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Reflections on a Post-COVID World: Lessons from the Surge.

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DR. DAVID B. NASH: **These amazing roundtable participants for this discussion were also present for a good part of the early implementation of the Affordable Care Act, and were likewise present to see how our system has so seriously failed many citizens of the United States during the COVID-19 pandemic. Dr. DeSalvo, what do you think the future of the Affordable Care Act might be regarding the core tenets of expanding access to health care and the future of the exchanges? Everyone would agree that improving access to care will certainly help the health of the nation. What is your view of the future?**

DR. KAREN B. DESALVO: You know, Dr. Nash, one of the important parts of the Affordable Care Act beyond coverage expansion was the introduction of tools that allowed for experimentation around value-based care and population health measures. Growing out of that, two really important ideas that I hope continue forward at an accelerated pace after the COVID-19 outbreak include population-level payments that support upstream care and accountability on the part of delivery systems or health plans for people even when they are not physically in front of the doctor in a clinical environment. In short, I view the future as being more broadly conscious of health and prevention and services.

I sense that what health systems were in global budget models have learned throughout the course of the COVID-19 pandemic is that they have more sure footing, but they also have an accountability to a population.

The second component I would highlight came at the tail end of the Obama Administration, and it had to do with social determinants of health and models like the Accountable Health Communities model. These were opportunities for the country to begin to learn about addressing health beyond medical care.

COVID-19 definitely brought to the fore the idea that you cannot just address the virus, but particularly if you are trying to help prevent the spread of disease and you want to put people into isolation because they are either at risk for developing the infection or because they are at risk of exposing others to infection, you cannot just quarantine somebody. Other services and supports from the social care system are needed.

In addition to access to coverage, thinking holistically about the population from a prevention and a social care standpoint are also important. It is my expectation that COVID is going to teach us that those systems that are involved in value-based care models and can address the social determinants are going to do better by their populations.

DR. NASH: **Wonderful. Thank you. And speaking of enabling experimentation, it is so great to have Karen Murphy with us, who was in on the ground floor of some of that experimentation at the Center for Medicare and Medicaid Innovation (CMMI). So, I pose the same question to you, Dr. Murphy. What is your view of the future?**

DR. KAREN MURPHY: I am optimistic, even though it is a struggle to be optimistic these days. But what has given me great hope is that, up to this point despite all of our hard work over the last 12 years, we have only incrementally tried transformation, always under the myth that you just cannot stop the current health care delivery system and start something else. Since the pandemic hit, we have dispelled that myth because we brought the health care delivery system to a grinding halt.

I am optimistic and we have proven that we can transform the system rapidly, that we can indeed stop what we are doing and develop new approaches, and if we regain the will to really move to value, COVID-19 is going to show us that we can do transform in a much bolder way than we thought possible 12 years ago.

DR. KAVITA PATEL: I completely agree with both Karen Murphy and Karen DeSalvo on the point that unfortunately a pandemic offers us a great deal of opportunity. However, I would say that I worry that there is just so much damage and suffering that has happened, whether it is revenues lost for individual physicians' offices, people who are feeling insecure about financial security no matter what the size of the institution, or, frankly, patients who are nervous. I have a number of patients who are very nervous about coming into the physical office despite all efforts being made to make the environment safe for them. This is not helping efforts for prevention, especially when I as the patient's provider do not feel comfortable delaying care for even just a couple of months.

I worry that even though we know there is a lot of damage to repair, the progress we can make is going to take a little longer than I had hoped. Having said that, to Dr. Murphy's point, I do feel like there is incredible support for investments in improving the social determinants of health on a broad level.

