Bernadette Melnyk: Thank you, John. Well, as Chief Wellness Officer for the Ohio State University, I'm going to ask all of you, especially those who have been sitting for most of today to stand up for the panel. Not only does prolonged sitting increase our cardiac risk but it's the biggest zapper of our energy. Before I start to introduce our illustrious panel, I would like for people to answer two questions in that poll. So John, would you please bring up the first question?

1. How much do you believe that stress/anxiety and depression contribute to hypertension and heart disease?

1) Not at all
2) A little
3) Somewhat
4) Moderately so
5) Very much so

Alot of you think moderately so and very much so. The second question, please John.

2. How much do you believe that stress/anxiety and depression are missing links in the prevention and treatment of cardiovascular disease?

1) Not at all
2) A little
3) Somewhat
4) Moderately so
5) Very much so

Now I would like to introduce our esteemed panelists. Dr. Ileana Piña is Professor of Medicine at Wayne State University and Clinical Professor at Central Michigan. She also serves as Senior Fellow to the Food and Drug Administration Center for Devices and Radiological Health. She is an expert in heart failure and on the board of directors of the National American Heart Association.

Dr. Jay Bhatt is a physician executive, internist, geriatrician, and public health innovator. He is founder and principle of JDB Strategies and an ABC news medical contributor. He is faculty at the University of Illinois Chicago School of Public Health and Former Senior Vice President and Chief Medical Officer of the American Hospital Association.

Dr. Garth Graham is a leading authority on social determinants of health and health equity. He is currently Vice President of

Community Health and Chief Communication Health Officer at CVS Health. He previously served as Deputy Assistant Secretary of Health and ran the Office of Minority Health under the Obama and Bush administrations.

Well, I've got a philosophy and that is in God we trust but everybody should bring data to the table. So before I start to ask the panelists questions, I'm going to bring you a little evidence on why it is so important that we make mental health a higher priority when we talk about heart health. So, when Million Hearts was launched with the ABCS, we at Ohio State really felt stress and mental health disorders needed to be added, so we added a second S for stress reduction. We intensified our efforts throughout our university, and as a result we experienced a 6 percent improvement in population cardiovascular health over three years.

Even before the pandemic, one out of five adults were living with a mental illness. Now with COVID we have a mental health pandemic within the COVID-19 pandemic. Health disparities are also very, very prevalent, especially with access to mental health care. We also launched a national online Million Hearts fellowship program. We created a toolkit for providers that included stress reduction.

We collect anonymous data from these screenings all throughout the United States. We published our findings on nearly 60,000 people across the United States and we found compared to those with low stress, high stress was associated with significantly higher risks of having prehypertension, hypertension, and elevated cholesterol. There have also been other systematic reviews like this one that show the link between chronic psychological stress being a major risk factor for high blood pressure. This analysis on the National Health and Nutrition Examination survey showed having fewer ideal cardiovascular health metrics, especially health behaviors, was associated with greater risk of depressive symptoms.

In all of the studies that I have done, increased stress, depression and anxiety decrease healthy lifestyle behaviors. The question is the chicken or is it the egg that comes first? In this systematic review of nearly 1 million patients anxiety disorders were associated with a 24 percent increase in the risk of stroke. We have so many studies that have established the direct link between physiology and behavioral patterns associated with anxiety, depression, chronic stress being a major contributing variable to heart disease. So the United States Preventative Taskforce

recommends screening of adolescents, adults, pregnant women, postpartum women for depression.

But in so many practices across the United States depression screening, screening for stress and anxiety, is not done. One of the major reasons I hear from providers is that we don't have a system in place if we diagnose it. We need systems in place to more rapidly be able to treat stress, anxiety, and depression. I'm really excited to share the American College of Obstetricians and Gynecologists now recommend clinicians screen women at least once during the prenatal period for both anxiety as well as depression. Reimbursement is critical along with changes in practice throughout the United States.

So with that I am going to begin with Jay. Jay, based upon the data that I just showed that clearly links mental health with cardiovascular disease why do you think there hasn't been a greater emphasis on mental health screening and evidence-based management in the treatment of high blood pressure and heart disease?

