NAM Vital Directions for Health and Health Care: The North Carolina Experience
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Unperfected transcript

>> DZAU: Well, good morning, everyone. Good morning.

>> Good morning!

>> DZAU: All right. That's good. Thank you. I'm Victor Dzau. I'm the president of the National Academy of Medicine. I'm a Dukie. I'm sorry to say to some of you. But I'm a North Carolinian. That's the most important one. My wife and I still live in North Carolina. I'm actually a Duke faculty on leave of absence in Washington.

So for those of you who may not be familiar with National Academy of Medicine, let me just give you one slide to tell you who we are. Most of you know us as Institute of Medicine, but then I want to tell you about why we're so excited about being here in North Carolina. There you go. So there are three national academies in the United States, certainly in the science area, National Academy of Sciences, National Academy of Engineering, and, of course, National Academy of Medicine. Our founding organization is the NAS, or National Academy of Sciences, which is charted by Abraham Lincoln and congress in 1863 to be that advisor to the nation. Now, at that time, because it's during the civil war, it was really critically important to have independent advice from scientists and experts, and because over the 150-some years, we have been the independent advisors. We're not part of the government, but we're authorized, in fact, by congress and chartered to advise congress, U.S. administration, and, of course, now I see the nation as the public, and also globally, and you can see that in 1970, because of health and medicine, the health arm of National Academy of Science called IOM, Institute of Medicine was founded. We have actually functioned as the third academy for all these years, and so in 2015, the year after I got there, we reconstituted to become the third National Academy officially.

So currently we are co-governing the national academies by the three presidents of the academies, and as you can see, our job, and we're very proud to label this, by New York Times

as the most esteemed authoritative advisor on issues of health and medicine, and its reports can transform medical thinking around the world. Certainly we believe so, and we hope so, and that's why we're here.

I want to welcome you to the symposium, Vital Direction for Health and Healthcare, the North Carolina Experience. Before I begin, I'd like to thank NC Biotech Center, and CEO Dr. Ashton, is he here? Doctor, thank you very much for hosting us. Greatly appreciated. And of course to the planning committee, to Mandy Cohen, my co-chair, and, of course, staff, particularly Jessica Marx, for organizing this event.

Okay. So first, you know this so well. This nation has faced major challenges in healthcare. Errors of increasing demand, unsustainable costs. And we also face issues about access and quality in addition to affordability. Efforts are being made to transform healthcare, which includes shift to value and address the fundamental drivers of health in order to improve health of the population, the social determiners.

So we know there's a lot of progress been made, particularly in the last ten years, under the Affordable Care Act and there remains to be lots of challenges. And you all know about this. My own feeling is irrespective of the political winds, we need to continue working towards improving the healthcare system, and that's why we're here. Today's symposium will provide a platform for understanding the status of how the healthcare at the state level, within the context of our National Academy of Medicine's Vital Directions Initiative.

So in 2016, in anticipation of presidential election, and entry of a new administration, we, at the NAM, launched this initiative, with a bipartisan group of very distinguished current and previous leadership in healthcare, in government, and also in health all together. And this initiative convened more than 150 experts of researchers, scientists, policy makers to provide expert guidance in 19 priority areas for U.S. administration. This was co-chaired by myself and Mark McClellan, and the publication that you see a little bit a picture about this, created a framework for achieving better health and well-being, high value, healthcare and strong science and technology for the nation.

So Vital Directions was really instrumental, in my opinion, in informing Congress in presidential election during the 2017 national debate about reform of the ACA. Or the repeal of the ACA, if you will. Providing a framework that refocused policy conversation with congress and policy makers, under foundation of principles of good health and healthcare in the context. I can certainly tell you that I went and saw almost all the leadership in the senate with Bill Frist and with Tom Daschle, depending on which side of the aisle, I've met different senators. But never

the less, I think there was really good conversation to refocus on what we're trying to do in healthcare and why, and certainly you know what the outcome is and I'm quite pleased to say today we still have, you know, ACA, which I think is certainly sending many of us in the right direction in healthcare. But I think our effort also underscored the importance of state and local actions. So while national policy can have great influence on many issues in care delivery, progress really depends on actions at state and local level. It takes local leadership to set expectations, implement policy and bring together different stakeholders and communities, and it takes a community to work collectively together across multiple sectors to address social determinants and improve health outcomes.

So this is why we're here, because as an extension of Vital Directions, it's very clear to us that we need to turn our attention to the all-important state level, beginning today with the symposium in North Carolina. So we purposely decided to pivot the state level beginning with North Carolina because not only because I love the state, but because this is where the action is. It is truly the forefront of transformation healthcare. North Carolina is the promise, but also those challenges you are all aware of facing U.S. health and healthcare.

For example, in North Carolina, we have some most amazing premier health systems and healthcare innovators. Many of you are in this room, capable of delivering state-of-the-art care, as well as healthcare providers and community organizations, again many of them in this room, implementing new population health innovations. Yet, we face pressing challenges, rising population mortality rates, substantial health disparities, 14.7 percent of North Carolinians live below the poverty line, and too many are uninsured, about a tenth of our population. Rising healthcare costs putting tremendous pressure on state budget, and, of course, limiting wage increases.

Now, despite these challenges, there's a lot of reason to be hopeful despite the recent setback. This article written by Mark McClellan, who will be here later on, noted in the 2019 health affairs article, thanks to a convergence of public and private sector, healthcare leadership, North Carolina is now on the verge of something really different. North Carolina is now creating a set of reforms, or hope to create a set of reforms that would create an unprecedented shift to how healthcare is paid for in the state, and how and ways social risk factors are incorporated in to healthcare payment and delivery reforms, and over the next five years, the state is poised to make an estimated 70 percent or more healthcare payments through alternate payment models. No other state, according to Mark McClellan and others, is on track to reform payments so much and so fast as with the goal of improving population health and healthcare delivery while lowering healthcare spending.

And that's a quotation from the paper. And I truly believe in this. And I really think that North Carolina has the leadership to make all this happen. We are so pleased that Governor Cooper is here today. And of course secretary Mandy Cohen, they are both working so hard to try to transform Medicaid through a series of efforts, of expansion, as well as transitional managed care, and despite setbacks. I know they're committed to do so, and we'll be hearing from them. We are also going to hear from Blue Cross Blue Shield, their effort in Blue Premier, an ACO payment model shifting to population payment linked to outcomes and total cost of care with down side risk. And of course, the business community, Vision 2030 of the chamber, also developed a road map to value-driven care, and many others.

I know there's a lot of work that remains and still a long way to go implementing this, but I'm really excited to be a North Carolinian and to know the leadership in this state and so many others all believe that the way pathway towards, in fact, better care for our population is to change the way we do things, change the payment, and begin to move towards truly a value-based organization in state.

So it's an exciting time to be in North Carolina. We wanted to be here to engage in this discussion. I do believe that many of the things happening here are models for the rest of the nation, which is why I'm a strong proponent to have our first meeting here. This symposium aims to bring together stakeholders to better understand actions that are being taken, hopefully be undertaken in North Carolina, and offer opportunity for us to interact and discuss and really work together towards improving the situation here.

There's a lot of people I need to thank, but I want to end by thanking Mandy Cohen. She's my co-chair, and her staff has been wonderful, and, of course, our planning committee. You see that in your book. You know all of them. They are all here, North Carolinians. And, of course, my executive officer, Michael McGinnis, who's here today, and, most importantly, to thank Governor Cooper for being here today. We are really honored, Governor Cooper, that you agreed to join us. I know you have a very busy schedule. We know you care a lot about health and healthcare, and is working tirelessly to bring high-quality healthcare to North Carolinians to keep family healthy and ensure equity for all.

>> DZAU: So with your indulgence, it's a great privilege for me to introduce Governor Cooper, who certainly does not need any introduction, but he was born and raised in Nashville County, and earning undergraduate law degrees from UNC Chapel Hill. Despite that, we're good friends. He practiced law for 18 years in Rocky Mountains in North Carolina and then took public service in the North Carolina State House and State Senate. He fought to raise teacher pay, reduced class sizes, and wrote North Carolina's first children's health insurance initiative.

After being elected attorney general in 2000, he protected North Carolina families for four consecutive terms. He oversaw a sharp decrease in crime and fought for consumers by advocating for low utility rates and putting predatory lenders out of business. As North Carolina's 75th governor, he's working to make lasting investment for our future. He wants to ensure that North Carolinians are better educated, healthier and proper prosperous for generations to come. Since taking office, Governor Cooper has worked to create thousands of new jobs. He's focused on boosting public education, tackling the opioid crisis, revitalizing rural communities and making sure North Carolinians have training to fill better-paying jobs that require more skills.

After hurricanes Matthew, Florence, Michael and Dorian devastated parts of our state, he fought for resources to help North Carolina recover smarter and stronger than ever. Governor Cooper is committed to enduring the state government looks like the people it represents, and he's appointed a most diverse cabinet in North Carolina history, and certainly we are so glad you appointed Secretary Cohen to be the secretary of DHHS. He believes that if we work together, we can build a strong North Carolina that works for everyone. So please help me welcome Governor Cooper.

[Applause]

>> GOVERNOR COOPER: Well, good morning, everyone. Thank you for coming. I know many people in this room who have contributed to the health of North Carolinians for years, and I'm grateful for your service. Thank the Biotechnology Center for allowing this conference to be held here today. I work closely with them in working to attract good-paying jobs to our state. We really are taking off in the life sciences area, and we're excited about the innovation and entrepreneurship and economy in North Carolina, particularly as it involves healthcare.

Glad to see Senator Floyd McKissick Here, great senator from Durham, and Senator Terry Van Duyn who is here from Asheville and going all over the state these days, and Victor Dzau, our long-time friendship is appreciated. It's great to see your much better half of the roof here today. We know that even though you have a national profile at the National Academy of Medicine, that your heart is in North Carolina, and that you care deeply about what happens here. We're grateful for that.

You know, getting near Thanksgiving, and I am thankful to work with, by far, the best secretary of health and human services in the country in Mandy Cohen.

[Applause]

One talent that I think I have is attracting good people in to where I work. You've got to do that to make up for your own deficiencies. But this -- I really outdid myself with her. And I'm grateful that she is here. There is no question that North Carolinians are healthier because of her good work, and although we have both had to deal with unnecessary partisan fights, we know how partisan healthcare can become, and that really is hurtful at the end of the day, but we've continued to strive to move forward, and I know she will talk with you a little bit today about how we're dealing with transformation and expansion, but still succeeding in many areas, even though we're having some debates and disputes in those areas.

With health, you're going to continue to get old. There's just no question about it. And you've got to keep yourself as healthy as you possibly can. But it reminds me of what has been happening a little bit at my house, having moved into the North Carolina Governor's Mansion which, for a guy who grew up in eastern North Carolina, this is way above my raisings, but Kristin and I are enjoying it, and for those of you who have been there, you see portraits of former governors that are lined up downstairs, and the law requires the governor, I think at least by two years into your term, to begin the process of making sure that you have a portrait done so that the state can put it up in the executive mansion. I'm not that interested in it. It makes me a little uncomfortable, but it's something that by law is required. Well, now you all know that I'm nearing my third year in completing my third year of my first term. We'll have a second one.

[Applause]

But my wonderful wife Kristin, who is a great lawyer and who is spending time going to all 100 counties. She's been to 80 so far and done events in 80 of them, and she's been spectacular, particularly in the area of children's health and hunger. We're doing a No Child Hungry event tonight, and so grateful for her, but she's been on me about, Honey, you need to get time to start taking your pictures and pick somebody to do your portrait. I don't have time. Let me do the budget thing. You take care of it for me. She says, Honey, you've got to do this. And I said, I've got a budget meeting. She grabbed me by the arm. She looked at me and said, it's not getting any better.

[Laughter]

Those of you who know Kristin know that to be absolutely true. I think she sort of enjoyed saying it, but it got my attention, so the appointment is set and all that kind of stuff. I hadn't thought about it that way.

I have a mission for North Carolina. I say this every day, multiple times a day, to my staff, to my cabinet. I want a North Carolina where people are better educated, where they're healthier, where they have more money in their pockets, and they have opportunities to live lives of purpose and abundance. That's what I want. Everything we do in our administration we want that to happen. And we know a critical part of that is health. The rest of it sort of falls apart if people aren't healthy and have the chance to prevent disease and to prevent accidents that can send their life sideways. People have to be healthy in order to try to get a good education and to live lives of purpose and abundance. So health is connected to every aspect of a person's life.

I wanted to just hit a couple of highlights of some things that we're working on regarding health, and I'll start it out by talking about our opioid action plan. We know substance use disorder, most every family has been touched with it in one way or another. And our opioid action plan that we put forth in 2017 increased funding for evidence-based treatment and training for issues related to the epidemic and prescribing. We pushed legislation that was passed, and we've already seen notable success. Many of you have talked to that parent who has lost a child to opioid overdose, or a family member, or a friend. We know how tragic it can be. We know how disruptive it can be to lives of anybody who cares about the person who is struggling with substance use disorder.

When we started this thing, the opioid epidemic claimed five lives a day in North Carolina from unintentional overdoses. Since the plan has been launched, along with our opioid action plan 2.0, unintentional opioid-related overdose deaths have decreased by 5 percent, which is a positive thing. The graph had been going up, up, up, up, up. Now it is beginning to dip.

We have seen opioid dispensing decrease statewide by 24 percent. The emergency room visits for opioid-related overdose have declined nearly 10 percent, and notably, the uninsured and Medicaid beneficiaries who have received opioid use treatment since we put the plan in place has increased by 20 percent. So even when we've got a state that has a lot of people who are uncovered and we've got to figure out ways to deal with that, we have had success and we have to do more to build on this success. Expanding Medicaid will help that significantly, but I'll talk about that in just a minute.

Our opioid 2.0 action plan updated the 2017 plan with feedback from partners and stakeholders, and now includes local strategies that are going on right now in counties. Coalitions, stakeholders who are working together.

I'm also proud of our Early Childhood Action Plan. We know more than ever how much zero to three matters, when brain formation is going on with that child. Early childhood education and healthcare is critical to success of that child, and the more science we see, the more overwhelming that is. North Carolina has seen that, and governor hunt, one of my predecessors started Smart Start. We have worked very hard to have four and five-star child care agencies. We know that it's not just babysitting, that we've got to have interactive education with our children, and we've got to make sure that they are as healthy as possible.

We put this opioid action plan in place because we know too many babies are born in our state with the odds stacked against them. More vulnerable than others because of social, racial and economic factors, and we are on target to dramatically reduce disparities in infant mortality by 2025. We have to do that. We must ensure that babies and children and young families have access to high-quality, affordable healthcare services. We've got to increase the number of our children enrolled in Medicaid and health choice to access wellness and visits, and home wellness visits and immunizations, and, of course, we've got to expand Medicaid to hard-working people who need access to critical preventive care.

In our schools, we know that we have to address health issues there. Spend a lot of time talking to our teachers and other educators across our state. When I go into a public school, I come out smiling, because I know the good things that are happening there. We need to lift up our educators. We need to give them the respect instead of sweeping corporate tax breaks, we need to be investing more in our teachers and principals. It's interesting that I had a discussion with a bipartisan set of legislators, and boy, we had some differences about public education and whether we should be slapping letter grades on schools or putting money in to unaccountable private school vouchers. I guess you see how I feel about that. But, we agreed on two things that would improve public education. A good teacher in every classroom and a good principal in every school. You've got to get the pipeline of people to do that. So you've got to pay them more, you've got to show them respect. When they get their master's degree, you've got to reward them. You can't charge them for when they have to take a leave day, and you can't charge them to pay for their substitute like they're doing now. You've got to greatly expand teaching fellows' scholarships across this state. They have to be robust. They have to recruit our best and brightest and recruit diversity. When we tell young students coming out of high school we think education is so important that we will pay four years of your school if you'll give us at least four years back in teaching in our public schools, you are not only going to

get the top of the class, which, when we were starting this, that's what we were doing until it got stymied and changed, and we've got to do it a lot better and get back to what we were doing and more. I was on one of the first interview panels. I looked. I said, my gosh, we're getting the top of the class! The very best teachers who are agreeing to be public school teachers in our schools. We've got to continue to encourage that and to push. But we know that these educators in schools often face kids who have had early childhood adverse experiences who have been dealt the bad hand because of where they live, or their economy, or their race, and we often expect our schools to magically educate them and fix them, and it's hard to teach a child when that child is hungry. And so we've got to approach this holistically. I was in a western county talking to educators there, and they send a health form home with parents at the beginning of the school year, and the superintendent told me that this was the first year, and this was like a year ago or two years ago, this was the first year where parental concerns about their children's mental health exceeded their concerns about their physical health. And so what I have proposed is more flexible funding for schools so that we can have more personnel that would help. Most of the teachers will tell you I've got two kids in my class who need mental health treatment desperately, and sometimes they just cannot find that coverage. So we need more social workers. We need more psychologists. We need more counselors in our schools, and I have proposed budgets for that, and we need to work to do that.

We also know when we're talking about health that climate change is a massive factor. It is real. It is here. And we have to do something about it. I talked to my kids about their generation may be the last to be able to do something meaningful, and we've got to get the ball rolling in our generation. I have, through executive order, put together a clean energy plan, and we unveiled it. It's September. And it says that it recognizes the threat of climate change. We are on a path to reduce carbon emissions by 70 percent by 2030 and to get us carbon neutral by 2050, and it does it in a way that we can grow good-paying jobs and support our economy and have reliable renewable ways to produce and generate the power that we need. We've got a lot of people pulling together for that clean energy plan. We might have had a president that says we're out of the Paris Accords. I said not North Carolina. We are going to continue to strive toward that. I've joined the climate alliance with a number of other states, and we are moving forward.

We also know rural health is an issue. Forty percent of our rural hospitals are in the red right now, and it's hard for us to attract people to rural areas. We have a strong rural revitalization plan. One of the major things we've got to do is get high-speed internet access all over North Carolina and in rural areas. We know how that affects health. We know how that affects education. We're working to attract businesses to rural counties. We have a hometown strong

plan that sends teams in to these counties who are often short-staffed to help them address their challenges, and we know that matters for health, and once again, Medicaid expansion is going to play a big role in helping to improve rural health.

So let's talk about Medicaid expansion. We are sending billions of dollars of our taxpayer money to Washington. That money is going to 37 other states to help insure people there, but not to North Carolina. We have an opportunity to provide health insurance to five to 600,000 North Carolinians if we just said one word. Yes. Yes. We'll take it. We can take some of that tax money back that we've been paying to Washington. Not only will we make so many working people healthier, we will create 30 to 40,000 jobs. We will reduce private insurance premiums by 7 to 11 percent. How do we know all this? It's happening in these other states. Has been for the last five or six years. We have the data. We know what is working. We could have that happen in North Carolina.

A guy by the name of Mike Pence has governor of Indiana, expanded Medicaid. I was talking to Governor John Kasich, former Republican governor of Ohio, and after I won the debate over which state was first in flight -- they had the bicycle shop. We flew the plane. Case closed. He looked at me and said, thank God we expanded Medicaid, and started talking about a 54 percent decrease in opioid overdose deaths in Dayton, and talking about the increased mental health capacity that was there. We know it will help our rural hospitals. We got a plan here, 90 percent will be paid by the federal government. The other 10 percent is going to be paid by insurance companies and hospitals because it will increase their bottom line, and they know it's a good thing for the state to do. It's time for us to do it.

I would encourage you to go to healthcarecantwait.org if you haven't been already. Healthcarecantwait.org. Plug in any county. Find out how many more people will get health insurance. Find out how many more jobs are going to be created. Find out how much economic investment is going to come to that county. This is why law enforcement, chambers of commerce, Republicans, Democrats, all are coming forward to say it is pastime for North Carolina to do this. And in this partisan political world, you hear a lot about morals. I think healthcare is a moral issue. I'm a person of faith. My Bible tells me you try to heal the sick. You try to welcome the stranger. You try to help the down-trodden. I was sitting beside an early childhood educator at a little table with a little chair in preschool. One of our four and five-star child care centers. She had a tear rolling down her cheek because she was having to declare bankruptcy because of a medical emergency. And you know that one in five of our early childhood educators have no health insurance. Many of these child care agencies, in order to be able to keep fees affordable for parents and to meet the demands of four and five-star requirements, they don't provide health insurance for their employees. This woman

happened to have a master's. She could be doing a lot -- she could be a public school teacher and make more money. We have to do more to improve our pipeline of early childhood educators, and not just our teachers. And Dr. Cohen will talk to you about that, and that's part of our early childhood action plan. But that is not right! It is not right. Every person should have the availability of affordable, quality healthcare in the richest country in the world. Come on!

Now, we can have a debate about how much the government should be involved in this, clearly, but right now, we're -- all of the partisan politics, we have a path that is narrow. We can close gaps under the present system. We have to continue to make the system better. The system needs to transform. We need a value-based system. Fee-for-service we know can keep healthcare costs up in a way that we don't need to be doing, but we need to do it in a way where we maintain our providers who are continuing to provide for our lowest-wealth people, and we can do this thing. We have to do this thing. And it takes strong leadership and it takes people talking about it. It takes people -- there's Wendy over here, a county commissioner, and, you know, you guys telling this story and chambers of commerce stepping up and saying this is something that we should do. We don't need -- the CEOs aren't telling me that they need another corporate tax break. They're telling me they need quality people in their workforce. They need healthy people in their workforce. They've got jobs that are open. We need to be doing that.

We're working to try to fill that workforce and deal with those healthcare issues. I've issued an executive order regarding family leave, saying that when a new child comes to a family that state employees should be able to take time with that child and now we've got the university who's done it, the community colleges who have done it, a lot of private businesses who are doing it. That's something, that's the kind of thing that we need to be doing. I issued an order, I call it Work First, with our people with disabilities. Some of the best employees you will ever find are people with disabilities who want to be in the workforce, and we are trying to encourage that and to make sure employers know this and find jobs for people. I've issued an executive order saying we're not going to have any tax dollars go to any organization that promotes conversion therapy that hurts LGBT youth. We can do things time and again to make people healthier in this state and do the right thing.

I am excited to live in the best state in the country. When I'm talking to companies about coming here, the quality of life, the low cost of doing business, we have the greatest community colleges and universities in the world. We have the warmest people. It is a place where innovators and entrepreneurs can succeed. We're sending a message now. We weren't a few years ago, but we're sending a message now that North Carolina values diversity, that our

state government should look like the people that it serves and protects, that we know diversity makes us stronger, makes us better, that we are open for business, that we are welcoming. All of those things we're doing now, but we know North Carolina needs to be healthier. And I'm depending on you all to have all of the answers for me at the end of this, and to help us get it done. There are great minds in this room. There are people who have great compassion in this room. There are people from the private sector. Particularly thank our people who are so smart working in the public sector who could be making a lot more money doing other things, but they've decided to, like Dr. Cohen, to give their lives to public service and we've got to be grateful for that.

I believe that North Carolina is going to see bright days ahead and be even better, and hopefully, hopefully, hopefully, my mission statement of having a better educated, healthier North Carolina with people being more prosperous will come true.

Thank you for allowing me to be here and being with you today. I appreciate it.

[Applause]

>> DZAU: Well, when you hear such aspiration and commitment, it makes me feel very proud to be a North Carolinian. So we're going to be in a treat for a great two days. We're going to be informal, highly interactive, but I think, important, we're going to work together to find the right solutions. And of course the person who's leading the charge in this state is our secretary of DHHS, Dr. Mandy Cohen. She's going to give the plenary lecture. We set up in such a way that we have one state perspective, and tomorrow we have Karen DeSalvo to give you the national perspective.

So Mandy's been really wonderful to work with, and her staff. I can tell you that she is accessible, committed, and really totally great partner to work with. And so I want to introduce her properly. And again, all of you know her well, but she was appointed to the role of secretary of North Carolina DHHS in January 2017 by Governor Roy Cooper. Secretary Cohen and her team work tirelessly to improve health safety and well-being of all North Carolinians. DHHS has 17,000 employees, and an annual budget of $20 billion, serving as home to North Carolina Medicaid, public health, mental health, state operated hospitals, facilities, economic services, adult and child services, early childhood education, employment services and health service regulation. And she and her team are focusing on building a strong, efficient Medicaid program, improving early childhood safety and education and health, and combatting the opioid crisis.

Mandy is an internal medicine physician like me, and has experience leading complex health organization. Before coming to North Carolina's DHHS, she was the chief operating officer and chief of staff at the Centers for Medicaid and Medicare Services, CMS. She brings a deep understanding of healthcare to state, and has been responsible in implementing policies for Medicare, Medicaid and children's health insurance program in the federal health insurance marketplace.

Secretary Cohen has been recognized as a national leader for her work at DHHS. In February 2019, Modern Healthcare named Secretary Cohen as one of the top 25 women leaders in healthcare. As a graduate of Cornell University, she received her MD from Yale, master's in public health from Harvard School of Public Health and trained at my old stomping ground, the Mass General. And I must add that, as I said, it's wonderful to work with her, and her office, especially Betsy Tilsen, and North Carolina is really lucky to have leader that Mandy Cohen as our leader. So please help me welcome Mandy.

[Applause]

>> COHEN: Good morning! So, it's been a week. So thank you for the kind words, because I kind of needed it this week. But this is such I think a well-timed conversation that we're going to have over the next two days here. I'm so grateful to Dr. Dzau and the National Academy for choosing North Carolina as the first site to think about taking the Vital Directions blueprint on the road. I think it's the right choice not just because you're a North Carolinian, because I think there's incredible work going on here. And while we did have a setback, and for those of you who haven't read the news, because of some gridlock, we aren't going to be able to move forward quite yet with our managed care implementation, which has a lot of the pieces that we'll hear about built into it, but despite that setback, it's given me this opportunity to sort of reflect on the last three years that I've been here in North Carolina and what we've been working on and accomplishing, and it was an opportunity to remember that it was always bigger than just this transition to managed care. And so I'm going to talk through a lot of that, and someone asked me, oh, did you have to spend a lot of time rewriting your speech? No. Because I wanted to talk about our blueprint here in North Carolina, because I hope it is helpful for us as North Carolinians to remind ourselves where we're headed, but hopeful for those of you not from North Carolina are here to learn with us that maybe that is also a blueprint that you can use as you move forward. And I've been talking specifically about how we focus on health and not just healthcare for a number of years.

