

*Kim Stitzel:*

Thank you, John. I couldn't be more excited for our conversation today with Dr. Steve Sidney. He is a Senior Research Scientist and Director of Research Clinics at Kaiser Permanente Northern California, where he has conducted research studies since 1983, authoring over 400 articles in peer-reviewed journals.

He received his BA from Yale University, his MD from Stanford School of Medicine, and his MPH in epidemiology from the UC Berkeley School of Public Health. He is board certified in internal medicine and a fellow of the American Heart Association Council on Epidemiology, and he is our forum's chief science advisor.

For the last four years, we have had this honor and privilege to have Dr. Steve Sidney prepare a signature report, highlighting the trends and opportunities for improving heart health. This year, the signature report, what we have fondly labeled as the Sidney Report, examines trends in heart disease and stroke in the context of Covid and the inequities that are present in our society today. This report will be found on our home page.

So let's get started talking with you, Dr. Steve Sidney. Persons with preexisting heart disease and cardiovascular risk, we know that they are strongly associated with severe illness from Covid-19. As you were analyzing the morbidity and the hospitalization data and trends, which populations or groups were you seeing that are disproportionately affected? And what are some of those immediate consequences of those inequities?

*Dr. Stephen Sidney:*

Well, first of all, we should say that cardiovascular disease and heart disorders are major risk factors for Covid-19. They include things like heart failure, coronary disease, cardiomyopathies, diabetes, and hypertension. There are known disparities on these.

To give an example of how strong these factors are, hypertension and obesity are found in about half the people who are hospitalized with Covid-19. *[Coughs]*. Excuse me while I clear my throat here.

Now, minority populations have a particular problem with Covid. The case rates in minority, race/ethnic/minority groups are two and a half times those in non-Hispanic whites, and hospitalization rates are four and a half times those of non-Hispanic whites. Notably, blacks, African Americans have twice the risk of mortality from Covid than non-Hispanic whites.

I want to focus on hypertension for a moment here, because we've had some really bad news about hypertension in the past about six years, where the control rates were recently reported to have dropped from 53 percent in 2013 and 2014 to 43 percent in 2017 and 2018. That is a huge 10 percent drop. It impacts here because the control rates are also very disparate, so that non-Hispanic whites have about a 48 percent in fall rate, while all of the major race/ethnic/minority groups are around 41 percent.

So control is worse, and there are other disparities very notable that people who don't have medical insurance have half the rate of control than people who do, and about the same can be said for people who don't have regular medical care facility. So these disparities impact both cardiovascular diseases, and because cardiovascular risk impacts Covid, they impact Covid.

So we really need to pay attention to them. I would say most notably these days with hypertension, though there are many of these risk factors that are a problem.

*Kim Stitzel:*

I know that as a cardiovascular sort of society, we've been very, I guess, frustrated about our abilities to address inequities as well as these trends going in the opposite direction we'd like to see. I bet there's a lot of cost involved. So not only is there the human capital, but what is the monetary capital that this brings forward as well?

*Dr. Stephen Sidney:*

Let's just say overall, the American Heart Association reports that cardiovascular disease costs the United States about \$351 billion a year, hypertension about \$56 billion a year. But these things get localized. They carry into the state level. They carry into the community level. We know that hypertension increases Medicaid expenditures by over \$300.00 the beneficiary. It's estimated that even in the younger age group, age 18 to 64, between 17 and 27 percent of Medicaid beneficiaries have hypertension.

If you translate it into cost for a state, for example, Ohio has three million Medicaid beneficiaries. If 20 percent had hypertension, this would cost over \$187 million to the state of Ohio. In particular, we can also find a cost within a given community. A recent report shows that metropolitan Buffalo has over \$200 million increased cost because of hypertension, and metropolitan Nashville, about \$350 million.

Finally, cardiovascular disease costs employers. The average person with cardiovascular disease loses seven days, a week of

work because of their disease, and the insurance costs are more than \$1,100.00 per employee on the average. So these extra costs spread out everywhere within society, everywhere within our country.

*Kim Stitzel:* This is really tricky, particularly since we know the states were already burdened with costs from heat disease. Then with the Covid, reduced consumer spending, we are seeing then less money that will go into taxes to be able to support these programs.

*Dr. Stephen Sidney:* Absolutely.

*Kim Stitzel:* So when we think about trying to get back to normal, I'd say it looks like from both an economic and a health perspective we need to do better than we were before. What do we need to do right now in order to achieve a better state?

*Dr. Stephen Sidney:* Well, as I was thinking of this and putting the report together, I thought there were some things. This is really a special, an awful special year with the pandemic and, hopefully, a year from now we'll be clear of this, but who knows.

But in thinking about what needs to be done right now to protect people from cardiovascular disease and to protect them from Covid, the things that come to mind are flu vaccination. Extremely important. Flu is an important cause of heart disease, and it's a particular problem with people with existing cardiovascular disease. So everybody should get a flu shot. A high priority.

Another thing we can do is to treat hypertension aggressively. I bring this up because we know hypertension causes increased risk of Covid, not to mention a number of cardiovascular diseases. We know that lowering, controlling hypertension will decrease the risk of the cardiovascular diseases. We don't know that it will decrease the risk of Covid, but why not act as if it would, and act aggressively right now to bring down people's blood pressure to control hypertension.

There's a reasonably quick method that will work in many, certainly not all people. But if they have medical care, if their blood pressure is controlled, a majority of people can be controlled using an algorithmic approach to hypertension treatment in a reasonably short period of time. So let's work on this.

Obviously, anybody who's got cardiovascular disease, emphasize this is a particularly important time to take their medications. The other thing that we've been thinking at the National Forum here is we may be pretty close to allowing pharmacists to do these tailored types of interventions that are algorithmic types of interventions. This would really expand the group of providers and would help get things like hypertension and diabetes under control.

*Kim Stitzel:* That's great, Steve. As we just wrap up this final, I have just one last question for you. What do you think the final key message of this report is, as we head in to the meeting today?

*Dr. Stephen Sidney:* We really have to think about life through Covid and post-Covid. I think our priorities as a country, certainly in the aims of the National Forum, are to keep moving forward, to push people towards better cardiovascular health, to control hypertension, to control other risk factors, to promote adherence to the healthy lifestyles, Life's Simple 7, and make it easier for people to make healthy choices.

Again, I get back to the surgeon general just last week did a call to action to control hypertension. Let's do it. Let's just keep on our usual path. Let's be particularly aggressive now on taking care of certain things during the Covid pandemic.

*Kim Stitzel:* Thank you, Steve. That sounds like a great charge as we head into our day today. Thank you so much for your time today, and we look forward to our future speakers.

*Dr. Stephen Sidney:* Thank you very much.

*[End of Audio]*