cancer disparities that we're talking about here today.

Next slide please. And so-

Edith Mitchell:

So, while we're waiting, why is that so important, Dr. Rivers?

Brian Rivers:

... Well, Dr. Mitchell, it's extremely important, because we know that for us to best understand mechanistically, what are the contributors, what are the factors associated with adverse outcomes of minority populations, we need to study them. And if they're not included in these samples, and then we fear exasperating disparities. Now, research has shown again, that historically, disparate populations are underrepresented in biomedical research. We know racial and ethnic groups, historically, have been underrepresented in biomedical research. And again, going back to the NIH Revitalization Act that was launched in 1993, that really called for a mandated strategic action to ensure adequate representation, of not just women, but minority groups in the United States, that they are presented in these different biomedical research studies and clinical studies. So it's extremely important, because if we don't do it, then we hamper the generalizability of a lot of our scientific advances that we're investing so much money in. Next slide, please.

Edith Mitchell:

Yes. And Dr. Rivers, do you think this can affect our overall cancer outcomes in the country, and decrease the gap between outcomes in races and ethnic groups?



Brian Rivers:

Well, I think we're starting to see it now, as we move closer to a model of inclusivity, and where we're able to study one group versus another, that's disproportionately impacted by disparities on cancer. We're better, we're able to then, really intervene and target those factors, and realizing that, as you see displayed on your screen, the National Institute on Minority Health and Health Disparities presented this research framework, that really helps us better understand the multifactorial nature of health disparities. Realizing if you read it at the top, it says the different levels of influence on patient outcomes, as well as the different domains of influence located on the lefthand column. And realizing that this unique interplay between these factors, account for a lot of the adverse outcomes that we see at the patient level. Again, going back to an earlier slide that my colleague presented, in terms of 20% of clinical care is attributable to patient outcomes.

But then, 80% happens outside of the clinical setting. And that's what this model here really attenuates to, this multifactorial nature and scope of health disparities. And to really begin to see a difference as we're seeing now, in terms of overall decline of cancer-related mortality, for all groups in the United States. Even though gaps still remain, we're still seeing a cancer, a decline of cancer-related mortality. But we still have work to do, and better understanding as well as intervening, on a lot of these social determinants of health displayed here on the screen. Next slide.

Edith Mitchell:

Oh, absolutely.

Brian Rivers:

And so, it's going to necessitate us to offering new approaches, in terms of how we deliver cancer care to patients, especially patients that are suffering, or that are adversely impacted by social determinants of health. So you're seeing across the country, this transformation in our health care delivery system, where you're seeing more of the inclusion in adoption of different technological platforms, whether it's telemedicine that we saw really come to life during COVID 19. Remote monitoring of surveillance. Bidirectional communication through a variety of platforms, whether it's the patient portal, or whether it's patient-facing mobile phone applications or iPad applications. We're seeing this, adding the new technology really infused into how we deliver health care, which is exciting, to say the least. Next slide, please.

Edith Mitchell:

Oh, absolutely. Very exciting. And one of the things that we talk about, is really the trust of the patient and the trust from the community. So as you discuss the emerging landscape for equity and health care delivery, can you comment on trust as well?

Brian Rivers:

Sure. And I think in this health equity era that we find ourselves in, trust, I think, is a key construct that we cannot ignore. So as you we're developing these new landscapes, and we're getting this big data from diverse



populations, and we're including that in terms of how we deliver cancer care, whether it's genomic data, proteomics, data, epigenomics, and incorporating that with the social determinants of health, and deciding how to best deliver care. We have to keep at the forefront of this whole notion of trust. And the historicity of trust, and research with different populations in this country. The US Syphilis Study that took place at Tuskegee is one that comes to mind. And most recently, the Henrietta Lack story. All these eroded trust to some degree. And I want to really hone in on this notion of trust, realizing that it is a multidimensional construct. There's trust for the health care provider. There's trust for researchers. There's trust for research in general.

So when we really target and begin to intervene on trust, we have to keep all of those different dimensions in mind, in terms of how we intervene and how we ensure that we do not further erode the trust of the patient or their family members. And so, we're seeing partnerships really come to the forefront. And I just want to salute the National Cancer Institute for their leadership, the Center to Reduce Cancer Health Disparities, under the leadership of Dr. Sanya A. Springfield. There's been numerous programs that have really fostered such a collaborative landscape now, that didn't exist 10, 20 years ago. The national outreach network. The GMAP or the Geographic Management of Cancer Health Disparities Program. The partnerships to advance cancer health equity programs, that really bring in minority-serving institutions and historically black colleges and universities, and anchor them with NCI designated cancer centers to help foster a stronger platform and context, to address a lot of the disparate outcomes that we see.