The term Social Determinants was a buzz word for a long time, and what I'm really proud about in North Carolina is we've taken that buzz word and turned it into a reality, and trying to make

all of the pieces related to health actually real here in North Carolina. So I'm going to talk about that blueprint. And this was, you know, I see some headlines written about North Carolina. We're the most innovative state, and I'm so proud when I see those things, but what I think is innovative about what we are trying to do is really that we have looked very hard around the country for what are the really great things that are going on around the country, and how do we bring them here and how do we take them to scale in a thoughtful way. And I think that's what's exciting. So it's not that value-based care started here in North Carolina and no one thought of that before, right? It's a matter of, like, okay, that seems to be working, let's look at the evidence and how do you scale that.

It's not that we didn't realize that food was important to someone's overall health. It was a matter of, like, how do we actually operationalize that at scale for folks and move folks forward. So what I think our innovation is, and this is a collective innovation is our commitment to health. And so I want to walk through what that blueprint is, and I will say, most recently as when I was at the federal level and I was running -- I was the chief operating officer, chief of staff at the Centers for Medicare and Medicaid Services, I was thinking about healthcare. And so I don't want to say that the folks who are thinking about healthcare are doing anything malicious, I just think that was the -- that was the mindset in the way that I had been thinking about things for a really long time. And it wasn't until I came to North Carolina and saw all of these different levers coming together that we were able to do something different.

I was a product of learning directly from Don Burwick and the triple aim and IHI and thinking about reduced costs and better care and better health. And we talk about it all the time, right? The triple A, triple A and now it's even a quadruple A. But even all the years that I spent at CMS, and if you think about your work right now in the healthcare system, those of you who run big provider organizations in particular, those of us who are payors, we spent most of our time thinking about two parts of the triangle. Right when the reduced cost part, as payors, we think about utilization management and formularies. On the better care side we were thinking about hospital-acquired infections and making great improvements there, but we didn't really embrace talking about the better health pieces.

What I'm excited about in North Carolina is us all collectively driving towards that other point of the triangle, and I think there's some -- two particular trends that are helping us get there that I'm going to talk about. Some incentive pieces that we've thought about changing, and then some infrastructure pieces that we've thought about changing. And so these are my short hands for value-based purchasing, or moving to value contracting and social determinants, which is the last time you'll hear me say that, but our healthy opportunities work in the

infrastructure we're building there, and I think that is what is going to move us from just focusing on two parts of the triangle to actually focusing on all of them.

And so here is my little blueprint for what I think we're trying to achieve in North Carolina. And as I reflect over the three years that I have been here, this is where I think that we have come. And so it started with a commitment to a clear vision of health. And I'll come back and talk about that. Then it's this great alignment around incentives and initiatives that lead to important action, right? I will say some of the incentives built into healthcare right now actually prevent you from focusing on health. It's actually keeping you from doing the thing that would help you focus on health.

And then there's been this incredible alignment of cross-sector investments. And that has been just game-changer here, and there are many of you in the room that have been part of that cross-sector investment, and it's just been something that has accelerated the work. So we committed to a vision, we aligned incentives and then aligned that infrastructure investment. So let me go through that a bit and just take you on a trip down memory lane.

When I joined here in North Carolina, the very first meeting that I went to, the big annual meeting of the Hospital Association, before they've changed their name as well, their session was focused on the social determinants, or on the non-medical drivers of health. They had a bunch of different speakers. And there was all this energy and thought of, like, oh, this is interesting. How do we do that? The Medical Society, under Bob Salina's leadership, had already invested in a lot of different ways through the Physicians Foundation and others, in thinking about how can we move towards health?

We were faced with a huge opioid crisis, as mentioned by the governor, and how do we put those pieces together. I was new to North Carolina. I did a lot of listening and talking to folks, both sides of the aisle, asking folks, well, what are you worried about in the healthcare space. And they rightly pointed me towards, I'm worried about some things in health, whether it was rural health and access to care, or I'm worried about that folks are dying young when they shouldn't be, or infant mortality rate and the disparity. And I saw this opportunity here in North Carolina that was already happening, and I don't think that it was anything I particularly did, but I saw the folks all running in a direction, and what we needed to do was take that energy and direction and turn it into an agenda that allowed us to actually do the things that I think it would take to transform the state and drive us towards health. And I also knew we were in a challenging political environment, and I was right, that this couldn't be about something new, meaning, like, that I was going to create -- we were going to create this big plan

and we were going to go to the legislature and go to my office, the governor, and say hey, we should invest X number of new dollars in something.

I knew this was going to have to be about using the resources we had wisely and efficiently, and so as part of that, we came up with this vision for overall how we were going to think about moving to health. We interviewed many of you, who are sitting in this room, about how we can do that, and it started with my own department, right? So I'm just not the head of Medicaid, right? We're not just a Medicaid agency. We have so many facets to what we do at the department that focus on health, whether that's obviously integrating the physical and the behavioral health sides, mental health. So many of the critical public health pieces, whether that's just about clean water or about making sure our restaurants are safe, but also about the big public health initiatives, and -- wait. So we have mental health, public health and all of the human services side, so all the economic benefits, child welfare, adult protective services, economic services. How do we think about even as a department, before I even got to you all, how do we as a department do our jobs differently? And that meant we actually had to be different as a team. We had to make decisions more collaboratively. We had to work on teams together differently, and then how do we bring in everyone else to that shared and collective work, and this was the vision we came up with, we envisioned in North Carolina that optimizes health and well-being for all people by effectively stewarding our resources that bridge our communities and our healthcare system. I think we needed to acknowledge, and I'll say this first as a doctor, that all the problems are not going to be solved for the healthcare system, right? This is a partnership that we're needing here, and everyone needs to be rowing in the same direction, whether it's our early childhood teachers or our community colleges who are going to train our community health workers, or the CEOs of hospitals and payers. So this was our vision. And then we took that vision and plotted it out against some really hard tasks that we need to do. You heard from the governor about the opioid action plan that we put together. Really, again, cross-functional, multi-disciplinary type of work to say that it's not going to just be treatment alone, right? If we just said, we're going to put all our resources in to MAT, yay, that's not going to solve the opioid crisis. We needed this comprehensive way of approaching it.

Same on early Childhood Action Plan, where we have ten goals. Very comprehensive across health, safety and learning. We've been incredibly lucky as a state from the time that governor hunt was the governor here, investing in early childhood education, national leader in it. I knew about it before I came to North Carolina, but education without thinking about the health and the safety, right, then you have kids showing up hungry at school. You can't learn when you're hungry, right? And so linking all those pieces together in a comprehensive look at early childhood.

And then, of course, our Medicaid transformation, right? This was where we, as a payor, and a market mover, could think about not just changing Medicaid, but use that as a catalyst to move forward. And we were lucky that we had a partner in the other big payor in the state who wanted to move quickly in that same direction, and frankly, well faster than Medicaid. If anything, I just wanted to align with where they were headed. And so as we thought about what we were going to do in our Medicaid transformation work is really about improving the health of North Carolinians, and you'll see it doesn't say Medicaid beneficiaries, it really was about moving the market through an innovative whole-person center well-coordinated system of care that addresses both the medical and non-medical drivers.

So you can see how that big vision of health where we were optimizing resources across the department really started to infuse our work at the department, infuse our work in Medicaid transformation as well.

So that's the first step, right? Because you've got to know where you're going in order to align all of these other factors around there. And so it was a fair amount of work right at the beginning to know where we were headed and how we would all get there.

And so then, let's move to the incentive pieces, right? Because I think these are so critical, right? As we think about moving towards health, if you're going to have a system that pays for pieces and rewards pieces and rewards volume, you're just not going to get to health, and it's not because anyone's malicious, right? It's not that the CFOs at some hospitals are bad people. They are responding to the system we have created, which is fill your hospital beds.

And so if we want to get something else out of the system, if we want to get health out of our system, we want to buy that with our resources, we have to do something different. That's why I think the incentives are so important.

And this started at the national level and the work that I was lucky enough to be part of at the national level, where Medicare was the leader here in saying we're going to pay differently. And you can see both Medicare advantage, traditional Medicare. You see are the leaders here with more than half in Medicare advantage and nearly 40 percent in traditional Medicare by the end of 2018, we're in these alternative payment models.

And some would say, oh, is that an Obama thing? Is that an Affordable Care Act thing, but what we're seeing is Secretary Azar and the new administration embracing those changes and frankly accelerating those further, which is fantastic, and I think you'll hear more about that over the

next two days, about the work going on nationally. And what I see is really exciting in North Carolina is that that really taking hold here, because I do think that's important, that we get the incentives right in North Carolina, we have 30 Medicare and six commercial-only ACOs operating the state. You'll hear more about the Blue Premier Program and other participations and accountable care organizations, right? Because someone needs to really think about health holistically as we're moving forward, and the incentives is a huge piece of that.

So here was our blueprint from the Medicaid said. How do we contribute to the incentives and the initiative piece as we think about moving towards health. And many of you in the room have been part of creating this. And yes, while we have a temporary setback and when we move to managed care, I think you are going to continue to see us make progress along these domains, even as we see where we go in terms of timing of implementation of management care.

So the first was a recognition that physical and behavioral health has to be integrated. Again, not a new concept, not innovative to North Carolina, but just learning great lessons from around the country to say we have to think holistically about folks' care, not just for those who have serious mental illness, but those who, in our Medicaid population who are moms who may just have postpartum depression, still need to be thinking about them holistically.

Secondly, we wanted to make a huge investment in primary care, recognizing that the data shows us investments in primary care, and particularly hyper local care management and a huge investment in that navigation and care embedded at the practice level was really important, so we did that through an advanced medical home program that we hope to launch in managed care, but again, this was something Medicaid had already invested in, right? The CCNC Program, for many years, has already invested in this direction of knowing primary care and local care management. If anything, I just wanted to accelerate that and double it, frankly.

And then the value-based payment. Right? This was, again, us aligning with what we were seeing at the national level, what we were seeing in Medicare, commercial space, and so thinking by the end of year two that we would have some alignment as we move to managed care. Again, this wasn't going to be something that was going to happen on February 1st, right? This was a long-term play, because changing those incentives are hard, and getting to that right next, particularly in the Medicaid space, is newer for folks.

And then wanted to have that unified quality strategy, and not only stopped thinking about all those processing measures and really focused on health measures, but also thought about total cost of care.

So again, that was sort of the play book embedded into our tool of moving in managed care, but now with where we are in timing of implementation, you will see us think about how can we continue to move forward along these lines to continue that change in incentives so that we get -- we move towards health.

All right. So we had our vision. We were starting to change some incentives to get folks moving in the right direction. But then we had to actually invest in some infrastructure. You cannot push risk down from payors to providers. You cannot just say, oh, I'm just going to tweak the rules of the road a little bit and hope everyone figures it out. This is a different way of operating our healthcare system to think about health, and that means you have to invest in some things, and there's more investment than just these things, but I want to talk about the three that I think are game-changers and how we do that.

And so this -- also, our investments that are not exclusive to Medicaid, these are investments for North Carolina, and you'll hear more about them. And they're all related to buying health or related to the social determinants, or our portfolio of healthy opportunities.

So first was around standardized screening. And you all have heard my story many times of my patient where I did everything wrong, and I did not ask my patient a very basic question about her health. I didn't ask her if she was running out of food. And for eight weeks of my knowing her, I ordered expensive lab tests. I CAT scanned her belly, but I didn't ask her about food and I didn't actually help her one bit. I didn't make her one bit healthier and I spent thousands and thousands of healthcare resources. So that burns on my mind when I think about how do we create a system that recognizes all of these facets of health. Right? Because if we -- it's not bad people, right? I went to some pretty fancy, very expensive schools, and I'm a nice person, so it's not like I was being malicious. We didn't have a system that was set up to ask questions in a standardized way and then navigate folks to resources that could help folks with their health, no matter what door they walked in.

Now, if they walked in a door of a community health center in Boston, they would have been asking these questions. They would have been navigating them to resources, right? So this is not North Carolina -- you know, we woke up in North Carolina. Folks have been doing this. Now it's a matter of, like, how do we take it to scale. Right? How do we do it everywhere. So we wanted to have a standardized screening tool here in North Carolina because you've got to have, you know, we're North Carolinians, got to have our thing, and so what we said, well, what works for us. Right? I was obsessed with getting under ten questions, but we came up with a tool that was nine. Yay, well-done. This advisory committee. And now, yes, we were going to

have, as we moved to managed care, we were going to require all of our managed care companies to screen 1.6 million beneficiaries starting next year with this tool, but we're not exclusive to managed care. I hope this tool is used by all different practice settings, and it frankly doesn't need to be healthcare settings, right? So I think this tool will hopefully be used in a lot of different places. I know that some of our Medicare advantage plans are using this. I know a number of our practices are, I would say, so my own pediatric practice is using this tool. Raleigh Pediatrics, go you.

Right? So when we check in for our appointments, we go through this tool. Now, it doesn't solve all our problems, but if we're not asking this in a routine way, we're not actually going to be surfacing all of the issues related to some of our patients' health and actually help them get the resources they need at the time they need it. So we're excited about that. And I hope, despite the fact that we don't have a managed care requirement starting in February that we're going to see more adoption of this tool.

But a second thing is if you're going to ask the question, hey, are you running out of food at the end of the month, well, you better be able to help someone when they say I need help. And that's a scary thing. I'll say as a doctor, in a doctor's office, right? Because I went to medical school because I want to help folks, right? And the idea of opening up, right, that can of worms of, oh, gosh, food, okay now I have to solve poverty in addition to all the medical stuff, yikes. But it doesn't have to be so overwhelming, and so what we said is, okay, if we're going to need to ask these questions in a standardized and routine way, we have to have an easy way to help folks navigate. And this is where the beauty of NCCARE360 comes in. How many folks have heard of NCCARE360? Yes, I love you! I was at a talk yesterday with my folks in the nursing home community, and I asked them to raise their hand if they heard of NCCARE360, and only one person did. So we have our work cut out, so thank you to coalition of the learning on this. So you know NCCARE360. It's embedding in electronic health records, and this is the epitome of embodiment of that vision, the knitting together, the optimizing of the healthcare and human services, the knitting together of our healthcare system and our communities.

And as a doctor, I'm obligated to say I hate technology, but we're really trying to find a tool that's beyond technology here. And what's been exciting about this platform and the way that our partners have gone about it, thank you to the Foundation for Healthcare Leadership, you're going to hear more from them and our partners at United Way and Expound 211 and Unite Us, what's great about how they've approached the work is the IT is secondary. It's the relationships that are primary. And I see Cathy, who is just such a champion for this, from Cone, and was our first -- was the first one who said yes, let's figure this out. It's really about building relationships. And if we are going to make progress at knitting together health and

human services, it's got to start with relationships. And if anything, this week has taught me is that change only happens at the pace of trust. And I'm learning that lesson more deeply every day, and that's whether that's in a trust in our political system or trust that we can all work together and invest collectively. But this is a place where I'm really excited to see what this is.

So we are deployed already in nearly half the counties in North Carolina and on track to be in all 100 counties by the end of 2020. And I want to thank, there's a number of folks who have funded and supported this work. It is almost exclusively supported by all philanthropy, and we did that intentionally to have it live outside of DHHS to be this collective platform that the state can use. This is not for Medicaid. This is for the state. So actually what we're seeing is a lot of folks, particularly in our aging population, use this platform. So I'm really excited about this. We're getting some good data back already. We've had over 1500 referrals through the platform and are already learning from that data about how we can continue to optimize what's going on in our communities and what's going on in healthcare to really drive towards health. So I think this is the game-changer. So keep your eye on this and this work, and if you're not already having your organization engage in it, make sure you're talking with us, and I want to thank Betsy Tilson and Erica Ferguson, who have just been unbelievable champions in doing this work and working 24 hours a day, seven days a week, getting it this far. I had sort of this figment of an idea in my head when I came here, and they are the ones that made it reality with these partners. So they're fantastic.

All right. That's another piece of infrastructure. And then the pilots in Medicaid is the other part of the investment, and this is another investment from the state where I want to help all of us learn about, well, what healthcare dollars should we use to pay for things that might not be traditionally healthcare, and that's a very slippery slope, and folks get very nervous about it, and I will tell you that when I sat at the federal level, we were nervous about it then. And so the fact that in a bipartisan way, we negotiated with the Trump Administration to say, hey, can we get some flexibility to really learn here and figure this out. I thought that was an incredible opportunity to, again, bridging both sides of the aisle, bridging health and human services to say, okay, let us learn about how we're going to spend dollars a little bit differently if we actually want to buy health. If we want to buy health and really embrace that, we can't just keep buying the same stuff. We've got to buy other stuff.

The classic example of the kids with asthma, and I've changed my example a little bit, but because I can't buy them new carpet because apparently carpet's bad overall for asthma, but instead we're going to rip up their carpet and give them linoleum. So it doesn't sound quite as nice, but we're going to give them hardwood floors. Right? Because those are the kinds of things that we should use our Medicaid dollars to buy that because why am I buying emergency

room visits when what I want to buy is health? So this is the opportunity to learn. And we are going to continue to move forward with this work. The cadence of this pilot was actually not meant to launch until 2021 in terms of service delivery. We're doing a procurement now for the lead pilot entities, and then there was a fair amount of time of capacity-building and building things up. So we're going to continue marching forward with this work and so I'm going to encourage all folks who are interested in this to stay engaged in this because it was running at a delayed cadence from the start of managed care, so I think we have a bunch of run room to still get ready for this pilot. Again, I think managed care is a when, not an if, and so we're continuing to run forward with this work.

But this is going to be huge, and not just for Medicaid, but so I can tell my fellow other payors to say this is what you should invest in because we realized when we were writing the rules around managed care, I wanted to tell the insurance companies to say, you must spend your money on this food intervention. Then we looked around at the literature and realized we didn't know exactly what to tell them to buy, or to do, or to invest in, and particularly, we didn't know what set of patients and what phenotype of patient or family needed a particular kind of intervention.

So this is going to be the exciting thing, and it is -- the work that we did on this started with thinking about evaluation. My first call was to UNC and to Seth Burkowitz to say how can we actually design this and to evaluate it in a way that we can actually learn. So I'm very excited that this work continues. Again, all of these under ongoing investments.

So let me end with some challenges -- well, I have one more slide. Don't worry. I'm still the half glass full kind of gal, so I can't end on challenges. So let me talk about how I see things moving forward.

So yes, we have political uncertainty, and that's not just about managed care implementation. We're going to do a lot of happy talk the next two days about how great North Carolina is, but honestly, the black eye of North Carolina is we have not expanded Medicaid. It's embarrassing. It's embarrassing. And it's well overdue, but it is also so necessary to help all of these things that we want to accomplish here be successful. I know this is the coalition of the willing, and all I would ask is that you continue to have conversations in different ways to help folks understand what's going on here and hopefully to get out of the partisan corners and to get to moving forward here.

So political uncertainty is always challenging, but, you know, we will work through it. And like I said, I think this is a matter of when, not if, and, right, it is right to make sure that we can have

all tools at our disposal to make us a healthier state of North Carolina. I was asked yesterday by a reporter, you know, about all of the things that we're doing in managed care, and aren't you so sad, and you're getting national attention, but honestly, the thing that we could do that would move North Carolina forward the most in terms of fighting the opioid crisis and reducing infant mortality and helping our rural hospitals, it's not managed care, it's Medicaid expansion and so I just want to make sure we get our priorities right on that. Now, I am fully committed to moving to managed care. I think it's important because we built in all of these pieces, but we've got to keep our eye on the ball here.

Okay. Then let's talk about all the change, right? If we're going to change from asking our system, I want healthcare to I want health, that's a big change, right? That means many folks are going to be waking up every day doing different things in our healthcare system, and that kind of change management, and I'll say we're doing that at the department, right? We are thinking differently, we are operating differently. We'll be making decisions differently, we're budgeting differently. We're thinking programmatically differently. That change management is hard. It takes a constant recommitment to the big aim that you're aiming for, and it takes really thoughtful leadership over many, many years, which is really hard, particularly if you think about government, when things change often in the government space, and even in any organization you have changes in leadership. So continuing to focus on why we're doing all of this and focus on that change management is really important.

You're going to hear about data infrastructure modernization. I think that the reason I think this can be successful now than maybe back in the '90s when similar activities were tried, is because I think our data infrastructure is already so much better, but it needs to get way better and easier for folks to use as we move forward. There's a whole session on this, and I'll let them get into it. But at the end of the day, I'll go back to the change happens at the pace of trust. And that's about culture, and do we all -- are we going to all link together here and say, yep, we're still committed. Yeah, we had a setback. Yeah. We all have different ways of viewing the world, but are we still aiming towards health and doing that together? And sustaining that kind of culture change.

So I'm going to end on thinking about achieving better health as a choice. I think we've made a commitment over a number of years to a vision of health. We've been aligning incentives and initiatives. We've been aligning that infrastructure investment, and we've continued to make that choice. And I know that we will continue to make that choice going forward. And so I just am so appreciative that folks have committed to this vision, that we've had the shared commitment to this vision of buying health in North Carolina, and it's not just the department, and it's not just our dominant payor, Blue Cross, right? It's really been a collaborative effort. So

this vision of buying health to this partnership in alignment, and really, it's all about the children, the families, the communities that we serve. Right? That is hopefully what you will remember from today, is that I think North Carolina's special. It is. It's not because we have necessarily the best institutions, which we do, and not because we have the best doctors, because we do, and not because we have fantastic partners. We do. But it's because of that shared commitment. That is why I think we are getting the attention, and we're able to accelerate progress faster here.

So I am very hopeful for the future. I know we're headed in the right direction. I think these two days of learning are going to re-commit us to that path, and hopefully we'll accelerate our progress even further. So I'm just honored to be in this role, grateful to have this opportunity to work with all of you as we chart some very hard ground. Like, this is very hard. But it's right. It's the right direction, and I look forward to continuing to working on it with you. All right. Thank you.

[Applause]

>> DZAU: So thank you very much, Secretary Cohen. I think this illustrates, I mean, real leadership, and we're so pleased that she is, in fact, our leader. She said North Carolina's special, and I totally agree with it, which is what I said myself as a Carolinian. We live here. We work here. Even though I'm in Washington, and we solely believe in this.

A couple of points I thought she made, I just want to re-emphasize this. First, Medicaid expansion. I think the data is very clear that Medicaid expansion, through the 30-some states that adopted it, that's making a huge difference. And, you know, I think that Mandy, keep going at it. Governor, I think we need it.

Second is that she -- what she's doing in bringing the social dimensions to healthcare is critically important. I want to call your attention to the book here that you all have. In fact, on page 1465 -- the book's not that big, but it's an article in here that I wrote with my steering committee. There's a figure in here, which is figure 4 from Elizabeth Bradley's work, and what that figure says is that if you look at the cost of healthcare, we are by far the largest in the world. But if you look at cost of healthcare and social expenditure rate to health, we are actually middle of the pack. That simply means we're putting so little in to social expenditures, and what you're doing, Mandy, is exactly the right thing, because by investing the social aspects of health, we're going to need much less health expenditures. So I think that, you know, thank you for your leadership.

>> DZAU: So with that background, I would say that Secretary Cohen's framed up the day really, really well, or two days. We need to move the program along and I'm going to ask Mike McGinnis, executive officer of National Academy of Medicine to come up and run the rest of the program. Mike's work, in fact, many of you may or may not know, he's one of the first to point out about the fact that health is determined by factors outside of healthcare. I still remember that VIN diagram he has that 10 percent of health is determined by the care, and the rest is by all the things we've been talking about. So Mike McGinnis.

[Applause]

>> McGINNIS: Well, thank you, Victor. And thank you especially to Secretary Cohen for a really wonderful keynote. I can't help but invite us all to offer another round of applause for Secretary Cohen.

[Applause]

It's clear that you have, in Mandy, a person of vision, passion and commitment that's going to move the ball forward along with you. And we're all going to benefit from that across the nation.

As we move to the program, I'd like to make a brief reference to three foundational elements of the meeting, but before I get into those, I want to invite our panelists to come up so I can talk while they're moving up, and we can move along in our -- in the progress of our agenda. Victor made reference to the -- to your booklets. I hope you've picked them up. If you haven't, pick them up sometime during the day. A wonderful job of pulling things together. Includes the agenda, the speakers, the planning committee, thanks, again, to the planning committee, and a few resources, including the article that Victor mentioned.

What I want to do right now is draw your attention to the very last page of that booklet, which revisits the organizational construct of today's meeting, because the meeting today and tomorrow has been constructed around the eight summary priority areas that were identified by the steering committee across that expansive examination of 19 topics. Some key elements were identified for special focus, and you'll actually recognize these in many ways because even though it's not noted here, it was noted in Victor's presentation that these eight issues fall into two groupings. One of them is action priorities, and the second is infrastructure priorities. And they reflect, therefore, what Secretary Cohen was presenting to you, and that is in order to achieve this vision of health, one has to have a nation and a state and a locality has to have the incentives for action and the infrastructure investments.

And so you see here the first four of these are Incentives For Action, Pay For Value, Empower People, Activate Communities and Connect Care, think NCCARE360. And the second four are focused on infrastructure issues, Measure What Matters Most, Modernize Your Workforce Skills, Accelerate Real-World Evidence, and Advance Science, the Research Dimension. These were designed for a national focus, but they clearly apply to the state and local arena as is illustrated by the strategy plan that you have constructed here in North Carolina. These are the basics. I'm staying with a few of the others from the National Academy of Medicine at a local Hilton down the road, and when I walked in to that Hilton, I was reminded of what someone asked Conrad Hilton when he was about 90 years old and had a long career in business and community leadership, and they asked him, what had he really learned, what was the most important lesson he had learned throughout his years of business and community experience, and he said, the most important thing I've learned is that you keep the shower curtain inside the bathtub. It's back to basics. And it's these basic elements that are reflected in the plan that Mandy has shown and the elements that were identified as key priorities by the steering committee for Vital Directions.

The second comment I want to underscore as we move to the panel is the fundamental importance of state and local leadership. We learned that clearly in the course of our work, and that's why we're so pleased and grateful to have our inaugural activity in that respect here in North Carolina, and it's also an important opportunity for us to learn from you as we think about Vital Directions 2.0. Vital Directions 1.0 was developed in fulfillment of our obligation as the National Academy of Medicine to provide advice to the nation, and it was clear that there was a change in administration at the end of the Obama administration to the next administration, and that's motivated our focus on Vital Directions. Because there's an election coming up, there may be a change in administrations, and we need to be prepared to emphasize key issues in that respect as well. So we're going to learn a tremendous amount, given the importance of state and local activity, from all of you and from these two discussions today.