Dr. Jay Bhatt: Thank you so much, Bernadette. Really appreciate your leadership and thanks to the National Forum and John for his leadership. It's just an honor to be on this wonderful panel, and I just really enjoyed the conversation thus far and I'll draw on some of those themes. But let me start with this; I think the data you shared is compelling and points to this issue also that the average life expectancy in the United States some would argue is around 79 years of age, but for those with severe mental illness it is around 54 years of age, a quarter of a century shorter.

And so access to behavioral services is challenging at the best of times but even more challenging in the time of COVID. More than 150 million Americans live in an area where there's no access to a mental health professional, and as a result they seek care from the emergency room or their primary care provider with whom they may have a relationship or may not, and those venues may be not well equipped to address mental health conditions. One study found that primary care providers prescribe 79 percent of antidepression medications without followup or connection to helping them be on a sustainable pathway to getting better. And depression, if we just look at depression alone associated with a 15 to 53 percent increase in five-year cardiovascular cost, and it can also – mental health conditions can affect the recovery of people with coronary heart disease and increase the risk of further heart problems.

We know that chronic disease is challenging to face in the context of having mental conditions. Now I think one is related to delivery systems and the quote "lack of coordination and the fragmentation of care." As Dr. Hacker said, "How do we make the easy thing – the healthy thing the easy thing to do or the default choice?" You know, we've got to make working with patients around mental health and cardiovascular conditions easier, and just I'll tell you from my clinic yesterday at least 60 percent of my patients during the day were struggling but didn't know what to do and how to advance their health in the context of the challenges they were living in.

I go back to something Dr. Yancy said earlier today about the disinvestment in communities, and that's a critical issue. Later I'll talk a bit about – you know, you pointed out stress and the connection there. There's profound impact of the way that stress shows up. It shows up in discrimination, it shows up the adversity over the life course, and that experiences of discrimination and racism can certainly impact all the conditions you referred to.

Bernadette Melnyk: Thanks, Jay. And I think one of the simplest things providers could help patients with, we've got a lot of research that shows just five big abdominal deep breaths regularly taken by people can reduce stress and decrease blood pressure, and that takes so little time to teach somebody at least how to take some big, good, abdominal deep breaths. Thank you. Garth, the next question for you please. We've heard today about the unfortunate declines in blood pressure control. Can we reach our national blood pressure control goal if we are not diagnosing and treating depression and anxiety as well as addressing disparities in mental health?

Dr. Garth Graham: Thank you. Excellent question. And the NHLBI had a workshop on this just last week that a number of us participated in and we talked about the fact that the vast majority of Americans are not reaching their blood pressure goals for a number of reasons, and certainly the concept of undiagnosed depression, anxiety, stress, and everything that Dr. Bhatt appropriately mentioned earlier goes into that. There's also an interesting systematic challenge that we are facing, and I think Dr. Bhatt touched on it a little bit, and that is sometimes the underdiagnosis or the lack of diagnosis of mental health conditions are particularly faced in a primary care setting and some of the systematic things we need to do to get around that.

There's also even this concept of followup. You know, 30 percent of – Harlan Krumholz published an interesting paper last year that

showed only 30 percent of people with severe hypertension actually get a followup in a month and those are people with blood pressures over 160 to 180 systolic and certainly those that we'd put at higher risk. And what that just shows is that in general a lack of control is linked to multifaceted challenges that we have with followup. Now going back to your original question about mental health and all of the diagnoses that go under that umbrella, no doubt those are drivers and we see that in a multitude of cardiovascular conditions and even recovery from cardiovascular conditions, even how mental health plays in how you recover from coronary artery bypass grafting or even a number of those procedures in general.

So to answer your question I think the data would show that's yes, and the challenge that we face is that I think Dr. Bhatt alluded to it well, is what are the multifaceted systematic issues we need to put in place that allow patients to do better and how do we create the infrastructure around them so that our clinical outcomes can get better?

Bernadette Melnyk: Thank you. Ileana, what needs to be done to reduce heart attacks and strokes driven by mental health issues and who is best to do that?

Dr. Ileana Piña: First of all, thank you so much for your leadership in this area and go Ohio State. *[Laughs]* My daughter's a graduate of the veterinary school, so I have a lot of love in my heart for Ohio State. You know, maybe because I've been in the heart failure world for over 25 years mixed in with the transplant world, we have always had mental health along with assessing transplant characteristics, and that over the years has spread out to my practice because I recognized and we all recognized that once the patients come to us for transplant there are already mental issues that have been going on for years, but nobody's ever addressed them, nobody's ever talked about them.