And then, the community networks program that really fostered a community-based participatory research model, to really engage and target populations that were adversely impacted across the cancer continuum. So exciting times in terms of the investment that the National Cancer Institute is making, to really driving partnerships toward addressing disparities outside of clinical settings, and realizing that the impact will impact what happens within clinical settings. Next slide, please. And we're also saying-

Edith Mitchell:

How have we brought into the implementation strategy, expanding our efforts in the communities with other individuals from the community participating? Have we done that, Dr. Rivers?

Brian Rivers:

... And this is important concept, Dr. Mitchell. It goes back to your, this whole notion of how do we establish trust, how do we keep trust, and how do we advance trust? Well, this is just one example, similar to the patient navigation model, which historically, was demonstrated in clinical settings, developed by Dr. Harold Freeman. The community health worker model, it has been more so applied and developed in community settings, where you're taking individuals from impacted communities, you retool them, you train them, and then you put them as a gatekeeper, as a resource to help with education, with access to care, to help understand prevention strategies, as well as treatment strategies toward better health outcomes. This is the model that's been around since the 1960s, that really focused in on intervening and reaching out to underserved populations. It's culturally appropriate in scope and nature, and the core competencies, again, it really attenuates to this notion of trust and ownership, of the information that comes in and out of various communities. And so, it's a model that I've used in a lot of my research studies, and it's a model that works.



Edith Mitchell:

Absolutely. And thank you for that comment. So as we advance cancer research, cancer education, cancer clinical trials, how have we encompassed the clinical workforce? We recognize that the United States population is about 13.9%, for example, African Americans, and about 18% Latino or Hispanic population. What are we doing about the composition of our physician, and clinician, and research workforce, to help in this effort?

Brian Rivers:

Well, there's a number of grant programs, and you bring a tremendous point, Dr. Mitchell, to this discussion. There's been numerous efforts through government agencies, as well as through industry, that are really fostering this notion of workforce diversity, increasing the diversity in the workforce. Those represented in the context of the research enterprise, as well as the clinical care delivery enterprise. One such example is the National Cancer Institute's Center to Reduce Cancer Health Disparities' Cure Program, or continuing umbrella of research experiences.

This program is designed to reach out to students as young as undergrad, as well as high school students, all the way through junior faculty status, or even their residency, and ensuring that those individuals have the needed resources to properly advance themselves in their career trajectory. This is just a phenomenal program that, to date, has trained over 3000, excuse me, underrepresented scholars. 3000, which is incredible. But there's still work to be done, because we're realizing that although we're making tremendous progress through this program, we still got to reach out to certain groups that most recently have fallen off, such as African American black men that are matriculating through medical school.

Narjust Duma:

Dr. Rivers, I just want to add a little bit about the workforce development, because-

Brian Rivers:

Sure.

Narjust Duma:

... something that is important, is we are recruiting underrepresented groups in medicine, but we cannot forget about the importance of inclusion. Diversity without inclusion is, this is how my grandma said, it's like rice without beans, right? So it is important that we do not only check the box about recruiting, but that we feel them welcome. And we change the status quo of what a doctor's supposed to look like, and look like us, the three of us here. Because in that way, we can also have retention, which is extremely important.

Edith Mitchell:

That is absolutely true, Dr. Duma. And thank you for that comment. So Dr. Rivers-



Brian Rivers:

Yeah.

Edith Mitchell:

... why don't you go ahead and talk about the clinical landscape?

Brian Rivers:

Sure. And we're seeing, to Dr. Duma's point, shifts in our clinical landscape. We have so many people that are leaving the academic medicine enterprise for a variety of reasons. And then, also, those that are leaving non-academic clinical settings, as well. So we have this looming physician shortage that's upon us. We have these still emerging disparities, as we saw displayed during COVID 19, where COVID just had this phenomenal adverse impact on black and brown individuals in this country. Again, why? What was, what were these populations doing so different than other populations, why they were so adversely impacted by COVID 19? But I think it attenuates to a much larger issue, and it goes to our discussion this evening around these structural issues.

We're also seeing a decrease in students entering STEM-related fields, as far as from high school. And then, as displayed here on the screen, 39% of black and 30% of Hispanic children under the age of 18, are the highest percent of children living in poverty. And we also know about a more recent construct, called persistent poverty, of those individuals that have lived over the life course in counties that are deemed persistent poverty. And so, all of those factors need to be taken into consideration, as we put forth our programs to address this emerging issue.