And the third point I want to emphasize is how well you are positioned for traction. It's clear with the governor, the secretary, key legislators we had here, wonderful planning committee, a beautiful venue, and incredibly informed participants that you are well-positioned for traction, and that's why especially we're grateful for your being here.

There's another reason that you're well-positioned for traction, and that's because of the good work of the NAM staff, and I want to point right over here to Jessica Marx. So at the beginning of the program, to thank her and the other staff that she worked with for their good work.

[Applause]

>> McGINNIS: So with that, let me now turn to the first panel of the symposium and turn it over to Dr. Pam Silberman, who's going to lead our discussion on health and healthcare priorities and challenges to North Carolina, and offer perspectives on those pressing challenges. Thanks to each of you.

>> SILBERMAN: Okay. I'm going to see if I can figure out how to work this. Oh, there we go. Okay. Is this working? It is. Okay. Great. Hello, everyone! And welcome to the symposium and the first panel discussion. We're working to really set the ground for the rest of the work that you're going to be hearing over the next two days. So in this panel discussion, we're going to be talking about health and healthcare challenges facing our state. I'm going to give a little bit of an overview and then I'm going to introduce our panelists and they're going to give their perspectives.

So what I want to do, though, is start with a little bit of the history of health in North Carolina because I think it's really important for us to know where we started from, see how far we've come, and then to put the challenges that we're facing today into perspective. So I'm going to go back to the 1940s. Many of you know about this in the 1940s, but North Carolina had the notoriety in the 1940s after World War II of having more men rejected for health reasons in World War II of any state in the country. And that led our governor at the time, Governor Broughton, to create a commission to try to figure out what was going on in North Carolina that we had so many people rejected for health reasons. And that was a hospital and medical care commission, and it led to something that was known as the Poe Commission, because Poe was the doctor who was -- actually, I don't think it was a doctor -- who was in charge of that commission.

And the Commission, the Poe Commission, created the Good Health Plan. So I'm going to do the same thing that we did before, which is how many of you have heard of the Good Health Plan in North Carolina? Only about less than a quarter of you. You have a treat. Hopefully we'll hear it later today, I don't know if we will or not, but if you haven't heard it before, you should go and Google "Frank Sinatra and Dinah Shore, It's All About You" because there was a song done about the healthcare in North Carolina and it's really fun.

But, the Poe Commission came up with a series of recommendations, and the reason I put it up here is because when you look at that list, you're going to see how many of them are still plaguing our state today. They said we needed more physicians. We needed more hospital beds. We needed greater affordability of care, and more health insurance coverage. We

needed to address health disparities. We needed more community resources to address the needs of people with mental illness. We needed greater funding for public health and we needed a school health program.

And if you think about what Governor Cooper said earlier today and what the secretary said, so many of those issues we are continuing to work on right now.

So I'm going to fast forward us to the 1960s or '70s because I want to highlight something that came up earlier in the discussions, which is that we are a state of innovation. In order to address the primary care shortage, North Carolina was the first -- Duke had the first program in the country for training physician assistants. It grew out of Duke. Around the same time, we had one of the first nurse practitioner programs in the country. So we were at the forefront of training non-physician clinicians who could address the healthcare needs of our state.

We were the first state to pass innovative health legislation at the time, in 1975, to allow nurse practitioners to practice. We are now a little bit behind the curve in terms of nurse practitioners and scope of licensure, but at the time, we were at the forefront.

We created the first state office of rural health in the country to try to address rural health challenges. We were one of the first states to create an Area Health Education Centers Program to help continue education for practitioners. Again, that grew out of the Poe Commission and what the Poe Commission recommended.

And then, of course, we created CCNC, Community Care of North Carolina, which is an award-winning Medicaid care management program that really helped launch us towards improving the quality of care we provided to Medicaid recipients and to link them with a medical home. So we have made -- we have been innovators and we did that clue collaboration between the professions, between communities in order to address these problems.

But we still have challenges that we're facing. As a result of our past efforts, we did put more emphasis on expanding the health professional workforce, but we still lack primary care providers to meet the needs across the state, and dentists, for example. If you take a look at overall health professional shortages, we don't fare as poorly as we do when you look at geographic distribution. We have a significant problem with misdistribution of health professionals. North Carolina is not unique in that regard, but you can see from the slide that we have 82 counties that are considered either in whole or part a primary care shortage. We

have too few primary care providers. We have 84 counties that have too few mental health providers, and 74 counties that have too few dental health professionals.

And then, of course, we've already heard about the fact that North Carolina has not expanded Medicaid, so North Carolina has one of the highest uninsured rates in the country because of that -- of the fact that we have not expanded Medicaid.

Our clinical care system is good overall. If you look at the Agency For Healthcare Research and Quality, they produce a report card that looks at how we were doing on clinical care and you can see that there are many areas where we are well above the national average in terms of person-centered care, care coordination, acute care, chronic care management. I think a lot of that came out of the work from CCNC and some of the other initiatives we've had in the state. But we have other areas where we have still challenges, and where more work is left to be done.

Now, this chart is a little bit harder to read. It comes out of health affairs. It's a recent article that came out of health affairs that shows how North Carolina's doing compared to other states in new model innovation, adoption of new models. And this slide in particular, it's how many ACOs, Accountable Care Organizations, we have in the state, and how many people are covered by that. And it shows when you can sort of try to discern the difference in the color of the blue that North Carolina's slightly above average in both regards there.

So clinical care is not our problem. Stepping up to innovation is not our problem. Where we have our problem is in those non-medical drivers of health. We know from the work of Mike McGinnis and from the work that's followed from the community -- the county health rankings and Robert Wood Johnson, that only about 20 percent of people's health outcomes are really attributable to the medical care we receive. So much more is due to the social and environmental factors, the physical environmental health factors and health behaviors that we engage in.

And when you look at our data, this is where we really have to focus our efforts. And that's what's so exciting about what the state is moving in to with healthy opportunities. We are 40th in the percentage of children living in poverty. We are 35th in health disparities. We are 45th in median household income. And that leads, of course, to poorer health outcomes, where we also are at the bottom of infant mortality, of low birth weight, and of premature deaths.

So this the take-away is that North Carolina has both great strengths and many challenges we have to face. We have a history of innovation. We have a history of collaboration. We have

quality clinical care. We are willing to and have historically been innovators in new care delivery, and all the work that you've heard about with Medicaid transformation I think is going to really move us forward, but we have significant challenges that we are -- have to face that we've already discussed.

So now, let me introduce our panelists and the rest of the time we're going to hear from them talking about both the strengths and challenges that our state faces.

First I'd like to introduce Karen Smith, who is to my left. She is a family physician and she is a medical director of Aledade's North Carolina ACO.

Then to her left is Steve Neorr, who is the senior vice president of Population Health, Cone Health, and the senior vice president and chief administrative officer for Triad Healthcare Network.

And then to his left is John Lumpkin, who is the president of Blue Cross and Blue Shield of North Carolina foundation, and a vice president of Drivers For Health Strategy at Blue Cross Blue Shield of North Carolina.

So I'm going to turn it over to them. I've asked them each to give about five to seven minutes in introductory comments, and really to say from their perspectives what do they think are the strengths of the state and what are the most pressing health and healthcare challenges facing our state. So Karen, I'm going to first turn it over to you.

>> SMITH: Perfect. I do appreciate the opportunity to be here. The best time to practice medicine is when we have the opportunity to make a difference in someone's life forever.

32 years ago I took the Hippocratic oath of medicine, and those words were inspiring then, just as much as they are inspiring today. The physician navigation journey through North Carolina's healthcare transformation needs us to think about what are the best physician characteristics? What do we have now? And then to take those physician characteristics and realign them with trend-setting strategies such as TOPPSS, Technology, Opportunity, Options, People-Pleasing, Scalable and Strategic, and then what is our best solution, the affordable care organizations? How are we utilizing those entities? And then finally to realize our prize at the end of the road, which is that comprehensive care in North Carolina.

My journey begins at the age of six years old. I was playing in my parents' home, and I fell down the basement steps, plunkety, plunkety, plunkety, plop, and I woke up, and what did I have, a deep laceration on my perfectly smooth skin.
Well, fortunately, our family doctor was at our home at that time. He was there caring for my sick mother, and so our pulmonary medicine family doctor went into his black bag and he sutured my chin at the home. Perfect suturing. But he left a scar on me which has remained forever, and that was a scar of the physician's compassion.

As we move forward in North Carolina's transformation, we recognize that that family doctor, that pulmonary medicine specialist, had the best characteristics of a physician. He was accessible. His quality was good. But he sacrificed cost and efficiency, what many of us know as the Quadruple A. And that is a challenge that many physicians face now as we attempt to integrate those principles in our daily practices. We're trying to implement those strategies for population health-based medicine for the treatment of chronic diseases. We also want to make sure that we are paying attention to preventive health, including that of vaccinations. In addition, we recognize the importance of social determinants of health. But we also recognize the need to continuously deactivate implicit bias.

And what about meeting the crisis of the day? The one that we continue to work with, the opiate epidemic? And so physicians are currently straddling between the world of the traditional fee-for-service and value-based payment models. And so we continuously seek solutions. And the solution that we have come up with the acronym TOPPSS, Technology, Opportunity, People-Pleasing, Scalable, Sustainable. But when you say technology to a doctor, we immediately think of our electronic health record system and many of us already begin to laugh at the humor of too many clicks, too much consumption of time and way too much cost. But then we do start to feel better when we think of the state-based health information exchange system and our bi-directional portals with our patients, and then we look at that and find some physicians are utilizing that technology for direct primary care practices and are starting concierge businesses.

And what about our vaccine purchasing businesses, such as the VAX Care corporation just coming into the state. But then our people-pleasing opportunities. We finally can utilize our little devices of our smartphones and use those to actually have secure messaging with our patients. Our patients can now hear us, and we can hear them. We can now act on their needs from what they have told us. And guess what? We finally put the patient back into their own care. And so that's what we're talking about.

But then we need to make sure that we're utilizing sustainable efforts. So we need to enhance our leadership and our own home, in our own patient-centered medical homes, as well as make sure that our staff have proper education in terms of health information technology, that they are Google savvy, and then we want to make sure that we continue to have those businesses that are sustainable.

By the way, those new practice trends are actually bringing those doctors, who left the traditional fee-for-service, are coming back into the joy of independent practice.

We move forward and we still recognize that the value-based payment model system is a little bit of discomfort for doctors. So we're still continuing to look for solutions. And we come up with the affordable care organizations, and some of us were entertained with the clinically integrated network, but before we even had that, we had the Community Practitioners Program a long time ago from the North Carolina Medical Society Foundation, and we trusted that program, and that program allowed physicians to go into communities where there were too few of us. And we recognized the value of that program.

And so now we have affordable care organizations that have come on to the environment, come in to our basic business plan, and we embrace them. And one such is that of the Aledade Organization. And Aledade, I like it. Aledade keeps it simple, they keep it real, they keep it moving. And because of that, their basic tenet that we can see on our slide is what's good for the doctor is good for the patient and good for society. Aledade uses high-touch technology, people on the scene in our practices, as well as they have introduced business models that allow us to remain and practice, business investments that we did not have before.

And so as we move forward in terms of what is transformation in North Carolina, healthcare transformation for our practices, one of the things that we keep in mind is yes, we had the Quadruple Aim. Quadruple Aim was merely steppingstones, and now we are moving forward through our investments with the ACOs, with the CINs, and those are the ideas that lead us to TOPPSS. And from that we feel like we will be able to obtain those healthcare system in regard to transforming North Carolina's medical systems in our offices.

Now, envision the six-year-old girl in the home of her 92-year-old visually impaired patient. He held my hand, and he said, you are a miracle maker because you are able to take the ordinary and create the extraordinary. And I say to each one of you, become miracle makers for the sake of North Carolina's healthcare transformation.

[Applause]

>> NEORR: John, I don't want to follow that. Thank you, Dr. Smith. I've got an admission to make. Let me see if I got my slides here. I've become an expert -- let me say this. I work for Cone Health for those of you who don't know. It's a six-hospital system based out of Greensboro, about a $2 billion health system. And I was brought in about seven years ago to start up at the time that was called -- it wasn't even an ACO, it was just the CIN. And population health wasn't a term yet, it was just an idea, and quite frankly, it was really about they wanted a way to partner with physicians outside of employment. That's how they got started.

So they brought me in. I had led a physician group out of Texas. I came in. They didn't even have an office for me. They had a spare conference room. They led me in and said, go do it. And so I've become an expert over the -- these seven years of really what not to do, and so here I am today.

But it's been really a great lesson of how things can change, and one great example is I work for a hospital system. A hospital system, and I can -- I have to give a lot of credit to our leadership when they brought me in because they really believed that there was a different way, and so did the physicians, that the current healthcare system just didn't work. And so from the beginning, we always were a little bit at odds with the hospital, because now my team has grown to almost 200 people between nurses and pharmacy and everything else, and my team of people do something every single day to keep people out of the place across the street. So we're always at a little bit of conflict all the time.

When they send out the daily census, and as a hospital executive, I promise you my reaction to a high census is very different than the hospital president's. It just is. It just goes to say.

But it's been a journey, and it's been a lot of fun. We'll kind of share some of those things here. But to answer the question, so what are some of the strengths? I've been here for now eight years. It's hard to believe. And a lot of these we've already heard from Governor Cooper and Dr. Cohen. Obviously, we truly believe we have a great local public health system. We have really unsurpassed, I think, education system here that really benefits in terms of both our providers and our professionals. You know, I will say, Pam, I would give us a mark, I think we're way above average in ACOs. I think, you know, there's only about 40 next gen ACOs in the country, and these are organizations that take full risk. We have three of them right here in North Carolina. Almost every health system in the state is an MSSP, so I would say that we are way above average. So no offense.

And one thing local I would like to call out is at least in our market we're seeing a lot of much greater connection with our public and private partnerships, and this I like to call out the one, the Get Ready Gilford initiative. We've already raised over $30 million and people in our community are really interested in early childhood education.
The challenges, again, I think we could go on and on about those. We've heard about a lot of these. I would like to point out this whole idea of access to quality, affordable healthcare. One of the things we focus on every day is really how do we lower the cost of total medical cost while improving quality and outcomes, that ultimately, when people talk about what is our mission statement, or what is my commander's intent, that is what we focus on every day. It's really quite simple. And one of the things that drives me crazy about our current healthcare system is I'll give Cone as an example. Everyone's trying to be more efficient and cut costs and we have this big initiative called Operation Effectiveness, and I give them credit for that. And then I look on their books, and they publish their community, how much they spend. And we spend $425 million in uncompensated care just with Cone, and I ask, after their kind of looking for the nickels and dimes throughout the system, I said who's managing that? What is the answer? No one. And the answer, we'll come to why that is, and this is one of my favorite quotes, and if anybody's heard me speak, I try to slide it in almost every single deck. And this is it. Because you're going to hear different perspectives from a health system, from a provider, from a foundation, insurance company, and one thing -- we'll all say the same thing. We all know the problems. We all know what the issues are. And yet, for whatever reason, it's like a mystery why we just can't make the change. And this quote, to me, summarizes it, and this is from Dr. Petal in 2006, and he says, every system is perfectly designed to get the results it gets. So I would make the argument that our system is working perfectly. We just don't like it. Our system is perfectly designed to deliver high-cost healthcare without any accountability for quality or outcomes. That's what we get.

And I'd like to share with you a simple example, and this will get you mad because you all participate in this. Most everyone here has got a job, I'm assuming, and if you look at your paycheck very carefully every two weeks, you have a little deduction for Medicare, about 1.45 percent of your pay. I promise you, it's there. And most people don't realize that 1.45 percent is actually goes to fund Part A, the hospital fund. And so when you hear of this idea that Medicare, the trust fund is going broke by 2026, which it is, that's really what's happening is we don't have enough people paying in out of their paychecks, that 1.45 percent, to cover Part A.

Well, part of being an MSSP, being next gen, we get claims data, and for those of you that have never really looked at claims data for 30 or 40,000 people, it's pretty interesting stuff. And then you start really realizing how big a problem this is, because what you start realizing is, as taxpayers, we're funding this, we start noticing we got people going to the ED30 times, 40

times, 50 times, 60 times. Our record-breaker still today is a lady that went 132 times in 12 months. And you're looking at this, and you're like, how could someone go 132 times a month? How could someone go 60 times a year? 132 times a year. And the question is it's real simple why that happens. There is no one, the system -- there's no one in the system, it's not incented to stop it. This is a woman -- and so we had a nurse went out to her home. It was a person in a wheelchair in a home without a ramp that had not been to a primary care doctor in three years, had rampant diabetes and no refrigerator. So guess what, any time she was lonely, any time she was hungry, any time she needed anything, who did she call? EMS. Design problem. Where does EMS take you when you call them? Hospital. Why is that? That's the only place they get paid to do it. It's a payment problem. It's a payment design problem.

So guess what, when she calls EMS, she's going to the hospital, and guess what, she goes to the hospital, they get paid for that. So there's no one there to fix that. And so what did we do? We sent out a nurse, and we realized, guess what, so how does it work with our arrangement with the government? They basically said last year, we'll give you $263 million if you spend less than that, you get to keep it. If you spend more than that, you've got to pay it back. Guess what? If I went back to our health system and said your margin is now based on keeping people healthy, what would they do different? Everything. Everything. Absolutely everything, because in our perspective, we looked at it and said what would we do different for this lady? Guess what? Is it worthwhile to build a ramp in her home? Yes. Is it worthwhile to pay for a refrigerator? Yes. Is it worthwhile to hook her up with transportation and do education for her? Yes, yes, yes. And yet in the current system, that is not incented.

And who paid for that? We paid for it out of our pocket because we knew if we stopped her going to the ED we would get the savings. That is the fundamental difference. And that's what's so exciting about this -- these changes that we've -- that we get to be a part of here.

One last thing. Changing this system, I'll say this -- my one last thing, one quote from Don Berwick, this is, I believe this wholeheartedly, everyone plays a part, but at the core, providers have to change this. I love this quote from him. If improvement is the plan, then we own the plan. The government cannot do it. Payers cannot do it. Regulators cannot do it. Only the people who give care can change it. And so we have to make the incentive. We talk about Dr. Cohen, you know, aligning the incentives. It has to align with providers. Thank you.

[Applause]

>> LUMPKIN: I get to follow you.

[Laughter]

So I'm going to talk about the work, and as you've heard, I've got two hats, so I'm going to shift from one hat to another when I talk about some of the work in the company, as well as the work of the Foundation. And the mission of Blue Cross Blue Shield of North Carolina is to improve the health and well-being of our customers and communities. And you're going to hear a lot about some of the initiatives that we're doing on value-based purchasing with other speakers. I'm going to focus on the issue of communities. Because the health of our nation, the health of this state, and the health of people is determined by the health of the communities where they live.

Now, when you look at the data for North Carolina, and Sig, it's good to see you here from Wake County, because Wake County is the healthiest state in this nation on the county health rankings, and if every county were as wealthy as Wake County, North Carolina would be the healthiest state in the nation. But that's not the case.

Just five miles from here, five miles from here, where Wake County is, but in this particular zip code, a distance of just five miles is reflected in an 11-year difference in life expectancy. So as we begin to look for solutions, we have to look into our communities, because when you look at the way people spend their time, there are roughly half a million minutes in every year, and people spend about 120,000 of those minutes working, 93,000 watching TV, 27,000 eating and drinking, 15,000, 16,000 shopping, 7,000 on sports and exercise, that's a problem right there, and only 60 minutes on average in this country in a clinical visit.

So health happens where people live, learn, work and play. And this isn't new. Karen talked about her Hippocratic oath, but one of the things that Hippocrates said 2600 years ago, that if you want to know about the health of the people, you look at the air that they breathe, the water that they drink, and the communities where they live, because these reflect the choices that influence people.

My former boss at the Robert Wood Johnson Foundation, Risa Lavizzo-Mourey, said that the choices people make are determined by the choices that they have. And let's think about that. Those of you who came from out of state, you were in an airport, and, like most every other airport I've been in, this is what you see when you have a choice for food. It makes it really difficult to make a healthy choice.

I actually was in one airport, and I saw this thing that said fresh green, and I said okay, I'll go there to get something to eat because even though it's all the way on the other side of the

airport, and I walked all the way over there, and it was a florist shop. Now, the good thing about that was I did get some exercise.

A few years back, I was back at the airport, and this is what I saw. The opportunity to make the healthy choice when that's presented versus what we typically see in an airport are the kinds of choices that we have as a nation.

Now, Rocko Pearla from the health initiative has looked at some of the data related to North Carolina looking at the health in our counties, and we begin to focus on how we see health from a healthcare perspective, from a health cost perspective. When you look at each one of those dots is a county, and we look at on the average, a person living in that county, how much money is left over after they pay healthcare expenses, then you might make the assumption that we're doing pretty good.

But the reality is that people also have -- you know, they have to pay for food. They have to pay for housing. They have to pay for transportation. They have to pay rent. They have to pay child care and taxes. And when you do that same analysis, almost every single county in North Carolina is in a deficit situation. People have to make difficult choices. A choice between -- and I'm sorry this didn't show up -- but they have to make a choice between housing, transportation, healthcare or food, and all too often, food loses out. That's why we have a problem in this state.

We are the eighth largest agricultural-producing state in the nation, and we rank 48th in food security. We have a challenge. And when you begin to look in North Carolina, the impact upon healthcare is dramatic. When you look at the same counties and you begin to rate them and look at those counties that have food insecurity, we see increased medication non-adherence. And further, when you look at food deserts and counties, those that have more food deserts also have increased medical expenses. So these are problems related to where people live.

And I was glad that Steve showed the slide from Paul that showed that, quote, that said every system is perfectly designed to get the results that it gets. And the systems that we have in North Carolina are systems that are decades in creating the problems that we're trying to address.

This is Greensboro. Greensboro is about 50, 60 miles away, and what's interesting about Greensboro, and this is thanks to the University of North Carolina in Greensboro, this is a map of Greensboro that was designed in 1936, and it talked about where to invest money in housing.

The red dots are where the term "Red lining" came from. And yellow are the areas that were next. The green are the best areas. And when you overlay that same area -- now, imagine the same area and look at this particular one, there's a lot of colors on here, but just say that darker colors means that high-income, high-housing value, and the paler colors, low-income, low-housing value, exactly in the same locations as the red-line communities 70 years ago. And then when you add in concentration of racial poverty, the same areas that we saw earlier on in the red lining.

Red lining is a system that is imbued a system of racial inequality that has to be overcome if we're, in fact, going to improve health outcomes in the state. So when we look at the drivers of health related to food insecurity, and you say well, let's look at it compared to health insurance, there's not a strong coalition -- correlation. And these, are, again, from Rocco Pearla at the Health Initiative. When you look at income, because we know income is directly related to health outcomes, there's a much stronger correlation. But in North Carolina, the strongest correlation is based upon race. And that when you look at the percentage of African-Americans in a particular county, the larger the percentage, the more likely they are to be food insecure.

So to make a difference, we need to address the issue of health equity. Health equity is that everyone has a fair opportunity to be as healthy as possible. And you may have seen this infographic from the Robert Wood Johnson Foundation, that the difference between equality, that is everyone gets the same thing, and equity, is that people get what they need to be healthy. And this shouldn't be a new concept for those of us who are clinicians, because we know we don't give every patient the same doses of insulin. We, in fact, titer their dose based upon where they live, their activities and how they live their lives.

And that the key issue and vital directions race for this is we think about making these solutions in addressing health equity is that we have to listen to the voices of communities.

This is Paula Avery. Paula Avery is part of the Community Centered Health Initiative of the Blue Cross Foundation, and her changing moment , the thing that really transformed for her was when someone asked her, what's the vision for her community. And her answer was, gee, I had never even knew I could have a vision for my community.

And when communities begin to develop visions, then change can happen. Paula Avery's vision was setting up a community garden. And we have been working at the Foundation with communities across the state, each one developing partnerships of healthcare and community organizations, but with people who are involved in the communities taking the lead. It is that

kind of leadership that can make a fundamental difference. And when you go back to Greensboro, that coalition there, working together with the University of North Carolina in Greensboro, the housing authority, community organizations and healthcare organizations began to address the issue of housing. And after five years working together as a coalition, not only making progress on that, but they're also addressing food and healthy exercise.

We think by working together between the Foundation, the company, other philanthropies, Laura, I see you out there, and the Department of Health and Human Services, that our Foundation's mission to improve the health and well-being for everyone in North Carolina, making North Carolina one of the healthiest states in the nation in a generation, is possible. [Applause]

>> SIILBERMAN: So I'm going to switch up the order a little bit and I'm going to just ask a couple of follow-up questions to ask them to probe a little bit deeper into some of their main points, and I'm going to start with you, Steve, because as I said, I'm going to switch the order a little bit. So I've had the opportunity to hear Steve talk a couple times because they -- Steve's organization did help create one of the first ACOs in the state, and it was a highly successful ACO, but I've heard him talk on numerous occasions about the fact that what they really need to be doing as a health system is investing more in upstream social drivers of health. And that it's been a challenge.

He gave us an example in his opening remarks about how, with that one person they did invest in upstream social determinants and addressing the isolation needs of that individual. But I want you to talk a little bit more about what will it take to get a whole health system to really move upstream and start looking at what are the real drivers of health and not just the medical care that we're providing or not providing.

>> NEORR: Sure. One of the things, and I have to give Cathy Cole the credit for this. She came up with the idea of Main Street for social determinants. I'm going to hijack that and call it main streaming of social services. I think one of the biggest mistakes we make is when we talk about social services, even in these contexts here, we think of it in terms of Medicaid patients, impoverished patients, homeless patients, and I will tell you that one of the nice things about NCCARE360 was the fact that we got to go out to our primary care offices and implement this, and what was shocking was for most of our primary care practices, they had no idea of these available services in the community. If you do not have a primarily Medicaid practice, you had no idea.