So I have always had a psychologist, another mental health expert, within our clinic so that that person is seen as part of the team, not as some outsider. And in our VA big appointment clinic here in the Cleveland area there has always been a Ph.D. psychologist who's just wonderful at relating to the patients. So they all sit in a room and they talk to each other, but we're listening to that conversation. So what I incorporated more recently in the clinic is I incorporated the PH-2, and so two simple questions about depression and anxiety, and if that's positive then we give them the bigger questionnaire.

When we did our HF-ACTION trial, which was an NHLBI-sponsored trial, we collected the Beck Depression Inventory, and we found that in what I do in heart failure 35 percent of the patients are clinically depressed by the Beck Depression Inventory, which is also pretty easy to give. And we also found that exercise improved the depression significantly, but the most affected by the depression scores were the African American's impact, and we have published this. About a year-and-a-half, two years ago Dr. Fuster, the editor of JACC, asked me to write a paper, sort of a review of psychopharmacology.

And I was going through the literature and putting this together I really realized that I think Dr. Bhatt is right, the drugs are given, followup is never really employed. Some of those drugs can interact with the drugs that we already give them for their heart, so how important it is to have that mental health input before you start the drugs and understand what you're giving them, but for some of my patients it's really difficult for them to sort of put their arms around the fact that they're anxious and that they're depressed. What I do know about depression is it makes you less likely to take your drugs. And we just published a paper for the American Heart on adherence and we have a piece in there about the importance of depression and anxiety to actually being adherent to a blood pressure drug when you don't feel anything.

You feel fine. We're the ones that are telling you you have a problem. And we make it difficult for them. I'm now in the COVID period, and this is obviously a personal one – I'm a hypertensive. I take my medicines every day. In my local CVS where I shop for my medications there was a blood pressure machine. Well, with the COVID they took it away because they were afraid of contamination, so for some of the individuals in my community, many of whom are multiracial and multiethnic, that's not there anymore for them to take their blood pressure.

So we have to make it easy for them to get their blood pressure. If they have to go to a clinical center or go to the emergency room that's not where we want them to get their blood pressure. And that's why think the wonderful study of the barber shops was so effective because it was embedded in the community with people that they knew and trusted, and it was part of their gang and they were being told that their blood pressures were high so they're more likely to believe it. But I think sitting down with a patient – and I agree with Clyde that this is something you fight right there on the battle lines with the patient in front of you, getting them to

understand that we do understand that they don't feel well, that we do understand that they're anxious and that there's a relationship between that anxiety and their blood pressure and they're having a stroke.

The patients are petrified of strokes. It's interesting; they're not as scared of renal failure and they're not as scared of having a heart attack. They're afraid of stroke, because they probably know someone in their community or family who has had it. And this year I had a very difficult encounter with it in my own world. One of my best friends, a woman who here, you know, veterinarian, DVM, had three hospitals that were there, a brilliant hardworking woman just went down in two minutes. She had been declared hypertensive, had all the doctors in the world that she needed, never filled her prescriptions, never told me about it, and she died within a week.

She had a massive cerebral bleed. So it kind of brings home that it isn't always the more intelligent, the ones that have access who do this. What was going on with her that she didn't pay attention to this? I'm actually kind of angry at her that she never talked to me about it, even though I visited her every year. So it's a very complex issue, but we've got to fight it on the frontlines. I agree with Clyde.

Bernadette Melnyk: Great points. My mom stroked out in front of me. She sneezed, stroked out and died when I was 15, but the saddest part of her story, she had just seen her physician a week before, was diagnosed with high blood pressure, given a prescription that she never filled. So again, so much of this is behavior and making it easy, as you said. The culture has to be one where these behaviors are the norm in our communities and in our system.

At Ohio State my college has an FQHC and we screen diligently with the GAD-7 for anxiety and the PHQ-9, and then we have a mental health counselor right there, a psychiatric nurse practitioner, so we deal with these issues, but a lot of these places aren't blessed to have these team-based care like we do. So Jay, what do you think and what have you seen in terms of successful other models throughout the country and what role can employers play?