Edith Mitchell:

Absolutely. And Dr. River's, many patients request specific, either racial or ethnic in their physicians, or gender. And yet, there is a shortage of physicians in various areas. More women are, of course, in medicine now. And in fact, in medical schools, more than 50% of medical students are women. But what is being done about the patient who wants either a Hispanic or a Latinx physician, or a black physician? What is being done to increase the number of men in medical school, so that we can have more individuals that look like what the patient wants? This is talking about, what do our patients want?

Brian Rivers:

Right, exactly. And again, if we're moving more and more toward patient-centric models, we have to ensure that those models are reflective of the patient's values, their preferences, as well as their needs. And then, we're hearing that more and more individuals, want an individual, or they respond differently to individuals that look like them, before them. I know Dr. Duma can attest to that, because even in her presentation, she talked about some of the cultural aspects that resonate with her, between her and her patients. And we have to do a better job in ensuring that we're targeting these individuals that are missing from the health care landscape, realizing the value and importance that they bring to the health care delivery platform. There's some studies that suggest this concordance helps foster trust, helps foster a shared belief system, helps foster relatability, meaning that the



person before me came from the same community that I came up in. They understand the context of my disease, and not just the disease itself.

And I think, whereas we move more from our historical traditional medical models, to more of a care model as fostered by the Institute of Medicine, now, National Academy of Medicine, and cancer care for the whole patient. We're caring for individuals now. And so, their belief system, their shared values, all resonates. And those are some things you just can't teach. And so, we have to have more targeted programs such as CURE through the NCI, through the different programs, through the American Association for Cancer Research, and others that really help foster and target strategies to reaching these individuals who have not been adequately represented in the clinical landscape.

Edith Mitchell:

Sure. And why is that important?

Brian Rivers:

Because the belief is, and research has shown, that there's better patient-reported outcomes. When the person standing before you looks like you, came from a similar community or upbringing as you, and not to say that, "Oh, only a black physician can deliver the best care to a black patient." But at the same time, acknowledging that there are some factors that must be accounted for, as it relates to patient-reported outcomes, especially around adherence to physician recommendations, better health literacy, better patient/provider engagement strategies. All of these are factors, that research has shown to really impact patient-reported outcomes. And at the end of the day, I think that's all we're all driving towards. Better patient-reported outcomes.

Edith Mitchell:

Absolutely. And there are some other projects, and topics, and research ongoing to address this problem. Can you talk about Project ECHO?

Brian Rivers:

Yes. So Project ECHO is a platform that I'm seeing more and more individuals use, to help disseminate evidencebased strategies, with the goal, and for example, of improving outcomes in cancer. It allows for diverse stakeholders, whether they were principal investigators on a research grant or on a similar topic, or whether they're clinicians. It allows them the think tank, if you will, to come and share best practices, and then discuss how to best tailor those practices for their respective context, whether they're at an NCI-designated Cancer Center, a National Cancer Institute, designated cancer center, or whether they're at a safety net hospital, or whether if they're a small oncology provider in the community, it allows for the sharing of information for those individuals who don't go to the National Medical Association Meeting, or do not attend the annual ASCO meeting or AACR meeting. But it still fosters this learning continuum for them to understand the latest scientific advances in the world of cancer. And then, how to aptly apply them to their populations that they happen to be serving.



Edith Mitchell:

Yes. And thank you. And recently, AACR released a report on minorities in cancer research. Can you speak about that?

Brian Rivers:

Yes. So Minorities in Cancer Research is one of the constituency groups within the American Association for Cancer Research. And I just want to applaud Dr. Margaret Foti and her visionary leadership, and how she's led the organization in such a tremendous way for so long. And more recently, you and I, Dr. Mitchell, had the privilege of being part of the first AACR Cancer Disparities Progress Report, that was presented-

Edith Mitchell:

Yes.

Brian Rivers:

... to Congress during the pandemic in 2020. So a couple of weeks ago, they released the second edition of their progress report as an update, to really begin to keep track of the progress that we're making. There's significant investments being made, and through industry, through the government, through nonprofit sectors, that are really helping eliminate disparities in some areas of cancer. And to help show forth that to Congress, to encourage researchers, to encourage clinicians in terms of best practices, this organization under in part, under the leadership of MICR, or Minorities in Cancer Research, helped develop and craft that awesome report. And I strongly encourage everyone to download it and read it. It addresses disparities across the entire continuum. It's not a depressing read, but it really talks about the progress that we made, and the hope that we have in terms of really eliminating disparities.

Edith Mitchell:

Oh, absolutely. And Dr. Duma, would you like to make any other comments before we begin the wrap up?