I would add, just to be a little bit more provocative, that most of what we have been doing with social determinants of health has been talking about funds or using community benefit needs funding, things that were codified in the Affordable Care Act. But what if we really take advantage of the fact that we shut down elective surgeries and decreased volumes; the levels should not have gone as low as they did. Some people do need to come in for life-sustaining care or care that could improve their morbidity. We saw that from some Kaiser Hospital System data about a decrease in hospitalizations for myocardial infarction.[1]

However, it is probable that a bulk of that volume never needed to be in a

hospital. I believe the Affordable Care Act has only just started, but the story is not finished, and I hope that story will have a chance to be continued, especially in light of recent conversations to repeal the Affordable Care Act Could you take those dollars and make it an aligned set of incentives and rewards built around hospital volume? For instance, if volume decreased by 50%, maybe it does not need to go back to the same baseline again. If you are on a board, and they are showing you those levels, and you are all waiting for those diagrams to go back to "normal," maybe they should not have to, and maybe they should be depressed in a way that offers us an incentive to invest those dollars in a different way.

I think the Affordable Care Act theoretically does that, but we are going to need to probably reinforce the Affordable Care Act in terms of coverage and cost and some of the things that Dr. DeSalvo was talking about that was incredibly promising, but expand on that and build on it, as well.

DR. NASH: **Excellent. Soon, we are going to be talking about the data, and Dr. Parekh, we are going to be talking about whether there is any bipartisan energy left that might address the issues that we have just been talking about. As you may or may not know, Dr. DeSalvo and I had another colleague in common: Dr. Will Shrank. Dr. Shrank published an important paper in *JAMA*, pre-pandemic, that essentially said that about 25 to 30% of what we do is of minimal value.[2] I love the way you made that analogy, Dr. Patel. Maybe we could reallocate some of the resources.**

My question to Dr. DeSalvo is, do you really think we could do this? In other words, can we identify waste, reduce waste, reallocate resources, and do evidence-based practice in the post-pandemic era?

DR. DESALVO: I really hope that we can find a way to stop providing unnecessary services, starting even with low-hanging fruit such as no longer repeating tests because people did not have a longitudinal health record, putting people through that anxiety and sometimes the pain and discomfort, working people up for conditions because the providers were not following evidence-based guidelines or protocols, for instance. I hope we can do a better job of meeting people where they are, not requiring them to have to come into the health care system, where I suspect that on arrival in a physical office space it is easier to have a lot of diagnostic studies that can run up costs ordered

for patients that can sometimes put people through some trauma.

My hope would be that that is the case. I think the reality still is that the health care system in the United States is really grounded in a fee-for-service model, and the business model has been working for generations. So I do not want to be negative about it, but I do think it is going to require significant leadership from health care to recognize that it is better for patients, communities, and the health system as a whole to be thinking not just about the individual episode of care, but rather more broadly about the health of populations.

We have clearly seen some recognition on the part of health system leaders that there are broader drivers to health than just great medical care, and that it is possible to deliver care outside of the usual pathways. But, Dr. Nash, I still think it has a lot to do with the business model, and we are going to have to keep changing those incentives coming from the payer space.

DR. NASH: **Thank you. So, Dr. Parekh, you have heard now both Dr. Patel and Dr. DeSalvo call for a new type of leadership that could help to bring about some of these changes we are describing. Where do you think this leadership could come from? An even more fundamental question, is there a groundswell sufficient for the leaders to implement some of these changes on a nationwide basis?**

DR. ANAND K. PAREKH: I think from a bipartisan perspective, and thinking about Congress, everyone is trying to grapple with how COVID-19 has changed and will continue to change health care and what we fundamentally understand about health care. There are opportunities, of course, with telehealth obviously being one of them.

There were a lot of regulatory, payment, and licensure burdens and restrictions in place prior to the pandemic that were lifted temporarily, as we have seen over the last couple of months. It will be interesting to see, at least from the telehealth space, how much will telehealth be here to stay. Should we try to make some of these temporary changes permanent? There is a lot of interest in doing that, and a lot of opportunity for health services research to better understand when virtual visits versus in-person visits make sense. How does that correlate to patient satisfaction, improved outcomes, and reductions in preventable health care costs? These are some of the opportunities on the radar.