Dr. Jay Bhatt: Sure. Thanks, Bern. I think both Dr. Graham and Dr. Piña made wonderful comments that I think are important to draw on about what does the system of care look like? So what I've seen work is it transformative clinically integrate into sustainable system of high

quality patient and family-centered care to serve the behavioral health needs of patients, their families and communities, and this notion of collaboration care is already a covered benefit for Medicare and most commercial insurance and under Medicaid in about 20 states. And so when we look at high-risk patients, they require up to 6.2 times more spending on medical care when they have an active behavioral health diagnosis and have poorer outcomes.

So building on, Bern, what you just said, you know, working in an FQHC now and in the past this idea of warm handoffs with the system of care for both the acute and followup is critically important. So one health system basically initiated an effort in which they worked with a dedicated group of behavioral healthcare managers and they developed the behavioral healthcare plan sort of as a liaison between the primary care physician, the psychiatric provider, and the patient, and then so the primary care physician and the psychiatric provider along with the behavioral health manager end up reviewing patient's progress in the care plan. So one, you've got to have table stakes of screening for depression and anxiety using evidence-based tools, and then instead of external referrals, primary care providers or other care team members can make warm handoffs to the mental health team.

This can be done virtually, onsite, or in a place in the community in which the patient may feel comfortable and connected. That's part of this also, is thinking about how to meet people where they're at, because part of the challenge ends up becoming is that it takes several weeks and sometimes four weeks before people see a difference or benefit from psychotherapy, and between that time and the time you're engaging with them they need help. So the therapy can help them along to help them through, and so it becomes important to have close connection, and so the systems I've seen work do that. The care team is aligned around measurement-based care, so you can't improve what you don't measure, and so that's critically important, and then psychiatric consultation to support the primary care team.

So for patients that need more support there are psychiatric nurse practitioners and other consulting psychiatrists who work with the behavioral health team. So that's sort of one model. Another model is a licensed clinical social worker, a health coach. So coaches from the community have been really powerful in helping move motivation and behavior and they can often obtain health coach certification pretty quickly and be supported by the health system

or the healthcare organization as well. And then you have the provider.

The other piece that's been really important in some of these models is a psychiatric pharmacist or pharmacy technician, really helping around the med management piece to the point Dr. Piña made about the interactions, and that's been really important. And the last thing I'll say is organizations don't compete on behavioral health. That's not something that there is significant competition around, and so the idea of how do you bring and convene organizations in a community together so as to say, "Hey, we're collectively going to handle this just like we've done with community health needs assessment," just like we've done with access to affordable generic medications, Civica being the example with Intermountain, Trinity and a bunch of health systems that now have 1,000 hospitals on board as partners. So what does that look like in this case? And so I'll stop there.

Bernadette Melnyk: Great. Thank you. I think we have to have all licensed providers being able to practice at their full scope because that's also a barrier in certain states across the country. Garth, what models have you seen be successful particularly in underserved communities?

Dr. Garth Graham: Yeah. You alluded to one that I'm a big fan of and that was really pushed by the late, great Ron Victor, a hero to many of us, who developed and published a lot on some of these barbershop models, and there are a lot of disciplines around who have set up other clinics in similar settings, and we've invested in some of those efforts, particularly in Tennessee because it is really about connecting the community to information. The medication is almost a correlative act in terms of having impact, but what Ron really identified in his great vision of publishing his *New England Journal* paper was this concept of community connection, when you're in the barbershop when the pharmacist is there, when information is being shared, you're in that setting, it's a trusted setting and you're able to kind of garner information.

So I'm a huge fan of that and I think Ron had been publishing and a lot of us have been following that *New England Journal* paper that we all know and refer to often. The point there is I think twofold. One, health is local. All communities aren't the same. Being present in communities is important and so managing at that level is important. I'll touch on something that Jay alluded to and I think we all kind of talked about.

This came up in the workshop that NHLBI had last week, and somebody jokingly said, "Maybe doctors themselves are the worst people to manage hypertension," and that may be true. You know, nurses, pharmacists, sometimes even community health workers, all of the other folks who are part of an extended care team and have so much contact with the patient either in the hospital or in other clinical settings more often, those are kind of the ideal people to make change. I think that's what I loved about the barbershop model, it's about contact change and it wasn't about roles and who wears a white coat. It was about who was sitting in that chair at the forefront that I think that is – if that is anything like we can do to carry on Dr. Victor's legacy I think it is that concept of how we manage it, and that pertains to even just my last point in this discussion around mental health and how it impacts the clinical outcomes because we're focused on the patient, we're focused on all the things happening in their lives and all of the kind of disease entities bringing to bear and helping to even destigmatize the concept of mental health particularly in black and brown communities so people feel okay talking about the challenges.