So what we realized is there a socialization here that we had to start making, and I have to give a lot of credit because really it was NCCARE360 that really we started introducing this, and they're like, oh, my gosh, this is available? Yes, it is. And so that's been a really great way to do that.
So from that perspective, a lot of this is doing education with our practices about what's available, and helping them along. We were just, like I said, somewhat surprised by the folks that don't -- just aren't aware of those particular services.

>> SIILBERMAN: So let me turn now to John. John, you talked a lot about sort of place base and the differences in health outcomes between -- in Wake County, the 11 years difference and five miles, if I remember that correctly. And you talked also about disparities. The last slide you showed was the strong correlation between sort of health outcomes and race. What do we do as a state? I mean, it's great to invest in a particular community, but how can we move the needle from a state perspective and really start addressing health disparities and health inequities in our state?

>> LUMPKIN: The critical task as a state is to identify and support our communities. I believe, and our state health officer in Illinois before I went to the Robert Wood Johnson foundation, that the role of state agencies were to create the conditions in which communities could be successful. And I think that when we look at, as a state basis, where are the barriers, and where can we facilitate change at the state level?

Let me give an example. I talked about food insecurity. One of the barriers that exist around food is that because regulations are in place, local growers can't sell to schools unless they have certain certifications which becomes cost prohibitive for those growers to be able to sell to those local communities and local schools. So removing those kind of legislative barriers, and providing support to communities.

>> SIILBERMAN: So let me come back at you one more, and then I'm going to turn to Karen. Which is I think that makes sense in certain contexts, but how -- we have a problem with disparities in wealth in our communities. Some of our communities, like Wake County, is pretty wealthy. Some of our communities, like Burtee County, isn't. I happen to be on the board of Alliance Health Plan, and they -- during the last hurricane, they were talking about how they were lucky because Fayetteville had housing stock where they could re-house people after they lost their homes, but that some of the other communities that were affected by the hurricane didn't have housing stock, and they don't have the wealth in those communities to build housing. And we talked about I think -- I can't remember whether it was -- I can't remember the analogy that we talked about earlier, but there's a movement of housing first in order to get

people in to housing is one of the critical factors to address social determinants. So how do you, in a state that has this inequal wealth and inequal ability, how do you rely purely on communities to do it? What else do we need in order to address some of those challenges?

>> LUMPKIN: So I'm going to start off saying number one, we need to expand Medicaid. Number two is that as we think about ways that we improve our systems, we give concern to our local communities. So you take Asheville. We, as a foundation, supported the Mothering Asheville as an initiative, as part of our community-centered health. And what they did was they were addressing infant mortality disparities in Asheville. And when they address it, they developed a doula program, and they hired women from the community and they trained them to be doulas. So the care that was being provided in the community didn't come from outside, it came within the community. That led to economic development.

And as we think about Medicaid transformation, as we think about shifting to value-based purchasing and partnering with health systems, the emphasis on using local resources and building up and supporting the capacity of local non-profits to provide these services rather than having a company from Philadelphia coming in to deliver meals, I think that's a critical aspect of the kinds of transformation we need that builds local economic development and stability into the system.

>> SIILBERMAN: Right. Karen, you've been one of the most articulate spokespeople I know for many years about the role of electronic health records and using data systems to really understand your patient population and to really connect them with care and provide high-quality care. But what we heard earlier today is the challenges physicians still experience in using these tools to try to improve health, and now we're adding a new layer on, which is the NCCARE360, which will be in the electronic health records to help connect them to social services and other human services organizations across the state. How can we help work with practices to make sure they're ready to fully engage in sort of the new practice reform and help patients get the care that they need to address all of their health needs?

>> SMITH: The practices are now seeking solutions, which we're finding in the affordable care organizations, as well as our clinically integrated networks. We are also finding solutions on the state level, as well as the national level. So what I'm getting to is fragmentation in terms of our solutions, and how do we get everything on one platform?
The affordable care organizations have helped us to understand what are those measures that matter and how do we teach our staff and our teams in terms of recognizing those measures, make sure we're gathering them, that we're collecting them, and then to be part of an ACO that has a high technology platform that can accept those measures, use that information, and allow

that information to now go back in to the community for the patient. But I wanted to highlight a project that is part of the American Academy of Family Physicians, and it comes through our Center for Diversity and Health Equity. It has been recognized on a national level. Therefore, the education has already gone out to those physicians who are part of the organization. But they recently released a gravity project, and a gravity project is utilizing the longest acronym I will use this year. HL7FHIR Accelerator Program. Okay. What in the world is that? And basically it is an advanced data exchange system that now allows us to utilize the language, the metric that can be captured in a interoperable system, which is also recognized in our electronic health records, which will also be identified in our ACO platform.

Finally, we are speaking the same language, so we're taking the basics of food insecurity that we have been told by a patient in a office, we are now converting that to a metric. That metric is now being measured in our systems, and we can now look at our data and put it back into the communities.

So what I have just said to you is we are getting beyond the problem of interoperability and getting beyond the problem of fragmentation so that we can get to the solution for the patient.

>> SIILBERMAN: Can I ask you a follow-up question? Because you're the expert here. So one of the challenges I hear a lot about, and this really gets to a question that Secretary Cohen was talking about, one of their goals was to integrate behavioral health and physical health. But we have these fire walls that have been built in because of the federal level of us being able to share behavioral health, or, in particular, substance use disorder information across providers.

I'm wondering if you think that there are solutions to how we can address that so that a provider really can address the whole patient care rather than still staying in these silos of this is physical health versus behavioral health.

>> SMITH: And I appreciate that question because we are working with a pilot project with the North Carolina Medical Society Foundation, which is Project OBOT, and that project is layered on the recovery platform. The recovery platform not only allows us to bring the patient into the practice, brand new individual. I had one yesterday, used heroin for 45 years. And now we can bring that patient in. Their information is actually captured on the recovery platform as part of Project OBOT. I'm able to see that patient. I'm able to provide them medication-assisted treatment for them. In addition, the care coordinators are able to access that information. We have a psychiatry consultant available to us, as well as LCASS, and I could utilize the urine drug screening information and access the PDMP, which is the state and CDC-recommended tool. All of that is on one platform. There are no firewalls on that platform

because it is an agreement, it is a collaborative, and it works well, and that one patient will be coming back to our office for induction next week. So we are utilizing that information without barriers of the firewall.

>> SIILBERMAN: Okay. I think we're coming to the close of our session. We have about ten more minutes. I'm going to ask the panel to really briefly, if you had one policy solution that you could raise with the state, we've already got the Medicaid expansion. I think all of us up here would agree with that. But if you had one policy solution that you think could make a huge difference in terms of improving the health of our state, from whatever lens you want to take it from, what would the policy solution be? And I will leave it up to the three of you to decide who wants to speak first.

>> SMITH: I'll go first. So the one policy solution that I would suggest is certainly looking towards decreasing the fragmentation. As a physician I feel like I'm pulled in multiple directions and if I could get it all together in just one day, that would be wonderful. Could I accomplish what we set out? And I also say as we develop policies, make sure we pay attention to implicit bias, from the institution level all the way down to the individual practicing level. I feel like that has been a great hindrance to much of what we try to accomplish. So to sum it up, let's pull our pieces of our puzzle together, get rid of the fragmentation, create interoperability and allow us to function in peace in one day's time.

>> NEORR: So Medicaid expansion has already been mentioned, right?

>> SIILBERMAN: Yeah. But you can say it again.

>> NEORR: No. That's fine. And I do tend to agree with your comment about the ability to share information more readily. This one is kind of one that was brought to my attention not too long ago, but we're certainly focused on it, but, you know, there's seven counties in North Carolina that have opened up their public school playgrounds and walking trails to community members after hours and on weekends. We think that should be everywhere across the state, just to improve access to people have activity.

>> LUMPKIN: So I'm going to say an increased investment in early childhood so that every child enters school healthy, at a healthy weight, with good teeth. Having had adverse childhood experiences addressed, with social and emotional skills so that they have the skills they need to be successful. Early childhood is critical for educational attainment, and whether or not that child will graduate from high school. And the difference in life expectancy between someone at age 25 who has graduated high school and gone to college versus one who hasn't graduated

from high school, is nine years. So I think it's a policy difference that can improve health across the state.

>> SIILBERMAN: Great. Thank you. I want to just take a minute or so to summarize some of the key points that I heard today, and then I want to thank our panelists. This was a great opening session. We really had a wealth, sort of a wealth of perspectives on what some of the key challenges are in the state. I think fragmentation is clearly an issue, but it sounds to me like we are making huge strides from when I heard Karen probably ten years ago talk about some of the fragmentation issues we had there to what we're doing now, both in terms of moving towards better interoperability, and also towards coordinating care that we're getting with this new models of care, and that there's been some great improvements in helping provide the supports needed for local practitioners to really be able to engage in this new model of care.

From Steve I heard a lot about the importance of really looking deeper at what is driving people into the health system so that we can address the underlying problems that people are facing that's causing them to come into the system. And really stepping back and saying, the goal isn't to put people in to hospital beds. The goal is to figure out what is driving their health needs and addressing that. And that may mean some discomfort in our period of transition between the sort of different financing models that we have, fee for service, keeping a bed occupied, and value-based care, keeping people back in the community. But that it sounds like we are making great strides, and I am glad to be corrected about how much ahead of the curve North Carolina is in moving in those innovations. And from John, we really -- he emphasized the real point about addressing disparities, not just racial and ethnic disparities, although those are key to the whole population health in the state, but looking at geographic disparities, looking at access to food. Looking at ACEs, adverse childhood experience, and that we need to focus in both at the local level and let communities sort of from the ground up figure out what is most important to them and get them involved in addressing their health problem. But also creating the policies for our state to enable us to be a healthier state, such as Medicaid expansion, although I'm sure it was not limited to Medicaid expansion. Early childhood education as well.

So I think you've heard a lot today that you will be hearing over the next day and a half about how North Carolina is at the front in many areas. We have still a long way to go, and how we have the wherewithal and the knowledge to really move our state forward in terms of improving health.

I'd like to thank the three panelists for being here today, and for setting the stage for us.

[Applause]

>> MCGINNIS: Thank you, Pam, and to Karen and Steve and John as well for a really wonderful overview of the key issues, and a beautiful set-up to the next panel on place matters from health and healthcare disparities to equity. And if our next panel could come up.

By the way, we're a little behind, and one of the reasons I wanted to introduce and -- Jessica Marx at the outset, while you were all still in a good mood is that she's the one holding the time cards up, and so she may become less popular to our panelists as time goes on. But thanks again. And as we move to our next panel, which is made up of Mike Waldrum as moderator, Sharrelle Barber, James Johnson, Weyling White and Reverend Mac Legerton, let's again welcome them and thank our last panel for a wonderful start.

[Applause]

>> WALDRUM: Thank you. Appreciate it. We're going to -- this panel is called Place Matters: From Health and Healthcare Disparities to Equity. I first want to start by thanking the National Academies for bringing this discussion to North Carolina and thank Victor and Mandy for their work in coordinating this, and thank you, Mandy, for your leadership in this state. And I know it has been a tough week, but you are in the choir here, and as you've heard, we all are very supportive of your efforts generally and specifically with expansion in this state, which is long overdue.

I'm going to start by introducing the panelists who are each going to come to the podium and speak for about 10 to 12 minutes, and then moderate discussion, which is going to include you and further this discussion.

I do want to make an announcement right off the bat as I introduce the panelists, that unfortunately Dr. Jim Johnson, who had participated actively in this planning, unfortunately has a health issue and is not able to be here today, and so we're not going to be able to hear his expertise, which is always such rich input. But unfortunately, that just gives us a little bit of time, and we'll try to accelerate it a little bit.

First, I'm going to introduce all the speakers, and then they're going to come up in order and then we'll have the discussion. Dr. Sharrelle Barber is here from out of state and is the assistant research professor of epidemiology and biostatistics at Drexel University, and will be giving us some national and then local perspectives on an epidemiologic perspective, and then reverend Mac Legerton is a rural development specialist and non-profit public sector consultant, and served as the director of the Center for Community Action for 36 years, and is in southeast

North Carolina, and a very active community member there leading a number of important initiatives.

And then lastly, we'll hear from Weyling White, who is the practice administrator at the Roanoke Chowan Community Health Center in Ahoskie, North Carolina, and is, I'm proud to announce, the first African-American mayor of Ahoskie, North Carolina.

[Applause]

And I just want to give a shout-out. We're so proud to have a health CEO, and so interested in underserved populations, and in eastern North Carolina covering 29 counties, but we're so proud of Weyling and the work that he's done at the Community Health Center, which is a partnership with us there, and his community in driving many of these issues forward. So we look forward to the discussion.

>> BARBER: So thank you so much for the opportunity to be here. So I am based in Philadelphia, Pennsylvania right now, but this is home, and I actually was really excited to see Pam Silberman, who was one of my former professors at UNC, and I am tasked with just kind of grounding us, as a social epidemiologist, I think I might be the only one in the room, grounding us in some of the data and helping us to kind of think I think a little bit more deeply and critically about why place matters for health and why we need to be thinking about it in this context.

And so someone quoted Hippocrates earlier, but I'll say this again. He said something that is ancient, so we know that place matters. It's not a new thing. Tell me what is ailing you and I will tell you where you are from, right? And so place being fundamental to how we understand health and also how we understand health inequalities is really important and it's not new. And in fact one of my academic heroes, W.B. DuBois, in the Philadelphia Negro, also documented, at the turn of the 20th century, stark inequalities, depending on where people live. And I, as a social epidemiologist have really kind of thought about this at the intersection of place, right, so we know place matters for health for so many of the exposures that have been talked about and discussed today, but we also know that in this country, and in this state, and in the South in particular, place cannot be understood outside of race, and, more specifically, structural racism, and so we cannot talk about place mattering for health without having a serious conversation about how structural racism has created the places that we live and we learn and we work, and how that has implications for racial and economic disparities that we see as it pertains to health.

And so I actually want to position the conversation looking at place mattering at three different levels. I want us to think about this from a national and regional perspective and then kind of from a statewide and then looking at some of the local communities here in North Carolina. So this is one of the maps that actually got me started in my research, really examining kind of chronic disease outcomes. And this graph is really striking to me that the South in particular is known as the stroke belt, right? And at Harvard, when I was a doctoral student, someone said, oh, that's just race genetics, and I laughed and cringed, but I know it's the legacy of Jim Crow and slavery and things that has created these conditions in the South that are really fundamental to our understanding of health, right?

And so in that same class, I did a project on racial discrimination and hypertension because again we have to think about how these institutional factors have created the burden of health. And this is stroke, but we see this map for obesity, for coronary heart disease, a wide range of chronic diseases. The South and North Carolina in particular, bears the burden of these inequalities, right?

We also have been having a large conversation about infant mortality and maternal mortality across the nation. Really, thanks to some really powerful women in the reproductive justice space have really talked about the racial inequalities that exist, the striking inequalities that exist by infant mortality, and so we know that, you know, black mothers are ten times more likely to die in childbirth compared to their white counter parts, right? And so we see these striking racial inequalities, but again, this also shows up spatially, right? And so in the South, in North Carolina in particular, we have rates of infant mortality and maternal mortality that are much higher than other parts of the nation, and we also know that the racial disparities in these outcomes are also very significant.

Everyone said it, but I'll say it again. We have got to think about what are the policies, both within the healthcare system and outside of the healthcare system that are driving these inequalities? Medicaid expansion. We've got to do it in North Carolina. I'm in Philadelphia, in a state that has expanded Medicaid. We've got to do it here. We've got to push the needle. We've got to push our legislators to understand that this is a fundamental driver in some ways of some of the health outcomes that we see. But again, we know that health occurs so much outside of the healthcare system, and again, I would just ask you to think about what are some of the other policies outside of healthcare that are driving the disparities that we see, and the regional kind of geographic dispersion of different health outcomes.

So then if we move to North Carolina, and we look at Robert Wood Johnson Foundation has this really nice community -- county health ranking system that they do each year, and here's North

Carolina. And again, widespread geographic differences when it comes to health, and these are based on health outcomes, including self-reported health, infant mortality and other outcomes. What you'll notice here is -- whoops, what you'll notice, if I can get this to move, we have in North Carolina our own black belt, right? And we know that in the black belt, that's where we have our worse health outcomes, right?

So again, place, mattering and race mattering intersecting to create kind of these conditions in the State of North Carolina. But if you look at the drivers of health, right? So this is things like economics. These are things like health behaviors, those same drivers of health are also overlay geographically in the State of North Carolina, and again, go along racial lines as well geographically in our state.

And so these, again, are -- this, you know, shows the kind of primacy of place in the State of North Carolina specifically.

And we see this in terms of life expectancy. So how many of you all travel up 64? Highway 64? Right? So there's about -- on highway 64, going from Raleigh to Rocky Mount, there's a seven-year difference in life expectancy, right, in the State of -- you know, going up this highway. Again, thinking about what are the policies that have created such large gaps over short distances in our state.

So my introduction to this idea of place mattering actually happened in Rocky Mount, North Carolina. I was a student at UNC in the health behavior department and we did a community action oriented -- community oriented -- community action oriented diagnosis, excuse me, of southeast Rocky Mount, which is a community that's low-income, predominantly African-American in Rocky Mount. And I'll never forget it. One of the pastors, long-time pastors, community activist in Rocky Mount said this set of train tracks is symbolic, right, because it represents the racial, social, economic and political divide in our community. Right? But this set of train tracks is not just Rocky Mount. It's Durham, North Carolina. It's Chapel Hill. It's Greensboro. It's everywhere you go, we see this kind of divide in cities, and we know that it's not just about the separation of people, it's about the separation of resources, and the investments or disinvestments that are happening in communities over decades.

And so I couch my research and the work that I do in a deep understanding of racial residential segregation. And someone mentioned this earlier today that we cannot understand place and particularly place in local communities without understanding the ways in which federal, state and local policies created neighborhood environments that we live in today. So in our dialogue around neighborhood, we cannot be ahistorical, and we cannot deny the ways in which

institutional and structural racism has created separate and unequal living conditions for folks in our state and around the country.

And so red lining map, this is a red lining map, actually of Philadelphia. And again, the same places that were red lined back in the 1930s are the same places that -- that are disinvested. But it's not just these red lining maps, right? The way structural racism works is that it finds a way to re-create itself. So we got rid of discrimination in housing in 1968 with the Fair Housing Act. But we still see high levels of residential segregation across the country. And so red lining started the kind of cascade of events, but we still have discriminatory lending practices, and other practices that create these separate and unequal environments.

And so this is actually a map of Durham, right? And in that kind of southeast corner where Lincoln Health System is, we see that same place being an area that has been -- is disinvested to this day. Right? So why do I kind of go through this history lesson in my kind of talk about restrictive residential covenants, also talk about racialized violence? We cannot talk about segregation without talking about racialized violence, but it's so critical, because again, it shows that our communities have been segregated not by accident, but by design. And if we can figure out ways to create these inequitable environments, we can figure out ways to re-create these equitable environments through policy and through interventions that actually make communities more equitable, and make it so that folks can actually not only survive, but thrive.

And so -- and we know that segregation is fundamental, because of things like -- because of things like schools and jobs and access to healthy foods and, you know, all of the -- all of the resources that are conducive to healthy living. Right? And so I often -- you know, we often, you know, kind of harp on the food part, but that's only one of the symptoms of the disinvestment. And so I think in local communities, one of the things that we have to move towards as we're thinking about how do we create more healthy and more equitable communities, you know, think about yes, access to healthy foods. Think about optimizing healthcare systems, but how about investment in jobs? How about investment in education? Those multi-sectoral policies that will actually build up communities on multiple domains, and really improve the health of those communities.

So I've done work, actually, for the last six or seven years in Jackson, Mississippi, with the Jackson Heart Study, and this is just one data point where we show we have a measure of residential segregation that we use. We look at incidence of cardiovascular disease and stroke over a ten-year period, and what we see in an all-African-American sample, okay, is that you have a two-fold difference in your likelihood of having a stroke or heart attack, depending on the neighborhood that you live in.

So change the environment, change the outcomes. And this can happen even among an African-American population. Right? So again, getting at that idea that these are structural and fundamental causes of health and health inequalities in our cities and our state.

And so finally, I'll just -- want to just highlight one of the kind of exciting innovations that I see happening in this area of building healthy communities. So the California Endowment has started in 2010, a Building Healthy Communities Initiative, and really thinking about places, you know, your zip code is more important than your genetic code in determining health, but thinking about it from a real kind of grassroots and community organizing perspective. So it has three tenets. How do we build power in local communities to think about the policies necessary to change the outcomes in our communities, right? So building not just capacity, but power. And this is economic power, political power, et cetera. How do we do that in our local communities because the challenges that we -- the changes and the transformation that is required is going to require some fundamental changes to our local communities.

The other thing is policies and systems changes, right? So what are the set of policies, both within the healthcare system and outside of the healthcare system that optimize health in local communities, right? So again, it's not just expanding Medicaid. It's not just creating better healthcare systems. How are we improving education in communities? How are we, you know, even when there's development, are we making sure that displacement is not the unintended consequence of that, right? What are we doing in terms of the tax code to make sure that as we develop new, better communities, that everyone is benefitting from those new developments. Right?

And again, systems changes, right? And so when we think about increasing access to healthy foods, for example, we have to again think about as a part of a system, and think about how we not only change the access to healthy foods, but the other types of investment necessary in those communities.

And then improving opportunity environments. How are we creating opportunities for children, for adults in their communities so that, again, they can live the most optimal and the most healthy lives possible.

And so I'll just leave with this. We talked about equality. We talked about equity, but I think we actually need to be moving towards liberation. How do we liberate communities to be able to have and to not only survive and to thrive. And then I'll also just end with a quote from Dr. Mary Bassett, she's a former commissioner of the New York Health Department and she says we must name racism as a cause of poor health because how we frame a problem is

inextricable of how we solve it and in the State of North Carolina, we're happy to be born and raised, we've got to address this issue head-on if we're really going to move towards health equity in our state. Thank you.

[Applause]

>> WHITE: I could have just sat down and let her go –

[Laughter]

>> That was amazing. So, I'm going to talk a little bit similar to some of the things that Sharrelle talked about also, but particularly from my community. So before Mike introduced me, has anybody heard of Ahoskie, North Carolina before? Really?

[Laughter]

>> Wow. Okay. Was it good or bad?

[Laughter]

>> It's been known for some bad stuff.

>> AUDIENCE: -- the Community Health Center.

>> Oh yeah, Community Health Center. Okay. We're going to talk about some of the disparities, and we can talk about equity as well.

This is my frat brother here, along with one of my other frat brothers in the room. [indiscernible] I give him a shout out. This is was published from 1966, and in 2019, this is still relevant. I wanted us to start highlighting this right here. "Of all the forms of inequality, injustice in health care is the most shocking and inhumane."

Hertford County, North Carolina, population of 24,000, [indiscernable] about us being in a belt. We are also in a hotspot. I do believe that our mortality rates colorectal cancer, we have one of the highest in the nation. Also leading causes of death is heart disease, cancer, diabetes; that goes right along with us having a high population and high density of African-Americans.

In comparison to North Carolina, we are at 60.5% of our population are black African-

Americans, and when you disempowerment and disenfranchisement -- Two weeks ago we just have had our first black mayor, 126 years. That says something in itself.

In comparison to North Carolina, some of our rates are lower, some are higher. Some of the -- if we're looking at today's, of course, our birth rate, median household income is lower, our education attainment rate is lower than in comparison to North Carolina. However, when it comes to poverty, we have a higher rate. And I see Lin Hollowell is here. I'm shouting out people today, so if you get –

[Laughter]

>> I wanted to say in regards to insurance coverage, we did have a decrease in our uninsured population through some of the other things that we've done in the community. We are having higher medical coverage in comparison to North Carolina around that.

So structural racism, I'm not going to tackle this, Sharrelle did. She did an amazing job; but one thing I will say about health equity, you cannot achieve health equity, you cannot address health equity without first acknowledging and being intentional about racial equity in this regard as well.

We do know that there's race versus racism, and I don't know if you all are aware, but race is a direct product of racism. Racism came first, and that's why we all attribute to a particular race, and we know that is because of superiority. So with that being said, we'll talk about railroad line, Sharrelle did a good job on that.

[Laughter]

>> But what I'm going to do is just talk about how this has impacted my community from a very, very literal real sense. We also are impacted by a railroad track, and guess what? This is four blocks from where I currently live. But on this side, we have Ward A. So we just had our general elections for municipalities. We have two wards, Ward A and Ward B.

I live in Ward A now, and one story about this is, my grandfather, who I talk about a lot, when he found out I had moved into Ward A, he said, "Hey, you got a nice house, you know, when I was coming up, if" -- He was a plumber. He went to different houses, crawled under sinks, and dig ditches and everything, and he said, "-- if I took a job in Ward A, in your yard, I had to make sure I was back across the railroad tracks before sundown, or I would not make it back home." And that wasn't too long ago.

In Ward A, I know you are pretty familiar with our Roanoke Chowan Community Health Center [phonetic] and of course, Vidant Hospital, all located in Ward A. All of our public schools, our health department, we have a nice amphitheater, Ahoskie Recreation Center, our Vital Wellness Center, our police station. All of our resources are located in Ward A. In Ward B, we have three tobacco shops. We don't need one; we need three.

[Laughter]

>> Two are within 20 feet walking distance, so if you come over here and they don't have your particular pack of cigarettes, you could just walk 20 steps and get your option.

We also have increased crime; our infrastructure is diminishing, a large number of funeral homes and, of course, all of our African churches are located in Ward B.

Ward A, just to give you all a better picture of Ward A, we have an amphitheater, we have a new display with the Hertford County bear. So we just had that built. We have a dog park in Ahoskie, so if you all are coming to visit, please bring your pets with you.

[Laughter]

>> I'm very proud about that; I don't own a dog, but I am very proud of that. So we have our hospital and a health center, of course.

And Ward B, this is part of the reason why I wanted to take action and take a part in my community. This news article right here, we just got this in our newspaper two days ago. This shooting took place on Sunday.

These are buildings -- this is right off of our main street, at the top, I used to get my haircut there. And I got that cut in high school. I'm not that old, so you can tell the type of structure this building was in.

And this is one of our tobacco shops that I was talking about earlier. Also in this ward, with all of this, we also with all of this, we also have a lack of small businesses and healthy food options as well which we couldn't fit on this slide. But this is just to show you what's going on in that ward.