On the value front there is quite a bit of bipartisanship that we need to continue

driving forward on value-based health care transformation. I suspect some of the models, particularly those that required quite a bit of risk, are on hold now, given the pandemic.

I think we need to get off this fee-for-service chassis. Dr. DeSalvo described how we need to all be on sure footing, whether that is as an individual practice in capitated payments, whether it is a health system and global budget model, or whether it is a state and it is per-capita funding, for instance. I think this idea of having sure footing and secure finances, irrespective of what happens, is very important to manage the health of the population. That is what it is all about. I hope there will be opportunities for this type of value-based health care transformation.

The last point I will make is that I am sure we will talk about disparities more now. I hope there will be more renewed bipartisan interest focused on health inequities and health disparities. As we have seen, that has been a central part of what has happened through COVID, that health inequities are driving the disproportionate number of cases and health disparities driving the disproportionate number of deaths. Getting at both the social determinants and thinking about what we can do better within the four walls of the clinical setting provide opportunities as well.

DR. NASH: **Great. We are going to come back to those issues in a moment. Dr. Scott, we have some really fascinating colleagues here talking about system changes and reallocation and leadership. In your amazing past ten years' experience of looking at the data necessary to make these kinds of changes, the new tools in artificial intelligence and predictive analytics, what do you see as some of the data challenges to implement any aspect of the changes that we have been talking about during this roundtable discussion? What are some of the high-level data challenges that you have certainly been very close to, especially in the last five years?**

DR. BYRON C. SCOTT: One of the things we must understand is that we already have a lot of data. I think COVID-19 has simply further exposed what we already know about some of the health disparities that exist, so when you talk about technology, data, and analytics, we have to be careful not to overthink it and overdo it.

There is a lot of new technology everyone talks about. Artificial intelligence (AI) is great, but you cannot superimpose new technology onto broken processes. If

you look at our health system, whether it is a hospital or a clinic, for example, we have to completely look at the processes and redesign them and make sure that we are implementing technology, data, and analytics appropriately so that we can drive the right outcomes.

It is a matter of just making sure that there is a fundamental change. We talked about leadership, and leadership needs to happen from the top down, making sure that priorities are leading change starting with their boards and driving down to the CEO and the culture of the organization to make these fundamental changes happen.

Data and analytics are great, and have a lot of data. Can we manipulate data to do more and find more insights? Yes. But we still have enough information to really make some fundamental changes. We just must make sure all the appropriate policy and reimbursement changes can help drive those things.

DR. NASH: **Dr. Scott, we will come back to you on aspects of those policies that might drive better adoption and implementation, but I'd like to pivot now to include Dr. Smith. Dr. Smith, you were in on the very beginning of another almost pandemic, of course, and that is your lifetime commitment to caring for persons with AIDS. You were on the front lines of that struggle. Now you are on the front lines, again, of another global struggle. What parallels have you been thinking about in your own mind based on your experience now, decades ago in California with the AIDS epidemic versus the COVID-19 pandemic? Can you lean into some of your experience and outline some of the parallels and some of the differences as you see them? This will lead us to a conversation on equity and institutional racism.**

DR. MARK D. SMITH: Well, obviously, there are some parallels in terms of early scientific uncertainty, the rush to try to do the science, the information and misinformation, the hysteria and conspiracy theories, and the intersection between public political consciousness and medical care.

As you know, I used to run the AIDS clinic at Hopkins. We were the first people to do outpatient transfusions, not because they were not safe, but because, frankly, the hospitals did not want our patients. So in many ways, with necessity being the mother of invention, HIV forced the adoption of practices that actually had been possible all along.

I am struck by how quickly things that we've been talking about for decades before COVID-19 hit –including cross-state licensure, telehealth payment, use of non-HIPAA-compliant technology, scope of practice – were finally implemented within a matter of weeks.