Because as Dr. Bhatt alluded to, structural racism, the ingredients, and all of those things that are overly representative in many urban communities are having deep impacts on individual lives and life expectancy and we should continue to recognize that.

Bernadette Melnyk: Absolutely. Ileana, you had a comment.

Dr. Ileana Piña: Yes. I think we have to be realistic about some of the barriers. Whenever I have gone to my administrators and asked them to give me a position for a psychologist, which I have now done several times because I so believe in their importance in my heart failure team, I get told what can they bill? And so if they can't bill anything directly then nobody gets paid. I am not going to get that person. So I think there have to be some policy changes about payment, and as we move as a society toward value-based payments, which is what a lot of the health systems are involved with, the BPCI programs, if a hospital decides to enter one of these programs, especially in my world of heart failure where the patients can be really sick and not taking their medicines as they should, puts them back in the hospital half of the times, that that team that they're taking charge of includes a mental health professional that becomes an integral part of that team.

So until we make that change between this is not fundable because there's no reimbursement for this, and the same thing happens with nutritionists. It's a very similar issue. So we have been using a lot

of pharmacists. I love the pharmacists. They're wonderful teachers and the patients really latch onto them as somebody that they trust because they see them at their local Walgreens, you know, it's somebody that's behind the counter and dispending their medicines.

So I don't think that we use the wonderful pharmacists that we have around us enough to really do that teaching, and so I really urge anybody who's listening here talk to your pharmacy in your own hospital. There may be people very interested in there in helping you help the patients in hypertension care, because I know that if we treat blood pressure aggressively – and believe me most of the cardiologists are not that interested in hypertension, but we heart failure people are – that we can reduce heart failure by 50 percent and we have the data. You know, as Clyde said again, data speak. Data are there. And we know from the Sprint trial that you can get reduction of heart failure by 50 percent, so we are really gung-ho on the prevention of hypertension effects.

Bernadette Melnyk: You made such a great point in terms of the reimbursement piece. I do a lot of mental health workshops for primary care providers on how to better screen for, identify and treat mental health issues, particularly in primary care. They all want to do this, they really do, but the two most common barriers that I consistently hear, lack of reimbursement for them to do what they need to do and lack of systems being in place. We still have people waiting three months for mental health evaluations all over the country, so we've got to get I think louder in terms of policy and payment on this issue. Jay, what would be your call to action right now? If you had just two minutes of a call to action what would it be?

Dr. Jay Bhatt: You know, I would say that the ability for our healthcare system not to help support people through their mental health challenges is tearing their lives apart and it's helping them not achieve their potential from a health standpoint and as a result then how they show up with their families and how they show up at work. So, you know, there's a whole group of stakeholders, our relationships, our colleagues that we work with that are invested in making sure that people get the mental health that they need, and we know that disproportionately people are affected in communities, people of color, and those that experience chronic stress and psychological stressors. Now I would also say what I found is that let's hold onto those opportunities where there's positivity.

In clinic, I celebrate those patients that have made progress, that there are not only the negative factors but there are positive factors

that actually help reduce cardiovascular disease burden and help improve health status. And so the more that we can try to move people to those situations the better, and I would say thinking about enhancing our payment systems, making it easier to do this work in a value-based care system and making it easier to use the codes that are out there. There are G codes, there are chronic care management codes, but the systems so convoluted in that we don't have the time to do it. When you're asking people to repeatedly engage in visits sometimes, they don't have time, and so that's where being where they're at makes a difference.

So I think that there are a lot of bright spots to look to, but ultimately, it's going to require making progress on a social need, social determinant, health equity as well as our system of care and how we pay for it, and so I'd call out to the stakeholders to help us with that.

Bernadette Melnyk: Jay, you make a good point though. So over my career I've developed a seven-session manualized CBT program that can be used by nonmental health providers in primary care, and I've taught providers how to get reimbursed to deliver it because some of the issue is our providers don't know how to get reimbursed for the codes for some of the things that they do. So education is super important, and it starts in our colleges, in our programs.