So I see some Community Health Center folks in here, Community Health Center Association, I know you all are aware of what this video is. This is out in the rural. So to give you all a little bit of background of where we are moving towards in our organization at Roanoke Chowan Health Center, another funny story -- not a funny story -- I tell you, I got a lot of stories -- Our CEO, Kim Schwartz, thought that it would be good for us to get back to our mission. You know that Community Health Center started out with civil rights movement in providing civil rights to those that were in poverty. And so we thought it would be a really good idea to show this to all of our staff and organization. I did a site meeting and after that meeting, I was confronted with a lot of criticism and backlash because this particular video showed a lot of black nurses, black providers, giving care to black patients in a very rural town that was very poor. Which sounds a lot like Ahoskie, right? So we said, "Okay, now, if our people that are delivering care are having these feelings about our mission that's tied directly to our organization, we have a huge problem." Correct? "We have to address this."

So we decided that we need to tackle health equity. We needed to be very serious about this. We pulled the health equity definition -- these are three different definitions, and so we wanted to be very intentional about this work and be very intentional about our standing in our community in that our health center in regards to how we are treating patients.

Some of the things that we wanted to do, we started early, so before we actually developed a health equity committee, we had done a SOGI training, which we called "SOGI," which was a Sexual Orientation Gender Identity training. In our epic [phonetic] we had SOGI questions that we will be asking of all of our patients. And some of our employees and our staff members were a little bit uncomfortable about asking those questions, so to make sure that we are having the proper education, we developed a resource and a training that we had all of our staff to go into.

And we also identified uninsured patients, LGBTQ, in the young adult populations where we were going to be focusing on. We re-established our Health Literacy Committee into the Health Equity Committee in 2017.

Some of the initiatives that we wanted to tackle was discounted care and nominal fee. We decreased our fee so we could have more affordable care for patients so they can be dropping down to $15, so patients are paying that now. We did also extend our hours of operation so that -- We have a lot of moms that have to work two jobs, and they get off at 5 o'clock, they can't receive their care, so we extended our hours to seven so that we can accommodate more people to be able to get those healthcare services that they need.

We also implemented interpreter services. Another story that really, really drives home as to why it's important for us to actually think about health equity in the healthcare delivery role. We actually had a situation where there was a patient that came, and this patient's last name, I think, was Martinez; and a front desk staff person where the person walked up, they said, "Oh, I need somebody that speaks Spanish." And the person said, "Hey, I'm just here for my appointment." They spoke English, but it's that bias that is embedded in our community.

The farmworker health program, we adjusted our living wage in 2016.

And the most important thing was we have our governing board adopted the IHI Leadership Alliance Health Equity Call to Action. We are very, very excited about that. Our board is very serious about health equity and intentional about our practices and where we're going as an organization.

Our Health Equity Committee, we have 12 members, 3 co-chairs. I'm one of the co-chairs. We meet monthly; we just had our meeting this week, actually. And one of the most important things is we have voluntary membership. For any organization that's leaving here and says, "Hey, we want to address health equity. We want to be intentional about this." The most important thing is to make sure that you're not forcing anybody to do that or forcing anybody to come around this, because there's a very fine line between voluntold and tokenism. Voluntold is something that we hear a lot, because I get voluntold a lot in our organization, but I will say in this regard, there wasn't any tokenism. So we don't want to go to anyone in the organization and say, "Hey, we need somebody that's homosexual, so come join our health equity team." Or, "You're Hispanic, come join our health equity team." No, we're not going to do that. It's only on a voluntary basis. If you are very serious about this, we don't want to have anybody that is the wrong voice coming to the table to address these issues.

We also work Vidant, so we Vidant come on. So they did Vidant Empathy Salons, in 2018 we had them to come and meet with some of our staff to address empathy. And some of our members went to the racial equity training in Greensboro to learn more about that. We underwent some of the Harvard Implicit Bias. We looked at identifying disparities in our health outcomes. So we have our quality improvement team that are addressing different chronic diseases and health disparities in our community. And we also are looking to investigate how to decrease these gaps as well.

One of the biggest things I wanted to point out was our community partnership, Duke Endowment has been given us grant money to provide access to care for our uninsured population. And with that, we have begun to expand and work on numerous strategic goals and

strategic partnerships and strategic plans in our community. One of those has been transportation and addressing social determinants of health. And with transportation, we know that that has been a direct link to people not accessing healthcare, not being able to live healthier lives, and so we have been able to strategically put together a program that can help patients that can't afford transportation or don't have it to help to be able to get to the resources that they need.

We've also been able to build our community partnership. So it's not just a lot of medical facilities and medical organizations in the community. We have DSS at the table, office [phonetic] of aging, Chowan University, [indiscernible] Community College, anyone that has an impact on the residents of our community, we bring them to the table through this partnership.

Lastly, just some of the things that we are doing for the community, we are just are just identifying action steps for each member, focusing on staff diversity. So we are being intentional about our recruiting practices and things around that nature and policies.

We're also focusing on pay equity, opportunity equity, and are very, very excited about our leadership skill development. Not only are we just being more equitable for our patients and our staff members as well, but we do realize that all of our staff members are not able to access the same skill development as others as well. So if you work front desk or you're in medical records or a janitor, and you want a class in public speaking; you want to learn how to do resume building or developing an agenda, we're going to be developing those skills in-house at our organization so that we are having equitable opportunities for all of our staff members as well.

And we're also partnering with our leadership team to identify topics, teaching, and schedules as well. That's my time. Thank you all very much.

[Applause]

>> LEGERTON: It's almost afternoon, I guess. So I'll say Good Mid-day. It's good to be here today. I particularly want to honor Jessica Marx for her work. Our panel actually had two introductory calls together in planning for this particular panel. And I'm going to turn my timer on here.

Besides being a community practitioner, I'm a minister and educator, and education and preaching conflict often.

[Laughter]

>> They're different forms of communication. So I'm going to certainly make sure I stick to the allocated time.

Okay, let's see here. Sharrelle, Weyling, and I and Dr. Johnson took our call very seriously. And I'm going to break this down in terms of the community practice angles. And so, my subject is Building Health Equity Through the Convergence of Grassroots and Professional Communities and Cultures.

I live in Robeson County. I want to ask you -- you all probably know about Robeson County, particularly the negatives and the reputation of our county. But we also have many assets. Besides our racial diversity that most folks know about, we are also a very eco-diverse county. We're the largest county in North Carolina. We have 50 swamps and a river running through it. Actually wear many hats and actually have the only outfitter on the Lumbee River. It is home for the Lumbee, the largest Native American nation east of the Mississippi. It's also one of the poorest counties in North Carolina and the sixth poorest in the nation.

Sharrelle commented on Eastern North Carolina, and you saw how much of the poverty is in the east. It's not only the historical home of our African-Americans, but also four of the six Native American Indian nations that are recognized by our state are also in the east. And so the convergence of indigenous and African-American populations are a major reason for the poverty as well as distance from our urban areas, which means that many of our European-American families are also poor.

I won't go through all the data, but you can look at this list over here for Robeson County and our health factor rating and our health outcome rating. We've always been near the top or the bottom, whichever way you want to look at it in terms of the state.

This particular study really gets it, the issue of this panel and this conference, if you haven't seen this report it's a very good report on racial and ethnic disparities in North Carolina.

So, to me, the greatest barrier to health and well-being, I'm going to posit, is creating equitable access to health and well-being are the barriers between these four characteristics: assumptions, values, principles, and practices of our professional communities, cultures, and communities and cultures and those of our grassroots communities and cultures.

In spite of all the racial differences in our county, after 40 years of community practice, I'm convinced that the greatest barrier is not just race, but it's the cultural barriers between our professional culture and our grassroots culture. And these are particularly manifest in two systems. Our healthcare system and our legal system.

Now, you know, the challenge with characteristics is they can often become caricatures. But these two charts that I work with in many of my trainings, sort of, are made to show the distinct differences between these two cultures and their biases and their interests and their values.

So on the community side, you've got grassroots interest. It really is, as we've said this morning, relationship-based. It's more process-oriented. And I particularly want to call your attention to this word, "andragogy." It's not much understood, you may not even have heard it before. It's the contrast to pedagogy. Andragogy deals with a process of how we do things. The medical profession, as we've discussed, talks about product and what we do, but how we do for grassroots people is 60% of their motivation to participate in that system. It's how it's done to them, most of the time, and for them, not with them.

And if I had more time, I would tell you that two of the barriers for me in healthcare are the waiting room and examination room. And if I asked you, how many times do you go into the examination room and actually lay down on the examination table? My experience is one out of ten times I go. So why do we even have them in the room?

So those are the questions that I raised. I've been very engaged in the healthcare profession. I was born with a terminal heart disease, and going through that as a child and having surgery back when kids weren't even considered human, has led to some serious understanding in my challenges with our healthcare system.

So I want to acknowledge that both of our systems and cultures on the grassroots and professional level are dysfunctional. And when we come to the table to do with our health equity committees, we need to just start with that reality, so then when we talk about honesty and openness, we focus on honesty that heals and brings us together rather than honesty that harms.

And we also have to realize that our greatest strengths are also our greatest weaknesses. One of my spiritual directors really help me understand that. And I love this little cartoon, if you will, "The longer you swim in a culture, the more invisible it becomes."

Okay, so how are grassroots-professional barriers manifest in the medical field? Well, it's mostly one-on-one case management, focus on productivity and efficiency -- I don't need to go through this list. It's already been discussed this morning. But I just want to point out this last note. The word "patient" indicates a level of irony because it really means long-suffering and passive.

So how do we converge our grassroots and professional cultures to advance health equity? I have a number of steps; I'm not going to go through them all. All these PowerPoints will be available. I want to just point out to this one: Meet on a regular basis. I'm working on a book on social action, because practitioners that practice don't write and academics the write don't practice.

[Laughter]

>> So there's a major gap in our literature when it comes to all forms of social action, no matter how you do it or what your ideology is. There's a major lack of understanding. And when I've researched social action, every group that is serious about changing lives meets on a regular basis, once a week. And if you're not that serious about changing lives, you can't do it once a month, whether it's Boy Scouts, Sunday school, Kiwanis, Jaycees, support groups. AA meets every night, that's the most clear example for me.

And this is real important, to work together to identify the cultural barriers, dysfunctions, and challenges in both of our cultures. I was involved very deeply in the Robert Wood Johnson opening doors efforts in the 1990s; and really began to understand through our local project with a healthcare agency how difficult it is to talk about this dysfunctions in our own community culture, whether it's organizations or grassroots communities. And this is so important if we're really serious about assessing the barriers and solutions for health equity.

Also we really need to assess the relationship between our health care agency or system and our community partners and how it hinders and deters meaningful relationships. It's our healthcare providers, if you will, that have the power to invite and include our grassroots organizations and leaders into the room as equal partners.

And then we need to work together to identify solutions to reduce and remove these barriers and create, as we've said today, meaningful relationships. And engage our two cultures in healthcare institutional and systems context working together to actually transform both.

Also we need to consider the use of groups of community care, communities of health program participants in your medical practice. And what I mean is, unbiased toward groups, not the individual care approach. Groups, for grassroots people, they want -- Loneliness is a medical illness, and for grassroots people, when they hear the stories of other people who are going through the same challenges they're going through, they'll come back. But our no-show rate in our county is 50% with our healthcare providers, even though we have the largest Medicaid percentage, and Medicare, over 40% of our entire population is on Medicare, and with Medicaid it's close to 50%. In spite of that, and with private insurance, we still have a 50% no-show rate.

Now this book, "The Community Cure: Transforming Health Outcomes" is really a radical book. "Radical" means getting to the roots of how to work with grassroots people in a health context. The book promotes group meetings -- and I'll show you a really wonderful quote, "the medicine that happens in the room between patients" when they're together.

So this whole new approach called "functional medicine," really to me, captures the essence of what grassroots community folk are looking for in all of our systems. Building relationships and community, peer to peer support models, peer-based learning modalities. If you're involved in in the mental health profession at all, peer support specialists are now Medicaid reimbursement positions within that, and that was one of the major federal policy changes in mental health of using peer-to-peer support. We haven't used peer-to-peer support as motives in our healthcare agencies.

Now in my theory of change, I'm working on all -- These are the nine levels that I have found, and when we're looking with the State, with North Carolina 360, to me, all of these levels of change need to be involved in that when you're looking at a community system. And if I were designing a local collaboration, I would make sure that all of the agents and agencies that work on these nine levels of change are brought to the table.

And my comment is, you know, cultural change is actually not that different than individual change. We think it's more complex, but the same dynamics of power and various forms of influence and inside within and external forces outside the boundaries of our experience are basically the same. So it's not as complicated to transform culture as I think we imagine.

Also, there's these four major types of change in my research. And I would just say that in terms of our healthcare profession, relief goes along with crisis, and acute care support goes along with chronic care, development goes along with preventive care, and transformation goes along with equal and equitable care, or what I would call "just care." And all of the strategies

that we use in the health and healthcare profession fit neatly under one of these four types of change.

So what are my major learnings? My major learnings in addressing health equity are, that to advance it, we really need this convergence and engagement of the clinic and the community as equal partners in identifying, removing, and overcoming barriers and challenges together. My proposal is -- How often should they meet?

>> AUDIENCE: Weekly.

>> LEGERTON: Weekly, if you're really serious about it, just to build relationships and build community so when the challenges come you have that those relationships and community to fall back on.

I don't like the word "patients." I don't like the word "client." I don't like the word "consumer." I am a consumer in the mental health system because my son has chronic schizophrenia. I don't like being called a consumer; it sounds like you're there just to take. I don't think it's a better term than the legal term "client." I particularly prefer "program participants" as a term rather than patient, client, or consumer.

And in the group setting with functional medicine, I love this quote, "You get your community support and medical care before you get sick in a group setting." So we have support groups just like AA, just like we need diabetes support groups in a ten mile radius of everyone living in Eastern North Carolina. You do this before you get sick. You bring in your family members as well.

A couple of the learnings, to create significant health equity involve relationships of accompaniment and empowerment. This is very staff intensive. I don't think our funders realize how staff intensive it is. In spite of -- I work extensively with Blue Cross Blue Shield projects with our regional food system and others. I think they understand it, but this type of accompaniment cannot be fulfilled in a conventional case management or crisis management role.

Also, lastly, research indicates that health equity programs that engage and empower program participants in sustained groups optimize changes in behavior and health outcomes, advance participant leadership, equalize relationships of power between roles, reduce cost, and increase revenue for healthcare service providers. Thank you.

[Applause]

>> WALDRUM: You get an idea about how much fun I had working with this group to plan this, and I'm going to pull an audible. We're going to be done at 12:30 for lunch.

>> Let's say 25 minutes.

>> WALDRUM: Okay, 25 minutes, I see frowning.

[Laughter]

>> No. And I'm going to pull a little bit of an audible, instead of me moderating and asking questions. I just really would like to get the audience engaged. It's just such rich work. I can tell you from an organization that's highly embedded in our community as we eluded to a little bit in Ahoskie, we have a hospital in Bertie County. And if you've never watched the movie "Raising Bertie," you need to watch it tonight. It is an incredibly impactful movie. But as we work as an organization to advance economic development, education, and health and well-being, you really have to -- It's about community engagement and embedding in the community. And one of you all just said something that just reminded me of a Yogi Berra quote, that "in theory, practice and theory are the same thing, but in practice they are not."

[Laughter]

>> And the only way to deal with this is just throw yourself at it and be in the community and have those meetings, and so I really appreciated that perspective and the insights that y'all brought.

And so, I have so many questions I could ask, but I would really just like either comments or questions, and we'll open it up, but really input. Y'all are the professionals; y'all live this every day, and part of this purpose is really to open up dialogue.

>> KOLLER: Good afternoon, I'm Chris Koller from the Milbank Fund. I'll be on another panel later on. This is really interesting, especially for someone who works more on the national level. So thank you, all of you, for putting it together. I have a question for Mr. White. If we're about change and trying to improve things, make things better, using kind of the processes that Reverend Legerton talked about, you've all dove in. You've got the political process, which is where change happens. Are you more optimistic about the political process for creating change than you were when you started? How's it going?

[Laughter]

>> WHITE: Well, December 10th, I get sworn in. I think for -- completely transparent -- So the process has been extremely difficult, but I'm very hopeful. One of the reasons why think I was successful, and I went into selection, I didn't [phonetic] have an opponent, but a lot of people say "Well, you're going to get a write in because -- this is being frank -- the white people here don't want you to win. They don't want us to have a black mayor." But as I moved forward throughout the campaign, there was so much support from everyone, from both sides of the tracks, and I think this win kind of personifies the removal of those railroad tracks a little bit, because it's the -- I was born and raised in Ward B, grew up there, played -- did everything in Ward B. Work in Ward A, live there, collaborate with a lot of people there. Now we're going to both work on solutions and bring forth change to the entire community.

So I'm very, very hopeful now. In the past, a lot of our mayors -- I went to our town hall right after I won, and the town manager was like -- I was like, "Okay, where's my space where I'm going to sit at?" He said, "Oh, the mayors never use the office. We use that as storage."

[Laughter]

>> So I walked in the room -- I told you I'm transparent -- I walked in the room and I opened it. I was like, okay, I'm thinking it's going to be this little tiny closet, boxes up to here, to the ceiling. There was so much room, and there was little boxes around the wall, I was like, "Three desks can fit in here. What do you mean this is storage? This is like -- we can work." He's like, "No, mayor has ever worked --"

[Laughter]

>> So, yeah, yeah, we don't get paid. Yeah, so you can see it hasn't really been serious and brought to the forefront, and a lot of different -- I would talk to the Rotarian, the Kiwanis club, our recreation department, and a lot of people are like, "We just want somebody that's going to speak for us, the entire organization." And so, my platform has been around youth development, crime prevention, our infrastructure, bringing small businesses and, of course, working with our healthcare agencies to make us more healthier.

We have great clinical care in Hertford County. We are doing good with our amount of providers, diverse providers, that we are bringing, but we just need that to translate into our health outcome. So I'm very hopeful of where we're going.

>> WALDRUM: I think as a follow-up question, I'll ask one. Just a little history on Ahoskie, I'm new to North Carolina, been here four years. But the hospital in Ahoskie was the first Hill-Burton hospital built, designed through the Hill-Burton Act, which is really an incredible, historical thing, I think, reflecting on where the nation is, especially in rural America and what is needed to deal with some of these issues. And then the community health center was spun out of the hospital and created from -- the hospital before was actually a Vidant facility then, but --

So there's this really unbelievable collaborative and cooperation there, ECU Brody School of Medicine has a dental health clinic that's actually in the same facility that you saw that's integrated with the FQHC there, so it's really interesting and great model.

And coming into that, you said something the other day, you just talked about it from the cultural perspective. And Mac, I like your perspective, I mean, also on this., the community's perspective. But you said something the other day about the -- and you mentioned it here about educating and trying to bring down some of the internal organizational barriers. And I'll just tell a story, and I'd like you to comment about that, because you told a story.

But, actually, I was driving up here this morning, and we do a lot of -- like a lot of us try to open the mind of our institution and do, as you mentioned, we have a lot of programs, and I was talking to a group the other day about equity and inclusion, and it was a bunch of old white guys, and I was in the room, and I'm an old white guy. And I said, you know, we got to change that, and I used that term "old white guy." On the way up here this morning, I was called at 7:10 saying, "We were offended by the fact that you used that term to us." So the whole white fragility issue kind of came right up at me. I'm going, "Oh, really, well, I didn't mean to offend you, but we do have to deal with that." But you alluded to some of that, and could you just talk a little bit about that issue?

>> WHITE: By the way, "White Fragility" by Robin Diangelo is a really good book, if anybody wants to pick that up. We've struggled with this issue for quite a while, and one of the things that I think is -- And we actually talked about this Tuesday in our meeting in our health equities because we've been struggling with straddling the fence, making everybody comfortable, but this work is uncomfortable, and if you're going to have change, you're going to have to go through discomfort. And we made the decision Tuesday, okay, are we going to continue to be safe or are we going to piss some people off? And if we're going to bring change, you're going to have to be intentional about where we stand as organization. We are not at the place where we are having a zero-tolerance policy on discrimination just yet, but I've seen where other organizations have taken that on. So I think that's going to be an opportunity for us as well.

>> BARBER: And I want to just comment, one of the definitions of social racism that are often used by physician and epidemiologist [indiscernible] Jones, and she says that, one, it's a systematic, kind of the ways in which we systematically create systems that benefit some individuals, disadvantage some individuals, but also sat the strength of the whole society. And I think in this conversation about structural racism and how it infuses itself or finds itself in different systems, whether it's the residential segregation or a healthcare system, we have to get to the conversations like, this is bad for all of us. Right? This is not just impacting black folks or indigenous folks or cells or Hispanic folks; it's actually making it so that our state as a whole won't flourish and won't thrive.

And so I think, this conversation is really inspiring to see that folks, I think, are really willing to, like, "Let's wake up to this. Let's think about how do we take up structural racism and think about the systemic and historical things that have happened and create the policies that actually move us all forward." And I do think that that's really necessary as we have these conversations. So we can say the word "racism." It's okay; it's not going to kill us, but it is going to move us forward.

I was actually at Greenleaf Christian Church with Ibram Kendi who has written a book "How to Be an Antiracist," and he talks about racism in our country, in our state as being a cancer. And when you find out the diagnosis of cancer, you're scared, you don't want to deal with it, you really don't want to confront it. But if you don't actually deal with the cancer, it'll kill you. And that's what we're seeing. We're seeing it in our health outcomes, we're seeing it in ways that we are not thriving as a state and as a nation. And if we don't, in this country, deal with the issue of racism, we're not going to move the needle on equity in our state or in our nation.

>> WALDRUM: I really appreciate those comments because I think, two follow-up comments is, one, that the issue is yet, it will kill us, but it's killing the people that are, you know, at the margin, right. And so, the voice -- And, actually, that's what Jim was going to talk about -- Jim Johnson, was going to give us the data on how we vote and the demographics on voting and how we actually have to get people like me, older white men and the demographic that I represent, to vote differently or we are going to continue to have these structures because the voice isn't there. And that what was so glad to see what happened in Ahoskie, but that's not going to happen at a state level.

So, Mac, do you have any comments? You're an expert --

>> LEGERTON: Well, we had a -- test, test. We had a -- I think someone wanted to comment out here. I'll just lighten it up a little bit. You know, in rural areas, we have all these little adages of

wisdom, and one of them is, "It takes a lot more energy to dig a hole then to fill it back up." And I think there's so much resistance to looking inside the holes that we don't realize, when we come together and use our energy to fill that hole back up and create -- use it to build on the foundation of the future, you know, and just let our guards down and trust, as was mentioned this morning. Build those relationships of trust. I mean, me built a multiracial leadership team back in the 80s and 90s. I was the youngest in our county. And we just did amazing work together, of course, three of us were ministers, and actually that helps sometimes; it's a hindrance. But, you know, focusing on the common interests and values that we have is really the key and keep the focus there. Deal with the shadow side of our histories and our personalities, but let's get busy on creating and transforming these systems. There was a comment out here.

>> BAKER: Yes, I have a comment and then a question for the whole panel. I'm Cedric Baker from Jamu the Phood Farmacy. Jamu is a bayeisian [phonetic] Indonesian word that means "plant-based health." And that's food with a "P-h" and pharmacy with an "F." So my first comment is, the pictures of the train tracks visually reinforces this phrase of "other side of the tracks," or however you want to iterate that. And that the wellness center, using the example of Ward A and Ward B, the wellness center was in Ward A. The health disparities are overwhelmingly in Ward B, with heart disease, cancer, and type II diabetes. And cancer is already worldwide taken over heart disease as the leading cause of death.

So when I was out working in South Georgia and North Florida, I made a mobile wellness center, botanical wellness center, which was an RV. It could literally drive over there and move some of the wellness to the Ward B because a lot of those patients probably are walking, and they don't want to cross the tracks for whatever reasons. So this is an important thing, is bringing the wellness to where the actual patients are that need it. And wellness, I must say is, fundamentally, we're talking about prevention, whether it's primary, secondary, or tertiary. And that was brought out very well.

And the last point I want to make is, this word "patient," maybe we could use something else like "self-care cooperatives" or something along those lines. I welcome your comments.

>> WALDRUM: Well, I totally agree. I mean, I think that one of our strategies is extending care to home or as close to home locally as you can. But there's huge challenges with that, but the community actually built that wellness center in Ahoskie, and the community leaders at that time chose that -- [cross-talk] yeah, it's great, oh it's an unbelievable asset. I mean, people really use it, but it is, again, coming to the table and having the dialogue and coming up with solutions like that. And I think as we're here talking about policy and intersection of policy and

community activism and engagement, I think that we have to really -- I find it interesting, I'll just tell you, and that's why I said watch "Raising Bertie," you've lived that reality you described. I was in Ahoskie last and go to Bertie, and all of our community meet with community leaders. Extending care to those environments and/or services is extremely difficult and, you know, we can talk about Medicaid expansion, but it's not just Medicaid expansion. A hospital -- and so your map, I loved your map, so you stopped in Rocky Mount, and Martin County, which is 30 miles down the road -- 25 -- they just closed OB services in that hospital in a part of the country that has one of the highest, if not the highest infant mortality and maternal mortality, which primarily is ten times higher in African-American women than Caucasian women. And it's low-volume services, and so that institution couldn't carry that burden with less than one birth a day, but when you close that service, more women die and more babies die. We have one baby a day in Ahoskie, but if we're not there, a mother and a child has to drive over an hour to get prenatal care or to deliver their baby.

And so, those are real structural issues that I think we have to understand in the second largest rural population in the country, 4.3 million people, that we have to have policy and payer alignment around that and extend other services as close to home as we can.

One more?

>> BROWN: This panel is amazing. I'm just totally humbled to be here learning from you all. I'm Kelby Brown, a medical student at Duke, grew up in a very conservative world. Now, I come back to the people that raised me with an elite name next to my name, an advanced degree, I haven't completed it yet, but –

[Laughter]

>> Right? Being in Durham for nine years, it's for better or worse, almost cool to be able to talk about systemic racism and inequity, you know, it is such a culture where you're allowed to engage this and there's people advocating it at every corner that you can join in. But I am sure, as many of you know, when you bring this back to people who don't have the same shared experience as me, there's defensiveness always, as was mentioned earlier, but there's also a sense of being looked down upon from the elite, sort of, tower of knowledge. And I'm so convinced by data; I can read a chart in two seconds, and I get the point. But presenting the research that we're doing at these institutions; I think is really hard to tell the story and to get that point across. How have you all found that you're able to bridge that gap with just the larger society?