I am cautiously optimistic. Cautious because, like all revolutions, this revolution will foment a counterrevolution. The empire *will* strike back, so to speak. As Dr. Parekh was saying, many of these newly instituted measures are temporary, and there will be different points of view on whether we should go back to the old days.

I am optimistic in part for a reason no one has mentioned so far, which is that patients have now gotten a taste of how much of their time and money we have been wasting.

I am a Kaiser Permanente patient. For years, my family and I have been e-mailing or texting with our physicians, taking a picture of something and sending it. I would never go back to a system that required me to be present in person any more than any of you would go back to a bank that did not do electronic banking. Now that patients have gotten a taste of what in reality has always been possible, I do not think they are going to allow the empire to strike back quite as much as it would like to.

And for evidence of that, all of our patient visits at the Positive Health Practice (for the HIV care) at Zuckerberg San Francisco General were converted to telephone visits in early March. One of my colleagues has been conducting a study of patient and provider satisfaction with this revolutionary new form of care. Our patients are poster children for the digital divide. These are not tech-savvy or resource-rich patients. Nevertheless, 70% of our patients said that even after we can go back to in-person visits, they would like at least some of their care to remain virtual.

My sense is that we are underestimating the degree to which patients and doctors have seen with their own eyes the waste and insanity of operating with early 1960s technology. And I think we are underestimating the degree to which that will force the market to move in this direction. At least I hope so.

DR. NASH: **Wonderful. And we will come back, Dr. Smith, to some issues about disparities and institutional racism. But I want to turn to Dr. Murphy, because she is the inaugural Director of the Glenn Steele Innovation Center at Geisinger. I would like to understand Geisinger's perspective on this new type of patient and the broad use of technology allowing telemedicine, or what I prefer to call digital**

health. Do you think patients in the Geisinger system share Dr. Smith's perspective now that they use the technology? What is their view moving forward? And what is the institution's view of the technology, as well?

DR. MURPHY: The pandemic has been very telling for us. We have learned once again that we were believing our own stuff by saying we have an elderly population that is just not going to adopt the technology. And not only did they adopt the technology, but as Mark said, they embraced it, and our 65-and-older population gave higher marks to virtual care.

Now, part of that might have been because of their fear, but they gave higher marks to virtual care than their younger counterparts. As you all probably know, many of our markets are very rural and high penetration of public payers. This newfound experience for us has caused an acceleration and a commitment to really digitalize the patient and the provider experience. And I, too, believe, as Dr. Smith said, that telehealth is going to be a demand of patients now, once they have gotten a taste of it. I think that is number one.

Secondly, when you think about how digitally connected other industries are to their customers, it is startling. It has become very apparent how far behind health care has been compared with retailers and banking, for instance.

At one point, I was receiving a daily notification from every retailer I had ever ordered from, and yet we in healthcare were scrambling trying to figure out how to be sure that we effectively communicate with our patients. I think the horse is out of the barn here, in a good way.

DR. NASH: **Excellent. Well, I cannot resist, because folks know that our leader at Jefferson, Dr. Steve Klasko, was told by Dr. John Scully, "Stop saying telemedicine. We do not say telebanking. We say we are going to do our banking." And so maybe eventually innovation will become so pervasive that we will just call it digital health, or, "I am going to the doctor," and we will assume that it is a virtual visit.**

Dr. Murphy, while you still have the floor, are there any other aspects of the innovation engine that you see coming into play at Geisinger in the post-surge era, at least, bringing us up to the fall of 2020, since you described the elderly patients as being now quite readily interested in the virtual visit? Are there any

other aspects of the innovation toolkit that you could describe to us today?