Dr. Jay Bhatt: Right. And I'll say a couple quick things. I mean I even – just to educate in 30 seconds, you know, what are the things that don't help you achieve your life goals, so putting your life goals in the context of health goals. So I ask my patients, "What do you want to accomplish in the next six months, next year?" And then we talk about that. The other thing I'd point is that we haven't talked about is childhood ramifications.

The impact of mental health on the pathogenesis of cardiovascular disease can begin in childhood with ramifications through young adulthood and older age. And so when you make a difference in early childhood it can carry over for some years to come.

Dr. Garth Graham: I just want to jump in on the point that Jay just made about what's happening with young people. There's no doubt that one of the things we're seeing with COVID-19 is this dramatic spike in mental health diagnoses, particularly in younger individuals, and who knows what's really happening with children? I think the data there is evolving and I think that's where I get the most worried in terms of children who are being exposed to stress in a different world that neither their parents nor they had been prepared for six

or seven months ago. And so to Dr. Bhatt's point, understanding what are going to be the longer-term clinical ramifications for that even outside of just even diagnosing anxiety and depression and everything that goes along with that but then how that spreads out into the physiology and the pathophysiology of everything that goes along with that is something that we're going to need to keep an eye on at least for the next two to three generations in terms of understanding the impact of COVID-19.

Dr. Ileana Piña: And to follow up what you just said, Dr. Graham, one of the things that I have feared is that the lockup is making these kids start eating things that they shouldn't and the soft drinks, the sugary drinks, the sweet stuff. We are going to see a climb in obesity. We already have a huge obesity problem in this country, and we have a huge problem in the young. We're going to see a spike of this and with it will come diabetes.

The waiting room of the diabetics is the metabolic syndrome and we're going to start to see a lot of that, and I fear that in the Hispanic population as well.

Bernadette Melnyk: You're so absolutely right. We're already seeing spikes in unhealthy behaviors as people are trying to cope with the stress of racial tension, of COVID. Unhealthy eating increases and substance use, alcohol, drugs, as well as interpersonal violence, so childhood abuse is spiking right now as well. So, lots of adverse outcomes that will follow these five years down the road for sure. So Garth, what would be your two-minute call to action?

Dr. Garth Graham: I think we need to both destigmatize and fully embrace and treat mental health. I think in particular in my own communities many times people think of mental health in a subjective way without understanding the full kind of clinical ramifications, that mental health is just like any other clinical entity, and I think once we accept, once we continue to promote that and integrating that into primary care then my second push would be around – and I think this is everything that Dr. Bhatt and Dr. Dr. Piña have said about how we build the systems, the default clinical systems to treat individuals appropriately. My worry though is that we haven't done such a good job for that for treating obesity, hypertension, diabetes, all the regular stuff we already kind of know.

So we have to be particularly sensitive to how we continue to build that for mental health. Last point to the points we just talked about related to COVID-19, I think this has to be a priority now more than ever before. You know, I think the concept around mental

health and integrating mental health, we have to use this as a – I don't know, _____ moment – whatever terminology you want to use to say that now we're going to really go after seeking and treating and appropriately addressing mental health.

Bernadette Melnyk: Ileana, your call to action please.

Dr. Ileana Piña: I'm going to challenge the big pharmacy groups. CVS, for example, had been a leader in eliminating cigarette sales in their stores. Everybody criticized them; they've done fine. So as a leader in health, because I think that that's what they really want to portray, I challenge them to make hypertension care one of their leading jobs in their own local pharmacies with their wonderful pharmacists. The CVS pharmacists are terrific.

Using those pharmacists to get that word out there about blood pressure, because they are in the community. They have pharmacies in each community area. It's been well studied. They know the population that they serve. So I'm going to challenge them to take up the mantra of blood pressure control at the level of their stores.

Bernadette Melnyk: That's great. My last question to each of you, if we couldn't fail in the next two to five years what would we do if we couldn't fail on this topic? Jay, I'm going to start with you.

Dr. Jay Bhatt: You know, I think it would be doubling down on reorienting ourselves around prevention, around investing in communities and around meeting people where they're at and thinking really intentionally about how we use data and analytics to help us and to make the healthy choice the easy choice and make it easier for healthcare teams to do the right thing. I put a piece in the chat about loneliness, that that's another big issue. 80 people went to the Dallas emergency rooms. 80 people accounted for nearly 5,200 visits in a year usually because they were lonely, and so this has implications for mental health and cardiovascular disease.