Narjust Duma:

Hi. Yes. I just want to add about the AACR initiative, because I was a first-year fellow when I got the cancer researcher award. And that really made me feel that I belong in oncology, in a moment in which I felt that maybe oncology wasn't for me. Because everybody around me didn't look like me. So those types of grants and awards make a difference. And I'm sharing my personal experience, but I know many people have shared their experience as well.

Edith Mitchell:

Oh, absolutely. And to begin our summary, over the last decade, we've seen such progress in cancer research, but we've also seen an increase in diversity of the workforce of our students, residents, fellows in training. And therefore, this is a collaborative effort to allow for better patient-focused research and treatment. So if we are



really talking about coming down from the ivory tower, where we've thought about in previous years, just those ivory tower institutions, but really bringing cancer research, cancer clinical efforts, cancer education, to the community where the patients actually live, where they exist, and making sure that we are including the community in our educational effort. But not only in our educational efforts. In our treatment, in our bringing patients into the realm of cancer research, and including patients and the community in our efforts. So we're connecting community with the corporate activities and research activities.

So our SMART goals are to talk to our patients about clinical trials, to consider participating in collaborative community partnerships. And we are asking our patients, give us ideas, what are the issues that affect your community? Because not all communities are the same. And therefore, we've got patient navigators, our community health workers, and our community individuals, as part of our research team, so that they can give us information. And therefore, we ask patients, join with us, consider leveraging your cultural standing as health care workers, to advocate for community practice, for anti-racist policies, and for more patient-oriented focus. So we have time for just a few questions. And there are a number of questions in the box. So we will try to get to as many as we can. So the first question is, without joining something like ECHO, what are the most effective approaches, community cancer practices, can we take to access experience? Dr. Rivers, you want to answer that, please?

Brian Rivers:

Sure. And so, most states have a comprehensive cancer program funded by the State Department of Public Health. That's one avenue. And then, most states also have different chapters of NAHA professional societies or organizations. So there's a state chapter for the National Medical Association. There's a state chapter for ASCO. There's a state chapter for the National Hispanic Medical Association. These are all great avenues or venues to learn about the scientific advances in cancer care, across the continuum, if you aren't unavailable to participate in an ECHO.

Edith Mitchell:

Thank you very much. And next question. Dr. Duma, if clinical trials are so beneficial for patients, why is it difficult sometimes for community oncologists and trial leads docs to work together? What has been your experience, and what actually works to improve this?

Narjust Duma:

At least, one of the experience I have, is that investigators forget that clinical trials are designed for patients. So the trials are becoming more and more complicated, keeping the trials in large institutions, because they're requiring repeat biopsies, they're requiring specific panel testing or various strict protocols. So that doesn't help move the trials from these ivory tower places, like the one I work in, to the community. Something that we really need to do, is to design, remember what the clinical trials are for. They are for patients and their benefit. And do the testing and that's necessary, and have inclusion and exclusion criteria that are supported by data. Some of my own studies show that people are just moving the same criteria from the phase one to the phase three. We already know the drugs are safe. So designing clinical trials that are realistic and that don't require unnecessary testing, having exclusion and inclusion criteria that is inclusive.



And most importantly, to listen to our community oncologist. 80% of our patients are being treated in the community. We need to get all community oncologists on board in the design of clinical trials. And the majority of clinical trials now are designed in industry, and then they're presented to the institution. So we need to involve not only the community oncologist, but also patient advocates and caregivers. We designed these clinical trials. I remember being a resident, the clinical trials were more simple. And now, I'm trying to recruit a patient, and it's quite the journey. It's quite complicated. So we are our self-creating barriers for recruitment. Simple trials, involve the people that matter, which is patients, and listen to our community oncologist, to what it would be practical to them.

Brian Rivers:

Yeah.

Edith Mitchell:

Well, thank you so much. Our time has ended, and I want to personally thank Doctors Duma, and Dr. Rivers, for joining me this evening. It has really been a very interesting conversation, and many questions. I've tried to combine, actually, a couple of questions. And I'd like to say to the group, that to receive your CME credit for this activity, please click on the link to complete the post test and evaluation. You will be able to actually download your certificate for CME, once that has been completed.

I want to also remind our audience, that this is one activity in a series of four, and I hope you watch the entire series with us. We will be sending out more information from CME Outfitters Oncology Hub, for you to access the additional activities, and the Diversity and Inclusion Hub, for discussions of disparities in health care, as well as other resources. And there is also patient education, information and materials, that you can give to your patients. So thank you again, Doctors Duma and Rivers, for joining me. Thank you to the audience for being present tonight, and participating. Thank you again, so much, and have a good night.