DR. MURPHY: Yes. I think another lesson that we learned and another outcome of this experience has been that the old ways of accomplishing change were inefficient and too slow. In the past, we would have to request to develop an innovative approach, and our timeline would be was prolonged. I think moving forward there is going to be a much lower tolerance for the enterprise to look at the Steele Institute for Innovation and say, "I have a problem, and I need this fixed," and we will say, "Okay, it is going to cost X amount of dollars, and we will have it done in a year." That is not going to happen anymore, because what we did during COVID-19 was we turned around -- like every other organization, I am sure -- but we turned around a product that would ordinarily take months, a year, years, maybe, in a matter of hours, days, and weeks. And I think that has been a game changer -- and rightfully so -- because it should.

I think with innovation, too, we decided that during COVID-19 some things about the changes implemented were good enough but not perfect, whereas in the past, we always tried to have perfection. I think this rapid-cycle innovation is yet another silver lining that is going to come out of the pandemic, and we are certainly going to try to harness and embrace that spirit of rapid innovation at the Steele Institute.

DR. NASH: **Great. I love the notion of rapid-cycle innovation. That is really a take-home message, for sure. So, Dr. Smith, I want to go back to you to discuss a topic that of course as of the time of this discussion is blazing front-page news all over the country: the pain of our own organizations confronting what is being called institutional racism, beyond just the inequities, but the actual baked-in issues that we have skirted and dealt with, but now I think every organization is going to have to confront.**

Do you have any words of advice for all of our complex delivery system groups as they try to look in the mirror and self-evaluate, specifically as to how they are going to tackle institutional racism and some of the other obvious inequalities in care that have been tolerated probably for decades? And then, Dr. Scott, I am going to ask you the same question.

DR. SMITH: I have two comments about that. First, I think it is important to advocate for social justice, but the people who populate our health care systems have just as

broad a range of political views as the rest of the American population, and not everyone shares my priorities on social justice or my views on it. I see these things not as "either/or," but rather as "both/and." This is a quality issue. I grew up with a Jewish pediatrician in Brooklyn. He did not have a picture of Malcolm X on his wall, right? So it might not have been possible for me to win him to my view of social justice, but he took an oath, as we all have, to provide high-quality care to everybody.

So my sense is that it is important to link the diversity, inclusion, and equity agenda to the quality agenda because that is the mechanism by which it gets addressed, and that is the mechanism by which we broaden the lens and the group of people who are working on the issue to define it not just as a justice issue, but as a quality issue, because that is what it is.

Additionally, the mechanisms by which racism operates should be mentioned, and it is indeed related to this issue of population health. I am not a population health expert. I know population experts. Some are friends of mine. But it got me to thinking about how we define population. What is the axis of commonality by which we address populations? Often, this is done in terms of neighborhoods, like "place-based health care, about which, by the way, I have always been a little skeptical, because usually when people talk about "place-based" health care, they are talking about a poor "place" How many of us on this panel know our next-door neighbor's blood pressure? How interested are we in getting together with our apartment complex to talk about diabetes?

The COVID epidemic has exposed a number of axes about which we might think about the commonality of populations that put them at higher risk and are directly related to racial segregation and history. So it may not be where you live, except if you live in a nursing home or if you live in a prison. These are neighborhoods that are not randomly distributed with regard to race.

It may be where you work, or it may be how you get to work. I grew up in New York City. I took the subway all the time, but I am not taking the subway in New York City for love or money anytime soon. Right? People who are at greater risk include people who have to take the subway or two buses to get to work.

What kind of household do you live in? What is the density of your household? Because those are the people who will find greater difficulty isolating at home for two weeks with no money.

So I think that some ways COVID-19 helps us think about population health, but in a somewhat more precise way, what are the populations who are at higher risk?

What do they have in common? What is the specific mechanism by which historical racism gets expressed and puts people at risk? It is not because you are black. It is not because you have higher melanin concentrations; it is not about the texture of your hair. It is about where you live, where you work, how you get to work, what the density of your household is, your likelihood of being in a certain nursing home or working there, and your likelihood of being in prison.

And so it actually forces us to put a little more specificity on the populations that we are talking about and how those commonalities lead to unequal exposure to risk and unequal mortality and morbidity.