>> LEGERTON: I'll make just a quick comment. I get asked a lot of questions in rural Eastern North Carolina. "You're a minister, but what's your perspective on life? How do you identify yourself?" And I think the key to opening access to inviting people in is to be professionals with a grassroots perspective. All of our formal education, you know, pushes us to be professionals with a professional perspective. And, actually, that sort of elitism just filters in through osmosis. It teaches us to be disembodied ourselves, you know, to be head instead of heart, like the chart, and we end up being divided within ourselves, much less with other people.

So I really think our -- I feel so privileged to be an organizer and work in a rural community that is so distressed and oppressed and neglected. You know, I feel privileged because my first commitment is to transform myself. This thing keeps going off every 10 minutes. So maybe that's a signal, it's time for lunch.

[Laughter]

>> But to me, that the thing, we need to be professionals and really struggling, be challenged to develop A grassroots perspective and really opened to what it means to see our relationship with everyone in the community no matter what context we're in as the most important privilege that we have, is to develop meaningful relationships with each other.

>> [off mic] Great way to end.

[Applause]

>> MCGINNIS: It was indeed. It was a great way to end, but it was a great way to course throughout the conversation, a really extraordinary morning, an extraordinary beginning to our discussions. And extraordinary affirmation of why it's so important for us to start our engagement with local and state issues here in North Carolina. It's hard to imagine a place which is a stronger crucible of the combination of opportunity, vision, understanding, and challenge. But the thing that came through for me, personally, throughout the course of the conversation was that understanding dimension, which is the starting point for everything, and we look forward to building on the understanding that's been shared by each of our panelists throughout the morning and carried into the afternoon.

We now have -- let's see, we've got -- we'll be back here -- we'll take 45 minutes for lunch. Does that work for everybody? And we'll be back here to start at 1:20. So we're breaking for 45 minutes. Lunch will be served in the Glaxo Galleria, which is the main lobby.

BREAK

>> MCGINNIS: Welcome back to the afternoon session of this really invigorating and inspiring meeting. The panel that will be introduced shortly is to engage us in a discussion of investing in whole person health for the integration of physical, behavioral, and social health. Obviously, we've had important introduction to those issues throughout the course of the morning conversations. And I would ask that we both acknowledge the insights of the morning conversations, and welcome this panel to the stage.

[Applause]

>> I'm now going to turn it over to Elizabeth Tilson who's the moderator. Thank you.

>> TILSON: Thank you all so much. Thank you for coming back after lunch too. Sometimes you'll lose the folks after lunch. Thank you so much.

I hope you feel like this has been such a really invigorating time together. It has been a rough couple week or two, so it's really nice. I have found it very invigorating, so thank you all for that and for all that you work -- that you do every day.

I do have the incredible honor and pleasure to serve as the State Health Director and the Chief Medical Officer for the Department of Human Services. I'm in service to Mandy and the Governor. And I think probably, hopefully, what you heard this morning is how amazing it is to get to be part of that team and have that leadership and be able to execute on that vision. It's just kind of a professional dream come true, and so it is a huge honor and privilege to have that opportunity. Oh, and there's my boss right there, as I was just speaking, yay.

[Laughter]

>> She wasn't even in the room. Anyways. I am going to tee up just a little bit, reiterate a little bit what you heard this morning, but tee up just a little bit about this North Carolina vision for whole person health. And then I'm going to turn it over to our incredible panel: Amelia Muse, who's the Director of the Foundation for Health Leadership and Innovation, Center of Excellence for Integrated Care, who really helped us think about integrating physical health and behavioral health. Kathy Colville, who's the Director of Healthy Communities for Cone Health. I've been really thinking about this from a clinical workflow and from a health system perspective and integrating with the communities, which is amazing. Alisahah Cole, who is the Chief Community Impact Officer at Atrium Health, and really going to help us think through on

the community piece, especially as we think about disparities and inequity in that important of engaging our communities. And then, finally, Chris Koller, there he is. He's very tall; he's often hard to hide, but he was hiding over there. Chris Koller who will really help bring some of that national perspective for us. He's the President of the Milbank Memorial Fund and helped think through some of the financing mechanisms of this. Because you can have the best intentions in the world and the best design in the world, but if you can't figure out that sustainable financing piece, then you'll need that for the sustainability piece. So really excited about that and the conversation that we'll have with each other, but then we'll also open it up for the room for conversation and questions from you all and have this be interactive.

So really briefly, teeing up and, again, you heard this morning, at least from the perspective of North Carolina, North Carolina DHHS, but we are surely committed to ensuring that all North Carolinians have that opportunity for health and well-being. And so we really, through that lens, how do we buy health, not just healthcare. And think about how we design, how we catalyze, and how we execute a comprehensive multilayer, multi-element, multiyear, multiplayer plan, a[cross-talk] a unified agenda for North Carolina healthcare and health system.

And I think about North Carolina, it's an incredible opportunity to try to innovate in North Carolina or to innovate in North Carolina, because if we can do it in North Carolina, it can be translated to anywhere in the country. So I think, really, I am grateful to the National Academy of Medicine to think about highlighting North Carolina. Yes, we have innovative things that we're doing, but too is, again, if we do it in North Carolina, it can translate to red states, to blue states, to everywhere across the nation. And I do believe that innovation will happen at the State to spur that national dialogue.

What North Carolina brings to the table is incredible. A, we're really big; we're a really, really big state. We are ten-and-a-half hours from boundary to boundary; we're the ninth biggest state in the country. And so when you think about scaling something, we talk about scaling something, this is a big area to try to scale something.

We have urban pockets, but we're very rural, and the answers in the rural communities are different than the answers in the urban communities. So how does it work for all of our communities?

We have incredible diversity that's been highlighted this morning, and so how do we think about that? How do we think about our history of institutional and structural racism and that has our diversity -- we have not tapped Into the strength of that diversity by intentionally

segregating? So how do we think about embracing that and drawing strength from our diversity and making sure that we're very culturally humble? I've learned not to say "culturally competent" because whenever I'll be culturally competent, but culturally humble to recognize what we don't know and have this work across all of our populations and do it our populations, not for.

And we're politically purple. And so, healthcare is divisive, but what we're finding is that health is not. And so how do we think about that health perspective and not have it be caught in the political world, but really understanding in general, we all actually are pretty unified concept of what drives health. And we've done a fair amount of work with some partners, just saying, "If you have $100, how would you invest?" It is incredibly consistent across gender, race, political affiliation, physicians, laypeople, pretty much everybody will invest in health very, very similarly. So that's, I think, the advantages, is that health doesn't have to be partisan. And how do we do that, drive health, despite political partisanship?

And we have incredible alignment across our payers, across our partners, incredible alignment in drawing from the history of North Carolina of Collaboration and Partnership. And then using our Medicaid program, not as the sole driver, but as that catalyst and that market mover of our other payers in our state and being intentional about buying health with our Medicaid dollars as we're designing that.

So I think there's lots of great opportunities and lots of the advantages for North Carolina driving us. What does it take? It takes a clear vision, you clearly heard that from the Governor and the Secretary this morning. It takes aligning across strategic plans. We're doing that with our Healthy North Carolina 2030, which was structuring on that Robert Wood Johnson framework of health.

Thinking about our opioid action plan, our early childhood action, but intentional strategic alignment. And then thinking about those concrete tools and infrastructure that can be deployed across populations. And this is where we think about shared infrastructure, I get more excited about infrastructure than I ever thought I would.

[Laughter]

>> But I think we think about what do we do in the healthcare sector, where we built isolated silos? We built silos, we built our own infrastructures, and then we were dependent on interoperability to fix those silos. Let's not do that. Let's not do that when we think about broader view of health, thinking about the social risks, thinking about the human services. Let's

not build silos that we have to spend all this money trying to connect. Let's think about where do we have those shared tools, those shared resources. So where do we want to collaborate? And then where do we compete and innovate on top of that? Competition innovation is awesome, but we don't think we necessarily need to compete and innovate on every piece of that. So where do we agree that we're going to share tools, and then where do we compete on that?

And so thinking about, again, some of the shared tools that we have really been trying to make sure is available for all North Carolina. The standardized set of screening questions, people really like their own question, and we compare it all, we convene with our technical advisory group, like there's so many screening tools out there, all the questions are pretty much the same, like, come on. I actually thought it was going to be a lot harder to get those set of questions, but it took us three or four meetings, and people understood the benefit of having a shared set of questions. A, systematically ask that question, but B, when we think about pulling in data that data and the data integration and thinking about using that population level data to guide investment. People understood that the value of having shared questions.

And then NCCARE360, of course, thinking about what's the shared technology platform, coupled with the people that are connecting people and people, we'll be the first state to have one shared platform. And when we go to other states where their ACOs each built their own, and now their relying on interoperability, that's a bear. So the fact that we'll have one shared infrastructure, I think will be huge, and then we can innovate on top of that.

And then aligning our push to value based payment and using a lot of those levers, that when we do go into Medicaid managed care, those levers will really be market drivers. So we're really excited about that, and I think because in North Carolina we have such a history of collaborating, I'm really excited about those shared infrastructure pieces to accelerate. And I think this will be an area where standardization will actually fuel innovation because we're not all having to create our own wheels; we can share the wheel and then innovate on top of that.

With that as a tee up, I am going to then turn it over to my esteemed colleagues to do some brief opening remarks, and then we'll have moderated Q&A.

>> TILSON: So I'm going to go to Kathy first, right? Okay.

>>COLVILLE: All right. Thank you, appreciate that. I just want to acknowledge that this is the after lunch crowd, which is a special crowd.

[Laughter]

>> Thank you. This is the dug in, this is like I'm taking the whole day off. I'm going to let the emails pile up, I'm going to be here after lunch too. I appreciate that. We are together here for a reason; we are very alike, people in this room, So I appreciate how aligned I felt with so much of what I heard this morning. I was telling Weyling it's so neat to know that you're over there in Ahoskie and thinking and doing, and we're here thinking and doing, and we're bringing a lot of dispatches to you today from what this work looks like at a local level.

I've worked in safety net access and social determinants of health in Guilford, Alamance, Rockingham Counties, almost exclusively, that's been my focus for the last five years of my career at Cone Health. And I wanted to just pull one particular moment of alignment from the morning from Governor Cooper's discussion of his mission for the people of North Carolina "to have lives of purpose and abundance." That spoke so much to me, and I'm bringing you in these opening remarks also the words of one of the women that we've been able to work with in Greensboro, and her definition of what health is to really underscore why we're working so hard to swim upstream in so many of these ways and how good it feels to see the system shifting so that you're getting a little bit of the current helping along the way as well. We really appreciate that.

I wanted to mention that I, because I work at a health system, but I'm not in clinical care, I get to be a part of the downstream, midstream, and upstream work, and I'll just tell you how I conceive of that with the example from a child with asthma. So I want us to remember and honor that there are so many health systems that are doing that downstream access to care work, that when kids get sick, we're providing access to care, we're providing, hopefully, education and management along the way, but we're also providing that emergency care service and that longtime commitment that healthcare has had to that downstream work.

Because things are changing, we've also started to move to the midstream. And the midstream is where we know we have a child who has asthma, we know that there's potentially triggers that are happening in the home, and we're able to send a referral through Epic and NCCARE360 to Josie Williams and her team at Greensboro Housing Coalition. They're able to do home visits, and they're able to resolve those issues. That's in that sort of midstream space where we're matching medical conditions and putting social determinants, integrating them.

And then the upstream stuff, I have another colleague here, Steven Phills [phonetic] who's the leader of our invest health team in Greensboro. Mary Davis from Blue Cross Blue Shield Foundation is here as well, and there's others that have really been thinking about "Why do we

put up with kids having to live in unhealthy homes in the first place? Why aren't we thinking about affordable housing. Why aren't we thinking about tenant leadership and eviction prevention and understanding that is the work of health systems as well?" So how cool is that to get to have a job where you get to work with partners internally and externally, to work at all of those levels? It is amazing.

I want to go back to the midstream because I think that's where I've been asked to focus my remarks today and, again, I'm just going to tell you one particular story and hope that this particular specific story will speak in some ways for the whole. I want to just mention my colleagues, Jay Smith in rehab, Beth Murray in occupational therapy, and Rhonda Rumple in care management, not here, but these three just jump up and down about this program called Aging Gracefully. And Greensboro is one of four sites to have done a pilot with Aging Gracefully. The purpose is to prevent injuries in the homes of older adults by providing minor housing repairs. The pilot participants in Aging Gracefully, which was a randomized trial, had fewer falls annually, improved mean scores on their and ADLs, improved quality of life, and one of the biggest jumps was in their PHQ scores for depression. Significant improvement as compared to controls.

All right, so this is all important work, and I'm going to bring to you that the words of Madeline Reed; [phonetic] she's a resident of Greensboro. She was a participant in the first phase of Aging Gracefully. She got new back steps installed, and she also got some grab bars in the shower and things like that. But here's what I'm going to ask you to do about this. I'm going to ask you to do very crass and cynical work, and I'm going to ask you to assign a monetary value to what she's talking as I read you her words. So how much would you pay for what I'm about to read to you? And how much would you pay for yourself? But then I also want you to think how much would you pay for your mom to get this? I ask you what this is worth to you.

So, in her words, "I am now free to safely come and go from my home." So just, how much is that worth to you? You're just doing this inside your head. "I have a secure handrail and steps that are the right size. I have a secure floor on that little porch. Now I can get back to doing my own grocery shopping and taking out my own garbage." All right, are you adding up inside your head? "But the greatest gift that it has given me is my freedom, and that means my independence. At the end of the bathroom repairs, which were a shower chair and grab bars, I went to take a shower for the first time. When I got out, I noticed that I'd been in there for over 30 minutes. The reason I was in there for so long is that I was sitting on the shower chair crying. I know that sounds mushy, but what was causing me to cry was the realization that this was the first time in ten years that I was able to shampoo and shower using both hands and not just one hand because I was no longer grabbing for the wall. I felt safe and secure, and that has made all

the difference in the world."

This kind of help, what it does, it allows you then to give back. It allows you to be a productive member of the Community of Greensboro. So this is Madeline's words. All right. Some of you gave up along the way on your math quiz. You very quickly got to priceless, right? Because this is about freedom, independence, again, it's about that life of purpose and the sense that I'm giving back to my community. And who could put a price on that? But we have to; we have to try and understand -- we have to try and understand what that type of thing means financially.

And I want to let you know that, for patients in the initial pilot, the total spent per person for durable medical equipment, six occupational therapy visits, four RN visits, and housing repairs was a of, an average of, $8,000 per person. So that's the cost of this work, but I'm imagining that the value calculation in your head was far higher than $8,000 for what we get out of that.

And Madeline's story and the many like them are really the reason why as hard as it is that we come to work every day to do this. We want to create the system that rewards stories -- that reward systems that make stories like Madeline's happen, that rewards the kind of healthcare that makes Madeline feel like a productive member of the Community of Greensboro, and that understands that as really the essence of healing and health.

All right, I'm going to stop there. We'll get probably more into the weeds of it, but that's really the why of why we're doing it.

[Applause]

>> COLE: Thank you, Kathy. That was amazing. Good afternoon, everyone.

>> AUDIENCE: Good afternoon.

>> COLE: Okay. We're in the South.

[Laughter]

>> Caller responds. Good afternoon, everyone. Thank you. I know it's the after lunch crowd, but we got to keep our energy up. So I'm extremely excited to be here with you today. As mentioned, I am with Atrium Health based out of Charlotte, North Carolina. Atrium is one of the largest nonprofit healthcare systems, integrated, healthcare systems in the country. We're the largest safety net provider in our region; we're the largest Medicaid provider in the State of

North Carolina, and we are cover a very diverse geographic framework in North Carolina, South Carolina, and now in Georgia, as I think many of you are aware.

So we cover everything from urban, very metropolitan areas, to extremely rural communities and everything in between. And for Atrium, as we revamped our mission statement a few years ago, we really wanted to be intentional about continuing to serve every community. So our mission is "to improve health, elevate hope, and advance healing for all." And I always tell people we were extremely intentional about those words. Notice we set "improve health" and not "healthcare." And part of my responsibilities as Chief Community Impact Officer -- because everyone always says, "What does that mean?" -- is to really make sure that we are engaging with the community in regards to the things that we are doing for and out in the community.

Four years ago, we launched a committee -- I would say in true healthcare fashion, we started a committee -- and it was to really look at the work we were doing in the community. Now, we were founded as the County Hospital in Mecklenburg County, so that whole notion of the "for all" part of our mission is really embedded in our DNA. And I was selected to be the physician champion for of our system, our committees are co-led by physicians and administrators, so I was selected to be the physician champion of that work. We said, "Okay, well let's just take an inventory of the work that we're doing." And at the time, we had over 450 community initiatives that we were doing across our entire enterprise, and some might think, "Wow, that's a lot." But at the same time, we really had no strategy around that work. We didn't really have priorities around the different initiatives that we were doing. And some, we had engaged the community on what was needed, and a lot we had not.

And so we embarked upon a Community Health Improvement Study in 2016. We took an entire year to really truly engage with our community in of a lot of different settings, including settings that, quite frankly, were not very open to us coming in. And we had to be humble, and we had to come in on their terms and really start to hear, quite frankly, some things that were hard for us to hear as the kind of large healthcare corporate entity, if you will.

And so by doing that process and, again, we engaged in our urban, suburban, and rural communities, we found that there were actually five areas across all of those different communities that were consistently mentioned by our community members. And one of those five areas was around social determinants of health. And so we implemented screening for our patients, we embarked on GIS mapping; we actually worked with University North Carolina Chapel Hill, the Institute of Public Health -- and I know there's some colleagues in here -- to implement the heat map that now exists for the entire State of North Carolina. And then we overlaid some of our patient data.

So those communities of need, we actually overlaid or looked at rates of diabetes, rates of heart disease, rates of obesity, unnecessary EDU utilization, and readmissions. And guess what? It was a high correlation, right, higher rates of all of those things that we looked at in those neighborhoods that had those high social challenges. And so, again, I know I'm speaking to the choir here, and in most of your nodding your heads, you're not you not shocked by that. But, you know, this is often the question I pose when I'm presenting that data, and I've shown that heat map in probably a thousand different settings across every single community that we work in. And I always pose the question, well, how many are shocked? -- so on the map, the high social needs area are dark red and dark orange -- so I say, "How many are shocked by where those neighborhoods are where those communities are?" And I've only had one person ever raise their hand in over, like I've said, I've probably given this talk a thousand times. That was shocking to me, that one person was shocked, but then I had to have a conversation afterwards and found they just moved to that community.

[Laughter]

>> Okay, so you're not as familiar with some --

But just think about that. We all intuitively know where these communities of need are, right? So why are they still communities in need? And I think that's the larger question that we as health proponents can really help others to start having that conversation because it really is around systematic exclusion. There are systems in place, right, that have created an inequity and disparity. And one of my favorite Edward Deming quotes is "A system is perfectly designed to achieve the results it achieves." So if we are achieving disparity, if we are achieving an inequity, if we are achieving poor health outcomes, well, there are systems in place that are creating that.

And, really, we have a huge opportunity to really start to reengineer those systems, not just lead in these broken systems, but to truly reengineer these systems. And so I tell you that's our system for Atrium Health; that's what we're committed to doing, and that's part of my responsibility to lead as Chief Community Impact Officer.

But I will tell you a little bit about why I have stayed with this organization for, now going on 16 years, and I'll put my family medicine hat back on because I'm still practicing doctor. So yesterday I was seeing patients, and as a family medicine doctor, this whole notion of integrating what we have always called in our specialty "biopsychosocial care," is really true to who we are as family medicine doctors. So let me just say, we're really excited as a specialty, because we finally feel like in value-based care, we are on the rise.

[Laughter]

>> Thank you. But I started my day with a message in my EMR from my triage nurse to say, "Please give me a call, one of your patients passed away last night at home." So connected with my nurse, explained my patient had passed away in his sleep. I immediately called his wife to check and see how she was doing. Very peaceful passing, definitely a death with dignity, and was something that we had discussed and he had advance care planning on file, so this was aligned with his wishes. That was immediately followed by my first afternoon patient of the day whose primary language was Spanish and, fortunately, I had the resources available in my office to be able to translate and have a real great dialogue with that patient. And it very quickly became evident that he had not received the best care in the emergency room that he had visited for an abscess. And I ended up having to admit him to our hospital. I will say it was not one of our emergency rooms that he received that care, but I ended up having to admit him into a direct admit into our hospital for continuous IV antibiotics. He had only been in this country for a year, from Cuba, fortunately, did have his wife with him. So there was some family support, but was extremely scared, extremely nervous. In my -- I fortunately have 20 minute visit slots, not 15 minute, but obviously that conversation took longer than 20 minutes. So, you know, through my schedule off, right, for the rest of the day. But one of the great things I love about our organization is that, for our offices that really do serve, the -- Again, I don't even use the term "underserved" or "vulnerable" anymore; I use the term "systematically excluded." We have put the resources in those offices to really help support those of us who are taking care of patients on the front lines, the ability to take care them to our best ability. So it was great to be able to have resources around me that I can take this additional time with this patient, and my other patients didn't necessarily have to sit and wait for me for an hour to for me to see them.

The last patient of the day that I did see, very interesting, I've had this patient for 16 years almost, and the family's very engaged, 69 year old, African American female, just starting to struggle with some early dementia. And we actually have embedded the screening for the North Carolina screening tool in our EMR system already and, again, we're screening our patients. So that screening had been done, and lo and behold, it was positive for food insecurity. Now, this is a family that I know, I take care of the whole family. It was a shock to me that this matriarch of the family had screened positive for food insecurity. And so that then opened up the conversation, well, what's going on? And it was not an issue of financial resources, it wasn't an issue of family support. Really, what the issue was is that she was at a point within her dementia where she could not -- it was not safe for her to make her own meals. And, again, that's a conversation that may not have happened if I hadn't done that screening and that food insecurity question was positive. And so we utilize our community resource hub, and I was able to then electronically make a referral to Friendship Trays, which is

our Meals on Wheels program in Mecklenburg County, for my patient to now have access to meals that were already prepared.

So I say all that to say, we know what can work, especially when we really start to look at the causes of inequity. The question I pose is: Do we really have -- Are we really at a point where we are tired of the disparity and we're really ready to act?

[Applause]

>> TILSON: So now we're going to shift to Amelia, thinking about that Center of Excellence Integrated Care. And then, Chris, you'll be the one who can tell us how to pay for all this.

[Laughter]

>> MUSE: Can't wait for that part.

[Laughter]

>> As part of our attentiveness to you all as the after lunch crowd and as the therapist on the panel, I'll ask everyone take a deep breath in through your nose, our through your mouth, let go of any of that tension, those emails racking up in your brain, bring it back, and we can focus on the work that we are setting out to do today and share today.

Some of the things that have come up today that have really spoken to me are about the potential for change, but the difficulty of change, and the readiness for change, and that is at the heart of the work that I do at the Foundation for Health Leadership and Innovation, Center of Excellence for Integrated Care. And I'll tell you about the foundation first, and then I'll tell you about the center.

So the foundation is a nonprofit here in North Carolina that's focused on whole person healthcare, whole community health and wellness. We support innovative partnerships and leadership, and our vision is for "all communities to be healthy and all people in our communities to flourish." So we are one of the partners for NCCARE350; we're also the home of Rural Forward North Carolina, the North Carolina Oral Health Collaborative, and Health EMC, which is the program that helped organize the community health needs assessments in Eastern North Carolina.

And through all of our programs and partnerships and work that our programs do, we really work on health issues in North Carolina and try to help catalyze change, put support and technical assistance and expertise in place where people need help with change.

And my work is as the Director the Center of Excellence for Integrated Care, and our change area specialty is behavioral and physical health integration. And when I say that, there might be hundred different definitions of that for you all in the room, and I'll speak more a little bit later into our panel about what that means, the different models associated with that. But what we do at the center is help health systems -- and that can be one clinic, one team of providers, a hospital system, a community collaborative, primary care, and behavioral health practices -- transform their clinical, operational, and financial worlds of their clinic to better support whole person care and to support integration of physical and behavioral healthcare.

And we believe that is on a continuum -- behavioral health integration. Sometimes it means that a system is going to do the best coordination they possibly can between physical and behavioral healthcare. They're going to set up better protocols to communicate with external providers and make sure that very important information comes back to the primary care provider and the care team and that important information from the primary care side is shared with the behavioral health provider.

And we work at integrating behavioral health into primary care; we worked in the past on integrating primary care into behavioral health, which is a little more difficult. Take me out for a cup of coffee, I'll tell you all about that. But it's very needed, as well, in behavioral health homes.

And we also work on the integration of mental health and substance use treatment, integrated tool disorder treatment. Because of the way that policy and funding has happened over several decades, mental health and substance use, those worlds have kind of become siloed, and so people, patients were sent or interacted in the mental health system, and if they have a substance need, once the mental health issue was resolved, then they could go into the substance use system and address that. And then maybe if that was better, they could go back to the mental health system if that all happened, but that's not very efficient and not working well. And so we're working with practices to help them be dual diagnosis enhanced, where patients with co-occurring disorders can receive the treatment they need in the same place, with the same team of providers to treat both of their conditions.

And then beyond all those types of integration, we also just want to support providers, healthcare in North Carolina and beyond being attentive to social drivers of health, which aligns

with our foundation and the work of NCCARE360 and the initiatives in our state, as well as trauma informed care. It's a big call that we get from our practices in the field, that we need help being more trauma-informed.

So we are trying to help all of these systems change. It's very hard, and I think what it goes back to what Alisahah and Steve Neorr said this morning, that the systems are designed to do exactly what they're doing. But I think that if we can truly work together in true collaboration, then change is possible.

And then we also need to attend to organizational capacity and readiness. And so we're looking into the implementation science world to study organizational resilience. What makes some health systems take on these changes and thrive? What makes others have one turnover of one provider and the whole integration thing falls apart? We want to understand how to help these systems be healthy so that when we put on these changes, when they're already living in chronic change, they can thrive and it's better for their patients.