So I think connectedness is really important. We've got to live in a more connected world where we are for each and support each other, which is going to be important coming out of what we've experienced this year.

Bernadette Melnyk: Thank you. Garth.

Dr. Garth Graham: Oh, I'd say two things. I think that's a great challenge. I think challenge accepted, because I think much of what you're seeing

already unfold are activities along those lines, so thank you for pointing some of those out. I think if we couldn't fail, I would think through how we systematically address social determinants of health at the individual patient level and how do we create the community-based systems around that? It requires a multiple-tiered approach that kind of pulls on all the different healthcare players and can probably be done from the different vantage points, let me put it that way.

But I think if we couldn't fail, I do continue to believe that social and environmental factors are driving the vast majority of our health outcomes and moving outside of the doctor or clinical settings is where we should be spending most of our time.

Bernadette Melnyk: Thank you. Ileana.

Dr. Ileana Piña: So the American Heart Association has actually named mental health, depression, and anxiety as one of the many risk factors for heart disease, and so I am hoping that as we have these conversations – and again, I'm going to go back to my heart failure roots because we are people who see these patients, now with telehealth, we still see them often. We know them. We get really engaged with them. We think about not only the impact of this COVID on the mental health issues but the disease in itself.

When we tell a patient that they have heart failure that's a terrible word. You know, we all use it, and it has to be coupled with the hope that we've got the right drugs and that we can really help you and make you feel better. I may not be able to cure you, but I think I can make you feel better and give you a better quality of life. So I think with everything that we're saying we have to provide some hope for the patients. Your blood pressure is controllable.

Very few people you can't control their blood pressure. I will try to make it as easy as I can for you to do it and give you medications that you can afford, because it doesn't matter if I give you the latest and the best if your insurer isn't going to cover it or your doctor's going to have to get on the phone and do the prior auth that we all love and hate to get to the next best. I can do it with cheap drugs.

Bernadette Melnyk: Thank you. So I want to add the other professional that I don't think we use enough in hypertension control are registered nurses, particularly in primary care. It's just like pharmacists, Ileana. I think registered nurses can make such a huge difference in the hypertension control and they're not used enough. The last comment I want to make is on clinician wellbeing. Our clinicians

across the country have a growing prevalence of burnout, depression, stress and even suicide.

Let's not forget about their risk for high blood pressure, for heart disease, if we don't continue to look at factors in the work environment that can decrease their stress. So with that I'm going to give each of you one last comment. Jay.

Dr. Jay Bhatt: Thank you for raising conversation about this important issue, and I think to Darwin's point in the chat I would say that the more we can lift up positive interventions of psychological health and social determinants – and I put in the chat a reframe of that a bit – the more I think we're going to be better off, and to make it easier standardize them and do more research that allows us to say what are the positive deviants and how do we amplify and accelerate those positive deviants?

Bernadette Melnyk: Great. Ileana.

Dr. Ileana Piña: Yeah. I want to thank the National Forum for bringing this whole panel together. At first sight you may say, "Well, what does this have to do with cardiovascular disease," until you really delve deep into it. So again, I'm going to throw a challenge at the organizations that are members of the National Forum – we have a lot of them – to also think about where this mental health issue can fit in their own space, in their own qualifications. I know the American Heart Association is on this, so I don't have to get on them about this, but I think that every member of the National Forum should think about the impact of mental health in what they do.

Bernadette Melnyk: Lastly but not least, Garth, final comments.

Dr. Garth Graham: Thank you. I'll make this brief. I might add I was your traditional kind of old school teacher and philosopher and I would always say that every challenge is just an opportunity turned around, and so I do believe that COVID-19 gives us an opportunity to do all those things that we should've been doing all along, one of those things being paying attention and emphasizing the role of mental health. As we see it evolve as a challenge, I think we should see it evolve as an opportunity to really dig deep into what we can do in terms of addressing mental health, destigmatizing it, and many of the challenges that have been longstanding.

Bernadette Melnyk: Thank you. Really thanks so much to each of you. Great, great expertise, great comments, and I'm going to end with my chief

wellness officer add-on, and that is to remember to take good self-care because we cannot pour from an empty cup. Thanks so much to each of you.

[End of Audio]