DR. NASH: **So, Dr. Smith, I heard two really important messages in what you said, if I may summarize. I really like the connection between quality as the common language to reduce inequities. I think that is very important. Secondly, the real specificity of the population question, because we know from looking especially at New York City, it was poverty, density, and mass transit that almost crushed the system, and those are all social issues, of course. So, Dr. Scott, looking ahead, tackling the difficult question of what others have called institutional racism, where do you see the system moving in the near term?**

DR. SCOTT: My three thoughts are similar to what Dr. Smith said and some of the other participants have shared. First, organizations must take a really hard look in the mirror and ask themselves where the want to be going forward after this. It is one thing to say, "I am going to care about health equity and health disparities and do better by the populations we serve," but can you walk the talk and not just say it? That is going to be the big question going forward for a lot of organizations around this country, health care and non-health care, because there is a lot of talk about it now, and time will tell who is able to walk the talk and not just talk about it.

I liked Dr. Smith's point about focusing on quality and looking at whether you really understand the six aims and look at equitable care. If you are a health care organization, and you promote quality, then it will be imperative to do a better job of providing equitable health care, and to measure it, and let us institute a scorecard and see what you are really doing as an organization going forward.

I do not just think we can wait. I am not a policy guy, like some of you the others in this discussion. I have been in operations and have a background as an

emergency medicine physician and physician leader. I think we are going to have to say, "Can government and policy change quick enough to get this done?" Because I have seen some tremendous innovation going on during COVID-19.

As you know, Dr. Nash, I sit on the board of directors for Direct Relief, and we have been doing some wonderful innovative things with corporate partners who have been very generous, and coming to us to help some of these vulnerable populations and Federally Qualified Health Centers (FQHCs) around the country. So I think we have to look at other innovative models to help plug the gaps going forward in the short term. And hopefully, people like Dr. Murphy, Dr. Patel, and Dr. Parekh can change the policy one day on the back end.

DR. NASH: **Wonderful. So, colleagues, I would like to give you each an opportunity to address an important question. Looking in retrospectoscope or, as the military would call it, the lessons learned from our national and global experience, from your personal perspective, if you had to distill one to three main lessons learned that you personally and/or your organization took from the pandemic, I would like to give you each an opportunity to share.**

DR. PAREKH: I think the number-one lesson for the nation is you have to be prepared. For a nation's leaders, you cannot always just assume the best. You know, with pandemics and similar types of emergencies, it is never a question of whether or not they will occur, it is a question of when they will occur.

And so all of the issues our nation has faced for the last couple of months, from the lack of a testing infrastructure, not having the critical medical material or the personal protective equipment, being late to community mitigation, all of these things, not being prepared, particularly at a federal level, getting into federalism issues, making the public health response partisan, whether you look at masks or social distancing or other areas, and so on, such that when the public sector and public leaders are in that type of frenzy, and there is inadequate or nonexistent leadership there, then that makes it difficult for the private sector. This is true whether it is procuring the material that you need, whether it is understanding the background science of what you are trying to deal with, or whether that is trying to ensure that you are providing the best care that you can.

I think there are a lot of lessons learned, and I think we have been late several

times over the last couple of months. From a bipartisan perspective, I think Congress has tried to mitigate some of the social and economic consequences of the response so far. I think they have tried to support the response. A lot of that is going to continue to be needed over the coming months, because this is not just going away.

DR. PATEL: I will just combine mine, because it is both personal and professional. We, especially probably all of us on this panel, think we are pretty aware and educated. But in reality, we really have kind of no clue what people really need.

My parents were not well educated. For many of us who are extremely well educated, we can still be so incredibly out of touch with what is relevant to the patients we serve. This is largely because we have such a hierarchical nature at our institutions and the infrastructure lends itself to creating caregivers who are more and more out of touch.