And we also want to attend to the wellness of our workforce and our providers. So those are some of the things that we want to highlight. My topic is behavioral health integration, but all that is really a part of it. We'll talk more.

[Applause]

>> KOLLER: So, thank you very much, Betsy and the panel. I think my job is to place what you guys are doing in the national context, since we at the Milbank Memorial Fund work with a bunch of different states. And then also to be the money guy. Thank you very much, Betsy. I'm not a fin [phonetic] boy, --

[Laughter]

>> -- but I'll try to like talk a little bit of numbers. And the perspective I bring to that is not only working with these other states and state health policy leaders like the great folks you have here, but also in a prior life, I was the Health Insurance Commissioner in Rhode Island, so regulated commercial health insurers and dealt with [indiscernible] review and stuff like that.

I will begin with what is definitely a Ward A, if you're an Ahoskie story, because I was walking in Manhattan last night, and my head was down because I was talking with someone on the phone, but I saw this license plate that said "it factor." And the I looked up and realized it was this really fancy Rolls-Royce, which you would not necessarily see around. My news to you guys

is, you may not feel like a Rolls-Royce, but you got the it factor. There's a lot of folks paying attention to you, and you should take that as being good, not a standard that you have to live up to. Especially when you're kind of in the middle of it, and you're dealing with setbacks as you go through, and you're kind of some of the Groundhog Day around some of your political discussions.

[Laughter]

>> You got you a lot of mow, and people are watching you and they're pulling for you. So rest comfortable with that.

[Laughter]

>> Maybe not comfortable, but be assured.

What I want to do is actually [indiscernible] something from the National Academy of Medicine to kind of put a frame around this and then talk little bit about the financing piece.

Dr. McGinnis referred to it earlier, it's important to note that we are meeting in the Biotech Center, which reflects this kind of conflict that I used to remind my governor about. "Governor, is healthcare an expense that you're really concerned about, or is a revenue? Is it a job creation piece?" And we have to hold that tension and sort of hold ourselves honest to say, "Which is it?" And I think what gets people excited about North Carolina is, you are trying to expand the frame and say, "It's not just about economic opportunity. It is about what it can provide in terms of future opportunity for individuals if we pay attention to the factors that are driving our healthcare expenses." And so that's what gets people excited looking at North Carolina.

It represents a challenge, particularly, for healthcare systems and this is where I want to steal something from the National Academy of Medicine. Betsy and I had the privilege of serving on a committee that just finished up work around how do you integrate social needs care into healthcare settings. And there is, I will say, as a policy person, a little bit of hesitation when healthcare systems rush into social determinants. As a board member of mine said, "Well, given the wonderful job you've done with obesity, why should we handle homelessness?"

[Laughter]

>> And if I could sort of summarize the pitch from our committee in two words, it was health systems, "be humble." And we actually came up with -- a couple people on our committee

came up with the five A's of what health systems have to do as they approach this work, what Alisahah was describing at Atrium. I think she gave an example of it in terms of their work. And they are sequential.

First, you just have to raise awareness, and there's been a lot of awareness raising going on even today. The second is that, you have to adjust your own systems to accommodate what you are becoming aware of. Think about how you do your -- not you -- how appointments are scheduled. Do you even have face-to-face appointments? What are transportation benefits and things like that? Then you engage in the actual assistance around how do you help folks address the needs that you've become aware of.

Then you get into more heavy-duty work around alignment. It's not enough just to assist, but we actually have to align our work with our partners who are providing social services or providing community services. And then the big one that, again, we are challenged here today is advocacy. Are we so moved that we are willing to work on these things?

So thanks to the Academy of Medicine for giving this framework for what the health systems ought to do. And then what Betsy and I worked on were -- we weren't smart enough to do, maybe Betsy was, but I wasn't -- we worked on some of the enablers of it, and I think this is why people get excited about North Carolina. The committee identified three enablers: health information technology, North Carolina 360 -- check –

Workforce, oh, maybe we actually ought to pay for some of these services that we're doing, and then financing. And that is work, both at the system level in terms of the advocacy that you're doing from Medicaid expansion, and then the work at the provider level around value-based payment.

And I think that's sort of the -- if I'm supposed to be the money guy, the news I would bring -- and I'm a big advocate for primary care around in our work. I really try to work to promote greater investment in primary care as a portion of our delivery system. I don't think that will magically happen. I don't think you can just, in spite of the great work of family docs, you just can't say, "Oh, we're going to give you value-based payment," and primary care will automatically rise to the top. But if we're selling this -- and this is the same thing with selling investments in social services -- don't think that just because I put more money into the primary care or I put more money into social services, that everything else will magically take care of itself, particularly, reducing healthcare expenses.

Why are we talking about a return on investment in primary care or in social services expenses when we're not talking about a return on investment in diagnostic services or in pharmaceutical services? So we should not -- those of us who are working to integrate social services into a healthcare setting to finance social services, to finance primary care, should not let ourselves get trapped into a return on investment argument that says, "Give us the money now, and I'll reduce your ED visits tomorrow" when we're not holding the rest of the system to that same standard. But if we're going to make the case that there's got to be some redistribution here, it's got to be in the context of budget constraints. And I think that's the importance of value-based purchasing and alternate payment mechanisms, is that they actually encourage providers to think about under fixed budget. Where do I put my money?

I'm close to a primary care driven ACO in Rhode Island, and it's been fascinating to watch the decision -- this is one of the most successful ones in the country -- it's been fascinating to watch the decisions that they get, that they've been going through in terms of when they work with a fixed budget, where do they put their money, and at what point do they get to social care needs? It wasn't the first thing that they got, but they got to it, because pretty soon after they had brought out the low hanging fruit from pharmacy and from ED visits, they went after screening folks for social healthcare needs and started saying, "What do I got to do to meet these needs?"

So I think it's really important to learn the lessons -- and this is part of what you're supposed [indiscernible] to do because not only sick people watching you, but what are the lessons from some the other places? Think about budget constraints. There is a reason why Medicaid has lower per capita increases than Medicare or commercial. It's because Mandy and her team can't print money. They have to deal with a fixed budget constraint. That doesn't happen in commercial health insurance and, frankly, it doesn't happen as much in Medicare.

And so we have to accept the reality of budget constraints if we really believe that the money that is currently spent on healthcare could be better spent on social services, put in people's pockets, given to wages, put in other places. And there are states that are doing that. Oregon's been working with per capita caps for Medicaid for five years.

Vermont's now got them. Maryland's gotten an all payer waiver for their hospitals. And we're working with a number of states around actually setting targeted rates of growth on a per capita basis across all the healthcare services, so that you just -- As a colleague of mine says, "Oh, I can't lose weight without a scale." We don't have a scale for healthcare. It's easier just to shift the money off to somebody else.

So one of the lessons that you might think about from other places is, how do I get my arms around the whole thing? Because when you do that, you actually strengthen the case for making the sorts of investments that you guys are doing. Look forward to more conversation. Thank you.

[Applause]

>> TILSON: Okay, I am going to on the fly change just a little bit. So I'm going to -- I think us talking about the accomplishments and what we've done and what the vision is awesome. But I think a lot of the learnings is the mess. Right?

[Laughter]

>> What didn't work, which is great, because I think when you're on the bleeding edge, well -- actually my husband says sometimes we're not on the cutting edge, we're on the bleeding edge, like you're so far out that like -- anyway -- so a lot of us are on the bleeding edge, which is great.

And I'll say that, Kathy, when we were thinking about where do we deploy NCCARE360 first, Kathy came to us and said, "If you want a community that you can, not necessarily fail, but you can figure out the mistakes, that you can -- choose us because let's figure it out, let's get in that mess together. Let's make the mistakes together. If you want a community that you can fail in," -- well, that's not -- "use us."

[Laughter]

>> So like, that's where the learning is, in the mess. If we all knew how to do this, it would have been done long ago. So I think there's great lessons in the mess. and what we learn from that. So let's talk a little bit about that mess, and then we will then open it up to questions from the audience.

So, Amelia, as you think about -- so there's the on-the-shelf best practice models of integrating care, what looks good in a policy paper, but you actually try to implement that in practice. Can you talk about that a little bit? What are the best practices, but then what have you learned in your work of implementing and where's the mess we need to think about?

>> MUSE: Sure. I have a visual to help us a little bit, give you something to look at. Like I said before, behavioral health integration can have lots of different definitions to all of us. And it can

happen in the behavioral health world, it can happy in the specialty world, it could happen in hospitals with all kinds of different providers. But kind of the big momentum going around the county and in North Carolina is in primary care with implementing the collaborative care model, embedding therapists into primary care so that patients can have immediate therapy services when they're [indiscernible] need and identified during a primary care appointment.

And the, kind of, heart of these models is providers working together as a team and not just identity as a team, but really functioning as a team. And so the mess is when we miss the team-based care part of this. And I think that there are several barriers to that. Alisahah may be able to speak to some of that. It's some of the burden placed on the primary care providers right now.

And the primary care system, with the volume of patients, all the administrative demands, and then we're saying, "Hey, we're adding behavioral health integration. It's going to be so great for your patients. It's going to help you save time because rather spending 25 extra minutes in an appointment, the therapist can come in and deal with the psychosocial stuff, do an intervention, and you all can come up with a plan together." But the implementation of that is quite tricky.

But we know that it's very needed in that most mental healthcare kind of occurs in the primary care system anyways. That's where most of our psychotropic medications are prescribed. Most people, I think, with a suicide attempt also visit their primary care provider. There's a time window in there, I want to say it's maybe 30 days. I'll have to look it up to confirm it, but it's a very scary statistic that people with mental health things are coming into primary care, we need to be screening. And we need support in place, such as a therapist, a collaborating psychiatrist to get their needs met. Not just identify the need, and then the primary care provider is not sure what the next step is. So there's a lot of mess with the implementation.

>> TILSON: And then having your financing pieces be bifurcated, and so one of our commitments of moving into Medicaid managed care and having that financing piece be integrated so that we can then facilitate the integrated team at the practice level and then have the financing flow to support that team, which was one of the big --

>> MUSE: And there is an established ROI for the collaborative care model. It's a six to one ratio, and I think there is almost $3,500 in savings over 48 months of care of patients being in this collaborate care model, where their mental health is being managed by a primary care provider, a behavioral health care manager, and a consulting psychiatrist using team-based care. And about over 80 randomized controlled trial [indiscernible] effective. So the financial

benefits are there. But putting it into a system that's already stressed is difficult.

>> TILSON: Kathy, Cone Health, so much of your system now is in a valued-based contract, right, and so you've really thought about reengineering those clinical flows and having that be up front. So can you talk a little bit about when you try to change clinical workflows and IT pieces and some of the lessons learned in that piece?

>> COLVILLE: Yeah, I appreciate that, and I was actually thinking about this yesterday because the mess and failure was not just a topic about NCCARE360, but when we met to talk about this panel, I was like, how messy are we supposed to get?

[Laughter]

>> TILSON: As messy as you can get.

>> COLVILLE: Who's going to be here?

[Laughter]

>> I was thinking yesterday, it's like the rolling in the mud messy version or the messy bun version. We're somewhere on that spectrum, in talking with you all.

So I do think it's helpful to know that for Cone Heath, Steve Neorr talked to this morning about Triad Healthcare Network, and obviously that entire 263 million that they get is at risk in the ACO. But Cone Health's -- over 50% of Cone Health's revenue is in either shared savings or completely at risk contracts at this point. And we have those risk agreements with all of the commercial payers except for one, and as Steve mentioned, on the ACO side, they're in the NexGen model, which is the full risk model for that.

So I think that even amidst all of the mess, that is really the huge enabling factor for people at the highest levels of the organization to be thinking about innovation and flexibility in how we provide care. And because THN was successful early on in 2014, we've had a number of years to move forward with that mindset. So even amongst the mess, there really is an opportunity to do this.

Now, the mess sort of looks like this, Steve Neorr and Terry Akin, our CEO, and all those folks that are the top level saying, "Yes, let's move this forward." But the work that has to be done, happening at a mid-level manager level and even below, and trying to get those folks to change

their systems, especially when they've got pressures of making their budgets whole is a big place where the mess comes in, right. And that's just the administrative side of this. These people need to lose money so that we're not doing it over here, but it's hard for them to be able to give that up, So that's one huge piece of it, is just thinking about the budgets altogether and that just being sort of an organizational culture piece that we still have a lot of work to do.

One of the areas where we see it is in our charity care access. We have been completely non-strategic with that. It feels sometimes more like an insurance denial process for charity care applications than it does about thinking who is that's uninsured that we really want to have care, and why aren't we going out and seeking that out and being strategic in that way?

And I will tell you that, right now, that work looks like taking a team of people that have been doing it one way for a long time and having deep philosophical discussions about deservingness and worthiness that they carry around with them. And we uncovered, that early on we were going to have to have that conversation otherwise at every step of the rest of the process, it was going to come up and bite us over and over. So that's a huge piece of the mess.

And the other mess I want to talk about is just the data sharing and the stuff that's in place for that. And Josie [phonetic] and Steven [phonetic] can testify to that. And I'll just very quickly, because this is the one where I can go on and on. Early on, I said, you know, why aren't the getting it? Right? The HIPAA rules, don't understand that you need to share stuff with community organizations, that's not public health authority, it's not healthcare operations. It doesn't fit in a bucket. So I called this guy in Chicago who leads a group called Data Across Sectors for Health. And I said, "How do I do this?" And he said, "Your first conversation with all of them is, 'Do we really want to do this?'" And that's the conversation that we have to ask ourselves over and over.

For any of these innovations, the start of the messiness is an agreement that we really want to do this, because the systems aren't designed to do what we're asking them to do, and we have to answer that affirmatively before we can do the shifting.

>> TILSON: Alisahah, in thinking about -- I hope you don't feel pigeonholed into different segments, [phonetic] we're just drawing on your expertise. So that deep, deep work that you've done with the communities and thinking about what are those really important pieces of community engagement, and what are those missteps with community engagement? Because that piece is going to be so important when we really think about equity, and some of those lessons learned in what to do and what not to do, especially from a big health system coming in, and "I'm from Atrium, I'm here to help."

>> COLE: Well, I think that's the first thing, we have to stop doing that. And that was definitely a key learning for us. We kind of revamped our community engagement with all of the different segments of the population that we deal with and really had to level set kind of to, Chris, your comments earlier about being humble and coming in from a place of humility.

And so, I think the first thing was, for us, we had to be willing to be uncomfortable. And I think we all, again, as we talk about the inequities that exist, we're going to have to have those uncomfortable conversations, and we're going to have to be willing to listen, right? But it's beyond just listening, and I think all of us have heard that, when you're talking about engaging with the community, you need to listen. Our community advocates, which we have now established in a lot of our communities, I remember one of them, specifically telling me to my face, "I've been focus grouped to death. Don't come back in here with another focus group." I mean, they literally said that. And, you know, we had to hear that, and we had to receive that. Because in our past, we had often gone into a community or into a neighborhood with a grant funded project, and we did the project. We launched the pilot, and then the funds ran out, and guess what happened? We exited, right. So when you talk about the level of mistrust that exists in many of our community segments, we have to be willing to just be uncomfortable with that, acknowledge that, listen, but then hold ourselves accountable to what people are telling us. And so that was one of the key things how we revamped.

How we engage was around, "Okay, we're going to listen, but then we're going to make sure that we have a infrastructure in place that we're coming back to you, and continuing to listen, continuing to engage, but then also telling you what we've done with the information that you've given us or that you've asked us to do." And so, again, our whole entire community health framework and strategy is built around what our community told us they want us to work on.

I think the second thing, and this kind of ties into some of the being willing to be uncomfortable, I often say the message is important, but sometimes the messenger is more important. Sometimes the messenger is more important. And, again, I think that's something we have to check ourselves as health systems, but even individually. It may not be the best for you to go into a black barbershop and talk about all the great things that your organization provides because they might not even hear you based on how you look or how you come across, right. But I bet you have somebody in your organization that could maybe make that connection a little bit easier. And so can you train that person up? Can you provide those resources in a different way? Can you use another community partner to have those conversations? And so that was another thing that we really said, "You know what? We're going to have different conversations around this."

So we actually launched mental health first day in one of our, now amazing partners, No Grease Barber School, which is an African-American training school that trains both barbers and beauticians. And so now every student that comes through that program gets trained on mental health first aid. And you know you had that conversation? It was one of my faith community nurses, African-American female, who had connected with one of the owners of the barbershop at the church. So, again, thinking about the what and the who is critically important.

And then I think of the third thing that we're really focusing on right now is, how do we train our current workforce to have these conversations around equity, but also our future workforce? And so we're really excited to partner with Wake Forest to bring a new medical school to Charlotte. I actually see Julie sitting over there. But that has been part of the conversation. How do we make sure that we're training, kind of, Amelia, to your point, we're training the future physicians in this team-based model of care, in a model of care that really focuses on eliminating disparities, focusing on equity, focusing on social care?

And, honestly, I think my biggest thing is, kind of to Chris's point, how do we prevent medicalizing social determinants? And to your point about being humble here. My wish for us is that we really start talking about health, not social health, not behavioral health, not medical health. It's all one; we are taking care of people; we're taking care of a person. We really need to quit siloing this work.

And so how do we -- with this new medical school that's coming, we're really being thoughtful and intentional about how do we train the new workforce to take care of people and take care of communities.

>> TILSON: Great. So, Chris, again, I don't want to pigeonhole everybody. I'm hearing from you necessarily don't want to be pigeonholed as the financing model person.

[Laughter]

>> So I will give you luxury if you want to think about, A, what are the -- looking out across other states, you know, what are some of the lessons learned in terms of financing models that may be supported or didn't support integrated systems, or if there's something else you would prefer to speak on, I will give you that flexibility.

>> KOLLER: I got that one because I actually want to go back to something that you said. You sort of threw off the word "alignment," and payer alignment. Let's spend a little bit of time

thinking about that and not pay lip service to the idea, not make it to cheap. Alignment is tough, and I'm talking alignment of the payers so that they're sending consistent signals, so that Amelia can do her behavioral health and primary care integration. Because if you've got four payers paying you 12 different ways --

>> Don't get me started.

[Laughter]

>> Yeah, so lessons from other states around alignment? Smaller is better, it always helps if you don't have a whole lot of payers, so it's easy to talk about me in alignment in Rhode Island because we got like three or four payers. [cross-talk]

Locally accountable commercial providers are really important because you got to be able to call the boss person and say, "Come out, we need some speaks." The role of convening and leadership are both really important. The payers are not going to want to get together. They are trained to compete. Even the local [phonetic] one. This is what I learned as a regulator. They just play by the rules that are set out for them, and if you want them to do something different, you got to change the rules.

And that is the job of community leaders and government. So lessons from other places. Government can be a very powerful convener, and there needs to be leaders. In Rhode Island, I would call in the payers and the providers, our versions of the HMs and I make them listen to employers. I make them put up small business people and say how long am I going to get rate increases? When you get the other 80% in the conversation, it changes the conversation quite a bit.

What are some other lessons? Start with quality measures. It's easier to get aligned on quality measures than it is to get on dollars. Dollars, it's really hard. If you're going to get into dollars, start talking about payment methods, because at least we can have a conversation in general about, "Do we want to put up some money to primary care on a per capita basis as upfront money to do this stuff?" as opposed to just making them all perform and then paying them all on the back end.

The level of transparency is really important. You have cultures within the organizations that says, "Provider contracting is a source of competitive advantage." Yet, it's a source of mental illness for the providers.

[Laughter]

>> And you have a whole workforce that's trained to say it. Now, keep in mind, we are completely closed about the details of our contract because those are competitive proprietary, except when it comes to Medicaid or Medicare, in which case, it's all transparent. We can all figure out what people get paid.

So the lessons are around, it's important to that you convene the payers because that's who the money travels through. Medicaid, if they're going to use managed care, needs to retain the authority of the contracts because it's all in the contracts and you do whatever you want them to do. I ran a Medicaid managed entity, my Medicaid director was my boss, and if they said, "Jump," I said, "How high?" Use that authority, and have someone who can convene the payers and include the self-insureds. Self-insureds are really important because often they benefit from this stuff and don't always step up.

And figure out what the rules are engagement. [phonetic]

I go back to actually what Reverend Legerton said this morning. He talks about community locally in Lumbee County and you got to get together and meet every week. In Arkansas, the Medicaid Medical Director in the Arkansas Blue Cross and Blue Shield Medical Director meet every week to say, "How are we going to transform primary care?" It's the same dynamic that he's describing. It's happening in a larger bit because that's how you build common cause. And then every once in a while, if someone's disagreeing, you got to figure your way through it. You can't let them just kind of throw up their hands and say, "Well, we couldn't get to agree." Or they window dress or white wash it or something like that. But you need alignment, and that means pushing to get alignment on the key stuff.

>> TILSON: That's awesome. Okay, so we have a couple minutes for questions. If you all take advantage of this incredible wealth expertise and insight.

>> HUTCHINSON: I'm Sig Hutchinson, I'm a Wake County Commissioner, and, Chris, I appreciated your comments about North Carolina having a "it factor." At the elected level when things seem to be falling apart, and this whole conversation is about Medicaid expansion, to hear that we're doing a lot of things right -- and I'm particularly glad that Dr. Cohen is in the audience to be able to hear that message. Dr. Cohen's had a tough week. So that's great appreciate. I appreciate that.

My question, Betsy, to you, recognizing that we've got budget issues that we have to deal with, in your opening comments you mentioned that people collectively agree on how healthcare dollars should be spent. I wonder if you can share a little bit more information about how the public sees their healthcare dollars should be spent.

>> TILSON: Yeah, I'm really happy to follow up as well. I have some really great slides and visuals of this as well. This is a whole hour's worth of slides.

[Laughter]

>> But we have done work in partnership with, actually, Rocco, who somebody alluded -- Oh, John Lumpkin alluded to. Rebecca Oney [phonetic] and Rocco Perla [phonetic] who I was in a I was in a lot of collaborative work. And they actually did focus groups, actually they did in Charlotte, but actually talked to people, not the people in the room, but nonmedical people and said, "If you have $100, how would you invest that in health?" And they'd look at a pie chart. And they did focus groups in Charlotte, in Asheville, in Raleigh, again, across race, across gender, across political affiliation, and they also were in partnership with the medical society. I saw Bob Sullivan [phonetic] somewhere, also with primary care physicians, and specialists' physicians. Incredibly consistent. If you look at the pie chart, about 25% clinical care; 25% housing; 25% food; 25% childcare utilities transportation. Almost identical. In fact, the first two focus groups, which was in Charlotte, white Republican women, black Democratic women, almost to the percentage, exactly the same. Thought, this has to be a mistake. So did it in all these other settings. The one place out in Asheville, white seniors, there was a little bit more of a pie chart going to medical care in our older population, and actually, even more fascinating, the physicians, less medical care. Physicians on average, 20%. It was so fascinating. And even the specialists, the sub [phonetic] specials, 20% clinical care. So really consistent.

And it's common sense, right, it's what do you need to be healthy? And the answer is, and we say that, what do people need to be healthy? They need healthy food, safe housing, transportation, and a good paying job. That's what. And so we talk about -- And that's what Mandy was saying, we hate the term "social determinants of health." Oh, my God, what is that? And if it's determined, we can't -- And, actually, part of focus groups was what about term? And somebody said, "I don't know what stupid person behind the room came up with that term?" Nobody knows what it means, but fundamentally, if we ask people, "What do you need to be healthy?" we all know it. You need food, you need a house, you need transportation, you need a good paying job. We know it. We just aren't investing in that way. And I'm happy to give you those great graphics, happy to give you those slides.

>> AUDIENCE SPEAKER: Hi. Thanks for a wonderful, wonderful enlightening panel. I can't help but be struck. First, I have a comment, then a question. By the irony that North Carolina, which is at the very forefront and innovative in all these 18 bullet points, seemingly, it still has this buggabear [phonetic] of transition Medicare. And this is, I believe, it was half a million people that are kind of falling in the cracks there. Where would charity care come in that arena, is one point?

And the second point, and this goes on to the National Academy of Medicine victor also is, are we looking at what's succeeding or not internationally? Just to give you an example, botanical natural products, Japan, they have something called functional foods; in Europe, it's called nutraceuticals, and in America, we call them dietary supplements. So these are just other areas we might look at.

>> TILSON: Yeah, I don't know if were here at an earlier session or earlier part of the morning, but when we think about Medicaid expansion, right, huge, huge lever to dramatically really improve the health and well-being economically as well as physically and behaviorally is just a huge lever we need to pull in North Carolina. But it's caught in the political divisiveness of healthcare, again, which is why thinking about moving to a consensus, but it is a huge disconnect between the innovation of North Carolina and not moving on that incredibly important lever. So that clearly is a big issue we are discussing.

Thinking about internationally and thinking about -- What I'm really impressed and when I think about other countries as well is this thought, not exactly to your point, but the thought of food is medicine, right, food is medicine. And it's recognized, we know it, huge amount of evidence, even evidence around medically tailored food in folks with chronic disease. There is probably the deepest evidence in that one piece of medically tailored food. But there is kind of a cultural piece too of like, if it's not a drug, then you have to prove the ROI. I can even prove the ROI, I can show you ROI over and over again, but it's food, and then it gets to -- somebody said, the stigma, who's worthy and who isn't, right. Everybody's worthy to get a prescription, I mean, if they have insurance. [cross-talk] Everybody's worthy if they have insurance for medicine, but if you need food, then that is an indication of a moral failing and you're lazy. And if you don't have food, it's because you're lazy, and you're not worthy of --

So there's a lot of things that are in there that is wrapped up, I think, in our culture and our systems.

>> AUDIENCE SPEAKER: [off mic]

>> COLE: I would say just two things. One in regards to our community members who, unfortunately, uninsured. As a healthcare provider in a community clinic, I take care of those patients every day. And they are being taken care of by a lot of our healthcare systems across our state, and this is charity care. And I often say, this is actually a segment of the population that we are already 100% at risk for. So we really should be thinking about, from a clinical care standpoint, how do we better serve that segment of the population. At the same time, pushing for the policy, the big P policy at the state level and the federal level to bring access to those community members.

So I just want to say, as a provider who takes care of those patients every single day and those community members every single day, I think we are doing the best that we can with the resources that we have, but there are still things that we can be doing better. And I think, again, we have to be uncomfortable enough to say that.