We keep talking about patient-centered care. COVID and just dealing with the population has illustrated to me that when I think a patient needs accessible health care over telehealth, the answer I get back, because COVID has laid so much of it bare open, was, "Look, I just cannot be bothered right now, and I need to go do some stuff, and I need you to be able to tell my employer that that it is okay for me to go back to work. And I just need you to do that quickly."

And it was only because we had to have these rushed dialogues that I realized me sitting here and lecturing about ethnic disparities and racial inequity does not mean anything until I can actually listen and try to think about the system we have and what will actually work.

It has nothing to do with race, ethnicity, or socioeconomic status, but I can tell you that we are probably doing a pretty poor job of understanding what people actually want. I cannot walk in a room and say something and blow up a board meeting, so I have to think about how to work forward and both, one, appease the kind of very infrastructure that has educated me and brought me a lot of accomplishments, but also challenge that very infrastructure and not be ostracized as kind of a rebel or a rainmaker.

For people like us in different leadership positions, whether they are operational or not, we have to learn to listen and figure out how to respond better and be better. And if we do not figure it out, we are just going to keep tinkering at the margins and not making the changes that we really need.

DR. DeSALVO: I hope that we learn we are not done with this, so I think we still have to see if we learned the lesson that achieving health takes more than a health care system, and more than the awareness of the general public of the importance of public health measures and public health infrastructure. In a somewhat frustrating fashion, how public health has faltered and struggled to step up to do what it needs to in this time is a reflection of decades of underfunding of the public health infrastructure and a need for it to have partnerships that allow it to modernize and have the data and analytic infrastructure that it needs to have to protect the public going forward.

So I think it is a lesson about the hidden support of the public health infrastructure that we marginalize and under-resource who needed to be there for us in this time and is really struggling to keep up. My hope is that the general public, key policymakers, and important partners in the health care system advocate for its support and funding. We have not seen that yet, but we have seen some better partnership. It is something that we have been manifesting, for example, at Google. So that is one piece.

Dr. Nash, I know you know what a big advocate I am for the public health infrastructure, and this idea that it needed to modernize, now is its moment, and we have to support it so it can do it. It will not be able to do it on its own.

I think the other lesson I would probably flag is a related one, which is that there are systems that have to work together, but all those systems are interrelated, just like people are interrelated. I hope the world is coming to understand that health is not about individual choice. It is about circumstance and all the things that Dr. Smith mentioned, but it is also that our health is all related to one another, and so we cannot imagine that going forward we have to ask people to be solely accountable and responsible for their health, that it really is about the context and the community and the systems of support. And not just in the matter of infection, but in the matter of environmental health and chronic disease and mental health and all the other ways that our health is affected. So it is the sense of community, the sense of importance of systems, especially the ones that are often hidden to us that I hope that we strengthen so that if we ever face something like this again that we are not trying to do it in isolation or alone or with the wrong tools, but that we have strengthened the tools in our toolbox.

DR. NASH: **Wonderful. Dr. Murphy, you get the last word in this group, which is really pretty special.**

DR. MURPHY: It is. Thank you. My first personal and organizational lesson was the importance of effective communication. And I think the role communication played during this experience -- as Dr. DeSalvo said, we are not through it yet -- but really, the harm of disinformation and the lack of the one voice speaking both from a public health and a public policy perspective has really been remarkable during the pandemic.

The second is one that may be stating the obvious, but I think it certainly was highlighted. Dr. Parekh would probably also attest to this. The pandemic shone a light on the importance of state government and the importance of the state-federal partnership. I am a little biased there, because I have worked in both the federal and state governments focusing on that relationship. As we move forward, that is something that we have to really focus on as we face what seems to be a likely second wave. We have to fix that over the upcoming months, because to do what is right for our communities and our nation as a whole, that is going to be really, really important.

DR. NASH: **Great. Thank you for adding the perspective as having served so ably at both levels of government. That is really, really important. Well, this concludes our conversation for the time being. I want to say, once again, thank you so much for carving out time. I think we had a really rich conversation.**

References

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