And then, I think the whole notion of, quite frankly, the evidence around food as medicine is very, very clear. I think this is the one that we've done a lot of work around. Food insecurity was the first social determinate that we put a strategy around back in 2017 across our entire enterprise. But one of the key learnings that we found, and I know we're not supposed to be pigeonholed, but I do feel like I am the health equity person up here, one of the things we found, particularly here in the South, there are certain cultures where food is a part of that culture. So you're not going to just necessarily -- like I can't just tell my patient to stop eating fried chicken on Sunday's if that's a part of the Sunday dinner. At least not initially, right. I have to be able to establish that trust.

And so a lot of what we've done have actually been to work with our different segments of the population to learn more about what is their traditional food that they eat as part of their family, as part of their culture, and then actually create healthier recipes with substitutions for certain things. Instead of using margarine or lard -- quite frankly, a lot of people are still using that -- using some of the butter substances or switching to olive oil, just little minor recipe changes that you can at least start to have that conversation and not just expect that you're going to change an entire family or a community's culture to eat healthy, especially when they have -- this is the way they have their whole entire life.

And so I think, again, that goes back to us being humble and saying, "Okay, we have to listen. If this is your culture, then we need to be able to adjust and try to just figure out ways that we can maybe make some of those recipes a little bit healthier."

>> TILSON: I'm going to let Chris have the last note because Jessica has already held out. So one last --

>> KOLLER: I'm going to speak to the international piece. Five lessons. Countries that spend a higher ratio, not total, a higher racial of social to medical have better outcomes. And we've seen that in a bunch of different places including NAM reports, Betsy Bradley's work. So the ratio of social to medical have better outcomes, not lower costs overall, just better outcomes, which is a pretty darned good thing.

And there are folks here from the Commonwealth Fund, they do a lot of international comparisons. Eric Schneider there wrote this really nice perspective piece. It was nice because it was short, and I could actually remember it. Four lessons from other places, because you've seen those charts about how they have longer life expectancy and lower healthcare costs. And they're just dealing with healthcare, they're not looking at the expanded definition. This is our traditional, narrow -- sorry, Alisahah -- definition of healthcare.

The four lessons: They have lower administrative costs, they have a commitment to universal access, they have a preference for primary care, and they're paying attention to inequities and disparities.

If you think about those five things, you're actually working on all of them. And the lesson isn't, Oh geez, we stink, why can't we pull a rabbit out of our hat from someplace else? But that it takes work to do this stuff, and you're on the right path, you're working on the right things. You just got to hang in there.

[Laughter]

[Applause]

>> MCGINNIS: Thank you for a wonderful panel and for that last word, which was critically important lesson for all of us. It was especially fun for me, not only to listen to these extraordinary panelists, but because the first public meeting that I attended in North Carolina, if I can recall correctly, a few decades ago was chaired by an incredibly skilled moderator named Dr. Tilson. And here, again, we have an incredibly skilled moderator, Dr. Tilson, moderating this panel here today. Again, as we welcome the new Panel 4 that's coming up, let's thank our previous panel.

[Applause]

>> MCGINNIS: Fourth panel of this symposium, Connecting Care: Moving towards seamless information flow and data sharing, is moderated by Dr. Aaron McKethan. and Aaron is a Senior Policy Fellow at the Duke-Margolis Center for Health Policy, and he's also the CEO of NoviSci, Incorporated.

He's joined on his panel by Patrick Getzen, Annette DuBard, Eugenie Komives, Jessie Tenenbaum, and Matthew Ewend. Aaron, thank you very much.

>> MCKETHAN: Great. Thank you very much. Hi, everybody. This is the data nerd fest panel.

[Laughter]

>> So that could be really off-putting to some of you, but I assure you, we're going to try to not be too nerdy today. In fact when we had -- and by the way, what exceptional preparation, Jessica and others, for getting us to this day. What a great days this has been.

[Applause]

>> I don't know how long it's been since Secretary Cohen's been in the same room all day.

[Laughter]

>> But it's obviously a good sign that things are going really well here.

So in our prep conversation, we discussed the fact that we don't want this to be the quote on quote IT panel, the data IT panel. We're not going to talk about data standards, certifications, and the like all that much, unless you force us to with your questions. We prefer you not, please don't.

[Laughter]

>> Because we want to talk -- The panelists here were selected -- what a great group to my left -- to really think about what are the information needs of this changing healthcare system that we have. And I appreciate the Secretary beginning this morning with a reflection on health as the True North and it's worth every day, reflecting on that, why are we doing all this anyway. And furthermore, to put that into terms that we can know for winning or losing. What health

are we talking about? For whom, and which direction are we going in? And, sadly, despite all the great hype, North Carolina, which is both exciting and somewhat nauseating, admittedly, we had -- because we have to earn that hype, we have a lot of work to do to earn that hype around the country.

Despite that hype, in many dimensions we're not doing that well as a country with respect to that True North of health. Our life expectancy is actually going backwards, and when I tell young, enterprising, you know, college students that at UNC and Duke that -- and their learning health policy, their eyes widen. They were led to believe that the greatest country and the richest country in the world ought to constantly be improving in its life expectancy and health outcomes, and in many ways were not, and a lot of the disparities that were discussed today are further evidence that we have a long way to go.

And we also recognize here that information, data and information, are not just nice to haves in this environment that we're trying to build toward and toward this vision of a healthier North Carolina, but they're crucial. And we've used the word "humility" a lot today. I'm reminded of that quote that says, "North Carolina is the valley --" help me out, what is that quote? "North Carolina is vale of humility between two mountains of conceit," referring to our two northern and southern states. No one's ever hear that quote? All right, Google it, and let me know if I'm getting right by the end of the panel.

[Laughter]

>> Something like that.

So anyway, I've been at the state level and the federal level and in the private sector working on various aspects of data analytics, and it can seem a little abstract. And what I want to do briefly before I introduce the panel is to tell you a brief, personal story that I actually don't typically talk about, but I'll tell it to you because in the last few years, despite having been in the field of health data and technology and analytics for a long time, I realized it became very personally real that we have a long way to go to build the kind information infrastructure that we need as a country.

So four years ago today, actually four years ago this month, my father who lives in Watauga County died. He had lung cancer; he was diagnosed 13 months prior with a -- I mean, I was sitting there with mom and dad at the primary care doctor getting the results, they decided to route the results to the person they trusted and knew the most. And it was not a good day. It was Halloween, actually, the date, the year prior when we got the diagnosis. And it was late

stage cancer, stage IV, lung cancer, very common form of lung cancer. And so there we sat all figuring out what are we going to do now. And at the time, we lived in Washington DC. I grew up in North Carolina, moved to DC for nine years. As soon as we got that diagnosis, my wife and I looked at each other and said, "Time to go -- we got to go be with Dad for as long as we can. He won't be here very long, so let's do it." So we rented a house, sight unseen, in Chapel Hill, so we could be close to an airport and keep working, but otherwise, we're spending a lot of our time in Watauga County.

So the reason I'm telling that story in the context of data, as we got into the treatment process, I wanted to know how many -- So Dad got on a treadmill for chemo. It was time to get chemo. There wasn't a lot of question about it, it was just, "Now your chemo appointment is coming up." And I wanted to know how many people like Dad get that chemo, and it wasn't because I was second-guessing the doctors, who we thought were fantastic, it wasn't because I wanted some sophisticated algorithms to tell me which chemo drug he should use. What I wanted to know -- what we wanted to know is, is it possible for Dad to be able to go down to the beach to be with his brother, who at the time was also suffering from cancer, getting treated every day with radiation. We were trying to find an opportunity for them to sit together for a few months, just laugh and remember and tell stories.

And so chemo is, obviously, very logistically complicated. So we were just trying to figure out, is it 2% of patients like Dad that get this chemo, and therefore kind of need to be back at home and dealing with that? Or is it 80%? You know, that was kind of the basis of our question. And it was so shocking to me that no one could tell us the answer to that. No one knew. And these are great doctors. We'd send others to these doctors.

So the lesson for me in that was, despite what you typically hear at conferences, where there's a panel on data and analytics, which is about deep learning -- like nod your head if you hear all this -- deep learning and machine learning and all these things. That's great, but guess what? We have a health system that can't even count.

[Laughter]

>> We can't count things very well. We can't count them systematically. So I like all those things. Hats off to Karen DeSalvo who's going to fix a lot of the nation's issues with data at Google. They'll use all kinds of specific algorithms, [phonetic] but we first need a system that can say, "How many people, 65-year-old, white, former smoker with this very common cancer who's a Medicare patient that get this treatment, how many of them that get this treatment are still alive three months later? These are the very practical things that we have to get to.

So I think part of the challenge of building a healthcare information architecture is that we're doing it in the abstract. We need to do it to solve very specific problems like that, answer very specific questions, and solve really specific problems. This is a long way of saying, Dad get to go to the beach, he did get the chemo, but he did go to the beach, and that was an important quality of life to mention that we cherished to this day -- I was just looking over there of a picture of Dad and Uncle Gene on the beach enjoying their last month's together.

Data matters, and every numerator and every denominator is a person. And so this panel is going to try to bring that to life, and ask the question: How are we doing in North Carolina to fulfill the vision of a payment system that rewards quality and outcomes in health, that has an organization capable of taking downside risk? How can they do any of that unless they have information about who their patients are, where they are in the system, and how to help them?

So let me now introduce the folks on the panel. I'm going to start just to my left with Patrick Getzen. And by the way, I was also reflecting on this list I'm going to read for you. These titles only reflect their current roles, but many of you know, these folks to my left have been very impressively involved in all sorts of things, in different organizations in North Carolina and around the country.

Patrick Getzen is the Senior Vice President and Chief Data and Analytics Officer at Blue Cross and Blue Shield of North Carolina. We'll start out with him in just a moment.

Dr. Annette DuBard is currently a Vice President of Clinical Strategy at Aledade based in Bethesda, Maryland. She's based here, but they're based there. Is that right? Okay.

Eugenie Komives -- Dr. Eugenie Komives is the Chief Medical Officer of WellCare of North Carolina. That's a role that you've had for how long?

>> KOMIVES: Four months.

>> MCKETHAN: Four months. So she'll tell us about some other roles and hats she's wearing to talk about data that go well beyond the four months at WellCare.

Dr. Jessie Tenenbaum is the Chief Data Officer, fellow faculty member at Duke, but Chief Data Officer at the North Carolina Department of Health and Human Services. And she's, by the way, much better in that role than her predecessor.

And, finally, Dr. Matt Ewend is the Chief Clinical Officer at UNC Health Care and President of the

UNC Physicians. He's also a neurosurgeon. My first question for you, in a minute, will be: How many years have you been in school to be a neurosurgeon? But I'll come to that in a second. Count it up while you're waiting.

[Laughter]

>> MCKETHAN: So, Patrick, you are responsible for data and analytics at the largest insurance company in the state. When we talk about interoperability, maybe we can start with just, what problems are we trying to solve when we talk about that? And what tools do we need in North Carolina to do so?

>> GETZEN: Thank you, Aaron. Let me start by saying, the really sad story about your father is that the data probably did exist. It's what I kind of like to say is that, we are very data rich in healthcare. It's not integrated very effectively, so we're pretty insight poor. And then we're absolutely execution poor even with the insights that we have. So it exists; it's just not housed correctly and used correctly. So there's a lot there.

So Aaron said we all had different roles in the past. I'm the Chief Data Analytics Officer at Blue Cross North Carolina, but for a period of time, I used to be in actuary, and I spent a lot of time thinking about the business problems we needed to solve in healthcare. The three outcomes that we all like to talk about are affordability, quality of care, consumer experience.

As an actuary, I spent most my time on the affordability side, and there were a couple of data points that used to really bother me. The first is that healthcare premiums go up 6 to 8% per year on average; salaries go up 2 to 2.5% per year. And you don't need a designation as an actuary to understand that over time, that's an unsustainable cost model.

The other thing is, we recently have done some affordability analysis to look at what percentage of household incomes in North Carolina are going towards premium and out of pocket costs. And I would say that it's startling to find how much people are paying for healthcare, but what's even more startling is how to it degrades overtime because of the first data point that I gave you.

So we really are at a point where we need to do something and do something fast around that. So to the point that Aaron's talking about, we have these tools that are available to us, we need to put them to use. One big step Blue Cross North Carolina is trying to tackle on now, which you heard about, both in sessions today, but also in media relations for Blue Cross, is moving toward alternative payment models towards value based reimbursement. And that's a program

we launched this year called Blue Premier. We've launched initially with five systems; we've added two more recently. But the idea is that we want to move from paying for volume of services to paying for value of services.

I'm looking in the audience, and I see many people who aren't young enough to have been around in the 90s when we tried to push risk onto the providers back then. But for those of you who weren't around, I'll just kind of give you the cliff notes, it didn't work.

[Laughter]

>> And part of the reason for that was we said, "Hey, great. Docs, we're going to put you on risk." We never gave them any tools; we never gave them any data; we never gave them any insight. And as a result, it was a pretty big failure.

So people ask me, "What's different about today?" And I say, "There's two things that are really different. There's one thing that is different that people don't talk about, and then there's one thing I worry about." So I'll go through those with you really quick. The first thing is, data is very different than when I started in this industry in the 90s, and it's not just the clinical data or the claims data. We've talked about social determinants of health; we're not a fan of that phrase either. We call it "drivers of health." It tells you, not only what a person's health or status is, but why it's there. So we go from correlation to causality. The data sources are much more in a larger volume.

The second thing is, although Aaron did mention it, tools are better. I used multiple regressions when I first started off. Now we have predictive modeling that's much better than it was before.

The one that we're going to talk about today that people don't like to talk about is, how do you actually exchange that information and that insight or interoperability? This is a really important piece, because if you think of the steps to value, which are data, finding patterns in the data to give you insight, you still got to do something with those insights to actually create the value, in exchange, this tool is a really important part of this.

So and then the final thing that worries me a little bit is, you have to get it into workflow. So when I think about Blue Premier and what we're doing with providers, I really think that it's not enough -- All the steps are important, data's really important, insights are important, getting insights is important. Somebody has to accept those insights and then do something different with that insight to create a better outcome.

>> MCKETHAN: Let's begin the tradition of clapping for our fantastic panelists, because that was great.

[Applause]

>> MCKETHAN: So Dr. Dubard, you have spent a lot of your career working in the primary care world and understanding the needs and information and otherwise the primary care practices. Reflecting on what you've just heard, you know, how do you reflect on now the state of primary care in North Carolina with respect to information? What do they need? How well-equipped are they to get it?

>> DUBARD: Great. And thank you for letting me to be a part of this panel. To give some background of the perspective I'm hoping to bring, Aledade, the company I'm working with right now, is very particularly focused on helping independent primary care practices succeed and thrive in value-based care models. And so we work in 25 states with 6500 independent primary care physicians helping them organize, and two are accountable care organizations, and get into value-based contracting with Medicare and commercial and Medicaid payers. And importantly, bringing not only that opportunity and the size that it takes to do that well, while maintaining your independence and serving your community, but giving them the practical help. And very often that means the data and the technology it takes to kind of step up and recognize the needs of your population and tend to those needs.

And it's going well. Our partner practices across I think we had 18 ACOs operating in 2018, generated $69 million in savings to Medicare in 2018, and are having substantial success in commercial value-based contracts in other states. But I would tell you, we've been to North Carolina a little less than a year now, and this has been our fastest-growing state. We already have 1,600 primary care practices across 180 practice sites that are working -- that are grabbing opportunity to work with Blue Cross on Blue Premier and to do Medicare and hopefully coming soon some additional commercial value-based contracts, because primary care practices are very ready to be valued differently and to be recognized for the actual value that they bring to the healthcare ecosystem.

So the business model of Aledade is completely predicated on the notion that doing primary care the way it was meant to be, meaning you have access to a primary care provider who knows you and will see you when you need to be seen and will have a longitudinal relationship with you and cares about your total healthcare needs and will coordinate those needs, that that as is actually the key to success after all. And that is the model that keeps people out of a

hospital. It keeps people out of the emergency room, reduces unnecessary duplicative testing, unnecessary specialist visits.

And so I think the -- back to your question -- primary care practices are working in an information vacuum. And the reality -- has been such an exciting day because we're talking about such meaty great stuff, but there is a stark kind of reality check that I just want to provide on what is the usual care in our communities across North Carolina and really all the states that we're working in, which is that if you have managed to keep your business alive as a small-business owner trying to provide primary care in your small community, and if you stayed alive this long under the US healthcare system fee-for-service model, you are seeing 30 to 40 patients a day. You are cranking through. You're making decisions at the second, what problem am I actually going to try to address versus what do I just have to put off to another day? You are quick to refer, if anything comes up that you can delegate to a specialist. And you're churning through. And that way you are able to pay your staff, and you're able to keep your doors open. And you're able to keep an access point to your community.

So it is very different what we are trying to allow the primary care to get back to, which is give patients -- build the relationships that your patients need. Take the time that they need. Take the time to really assess health care risks and social needs and then and wishes at the end-of-life care, take that time, wrap your arms around your patients and reach out and make sure that you know when you're -- when they're in the hospital or in the emergency room and you're bringing them back in. And you're making sure everything is smooth during those times of care transition. So the information needs for that are not that fancy; right? I need to know what is going on with my patients. I need to know when they're in the hospital. I need to know when they get out. I need to know where they're going. I need to know when they're coming out of this skilled nursing facility. If I'm going to take total cost of care accountability, I need to know more than what I bill because that's only 3% of the whole picture. I need to know where the other 97% is going. And I need to be eyes wide open about where the health care dollar is actually spent because most providers out there don't have a clue.

So it's getting that information into the hands of providers. Is this really the best use of the health care dollar for this patient that they are seeing three different cardiologists and they're getting their blood pressure checked by two different nurse practitioners in two offices every other week, and that they had a third abdominal CT scan because they ended up in three different emergency rooms over the past three months? So there is very basic informational needs to really help illuminate where the health care dollar is going and where the patient's needs are.

And we do fancy stuff too. We do some machine learning and we, you know, predict who's most likely to come to go to the emergency room within the next three months. And we predict risk and mortality so we can flag patients who haven't had advanced-care planning and are laying in those kinds of really actionable need-to-know information to make sure right patients are getting right care. But the information needs really at the core are much more basic than that.

[Applause]

>> MCKETHAN: So we've heard this morning or in this afternoon the Deming quote, about systems design, and they get what they're supposed to and alike. So Genie, I was reflecting on that. Universities are designed -- the production function of universities is to produce papers and grants. And so when you say to them, do something for the world. That's really hard. They want to, but they have this overriding desire to produce more papers and grants.

[Laughter]

>> MCKETHAN: Big health systems, historical design is to do more tests and procedures. And health plans is to play claims and try to not pay as many as possible -- you know, come up with a way to not pay them.

[Laughter]

>> MCKETHAN: So those are some pretty embedded -- those are pretty embedded systems to overcome. And you've sat on both sides of a health system and now health plan and previously with a health plan. What does it take against that north star of health? How do we reengineer these big bureaucracies so they produce something different?

>> KOMIVES: Whoa.

[Laughter]

>> KOMIVES: How about an easy question to start? Yeah, so Aaron eluded to, I trained here at duke, family medicine by training, spent 11 years at Kaiser Permanente. Believe it or not, there was a Kaiser Permanente in North Caroline. Those of you that are young, probably don't ever know that because it went away before you have born. And then I moved over to Blue Cross Blue Shield, had the pleasure of working with Patrick for a number of years over there on kind of all things quality, provider quality. We actually started doing some innovative provider

agreements back then, but we didn't have nearly the sophistication that I think the team there now has really brought to that.

And I got enticed back a way to return to clinical practice at Duke and about a year and a half later joined the Accountable Care Organization at Duke as Senior Medical Director there. And four months ago -- I can blame Greg [phonetic] -- Greg is in the audience -- for that. But I joined Wellcare North Carolina, which is one of our new Medicaid prepaid health plans still waiting to launch.

[Laughter]

>> KOMIVES: You know, so we'll move past that, yeah. But so, you know, Aaron I think really wanted me to try to speak from the health care system, the [indiscernible] system perspective. And it's complicated. I mean, and so you're right, there's conflicting priorities when you deal with large health systems. In a way I'm jealous of Annette because when you're working with primary care practices, in a sense, they are sort of pure; right? They have to keep the doors open. They got to see their patients. And they're probably more agile to make decisions and make changes than in a big system.

But what we were trying to do at Duke was take a limited resource, care management and IT data informatics and figure out how best to deploy those limited resources so that we could manage within the Medicare shared savings program. We were in an upside-only arrangement for three years and then track three, which is up and downside risk for the last two years that I was there.

And so number one, care management. So you go to figure out who are you going to manage; right? Who are the patients that you're going to deploy that limited resource for? And when we had our call -- and Annette told me we needed to make this spicy, so I'm going to make it spicy.

[Laughter]

>> KOMIVES: But we talked a little bit about the issue of sharing cost data back and forth between plans and providers. And I think it was said earlier, it's easy in Medicare and Medicaid because they're all the same. We'll they kind of are the same, certainly in Medicare there's a standard payment scheme. But for Medicaid right now in North Carolina, it's -- you know, we're negotiating individual contracts. So I think that is a little bit more controversial. But in Medicare, we had cost data at Duke. We actually didn't use it. We built a machine learning

predictive -- deep machine learning predictive analytic model to figure out who was going to end up in the hospital in the next six months.

And that was really just kind of a guess of -- and talking about unplanned hospitalizations, which we were able to identify. And we used a combination of our clinical electronic health record data, as well as a claim data that we got curtesy of Medicare for being an MSSP program. And we had pretty good predictive capabilities in that model, which is great. And so we deployed our care managers and said, dig in deep; really work closely with these high-risk patients and let's see if we can't avert some hospital stays. I wish I could tell that that was widely successful. It wasn't the predictive model that was that problem. I think it is really hard to change the trajectory of health for this sickest of the sick in the Medicare program. And so, you know, more work probably to be done on that, but it was a great example of how you can take data -- and I will say, claim data alone, we got reasonable results, but the EHR data on top of it really enhanced the model; so the power of the health system having access to both types of the information.

Now, I got asked at Wellcare, are we going to share cost data with our providers? And we have had providers that have asked us if we would give it to them. And this is a little controversial, but I've said kind of like why? So the model that we built at Duke didn't even look at costs. We were looking at events and diagnosis and pharmaceuticals and other information that we had available. And it predicted, quite frankly, just fine an event that an unplanned hospitalization really should be a never event; right? I mean, in the ideal world, nobody would go to the hospital for an admission that they weren't planning on, like an elective knee replacement. Now, we understand you're never going to get rid of 100% of unplanned admissions, but they're not an event that anybody wants. And we were quite capable of predicting those. It was more bending the outcome of that that was the challenge.

Interestingly, there's been now some controversy. So there is a predictive model -- I think it's called Impact Pro -- that a large national payer uses. And I think this is maybe Massachusetts, but there's a -- or New York -- big lawsuit. And the problem is that that model actually uses cost, predicts costs. And somebody published a paper, much smarter than me, that analyzed the output of that model. And it turns out -- because we're talking about equity today -- that that model over predicts risks in white privileged individuals and under predicts it in the underprivileged communities. And at least the theory is because for the same degree of illness, we people that have resources consume more health care so we are more expensive. Okay. But what it's doing is it's parsing those needed care management resources inequitably across the population.

And so now I've been able to like say I'm vindicated; right? You know, I am a big advocate of using clinical data for risk prediction, but I am not sure whether we need cost because of that. And Interestingly, we looked at our model at Duke where we were only using clinical data. If anything, it over predicted risk in underserved, so just interesting. And that kind of makes sense too, because if you're -- have same disease state, but you have fewer resources at your fingertips, are you more or less likely to end up in the hospital? I think we all know the answer to that.

So anyway, and the other, I would be remiss if I didn't just mention quality data. And we've come a long way from, you know, running around the state, collecting 15,000 charts for HEDIS. We are still collecting a whole bunch of charts for HEDIS, but the ability to exchange flat file quality data -- and having been on the provider side of that, you know, we wanted the claim data to fill in the gaps of what we didn't already know from our clinical record; right? So when we said in the Medicaid standup, that the plan should share quality data with the providers. I am like more than happy to share it, but the truth is that the providers probably know more about their quality than I do. And they know it sooner because they're the ones, for the most part, that have rendered those services. So we're going to be doing it just to kind of help fill in the gaps, but I think we're coming a long way on the ability to mine quality data registries, you know, do quality gap closure, that kind of thing. So that's all good. Now if we didn't have 67 quality measures; right? Okay.

>> MCKETHAN: Great. Thank you.

[Applause]

>> MCKETHAN: So as I shift to Jessie, I just want to reflect on a conversation I had yesterday by the watercooler with an entrepreneur who is in real estate. He's got a company in Durham that's working on predicting which -- looking for leads, people who are likely in the future to want to buy a house and, therefore, referring them to realtors. And we were sharing what do we do. And we're thinking about, how do you get at the infant mortality rate? You think about the moms and the health status. You think about prenatal care. I was describing kind of the problem; right? We need to get more prenatal care earlier. But one of the challenges is: How do we find out that you're pregnant if you don't show up in the health system until fairly late in the pregnancy? Blah, blah, blah. He interrupted and said, "we just buy pregnancy data from -- you know, that's available." And I think, okay, now withstanding the kind of weird factor of that.

[Laughter]

>> MCKETHAN: That information is the father for, like, what else do you have on us out there in cyber space? But I do think we ought to be creative. Claims is important, but how do we put all the data sources that we have to use for the health outcomes that we're working on? And Jessie, you are now chief data officer of an enterprise. There's lots of data, lots of different types of the data, probably so many that you haven't even gotten to them all yet; data on everything you can think about in Medicaid, but also all the social services, SNAP, WIC, TANF, etcetera. How do you prioritize what data to work on and how to us it for good?

>> TENENBAUM: I was not anticipating that question.

[Laughter]

>> MCKETHAN: Answer whatever question you'd like.

>> TENENBAUM: All right. So there is a lot of data at DHHS. So I've been at DHHS -- is this on?

>> AUDIENCE: No.

>> TENENBAUM: Thank you. So I've been at DHHS for six months now. And I describe my first few months as kind of getting the layout of the forest. And I felt like, okay, I am finally starting to see the forest from the trees, but each time I think I get the rough shape of it, I realize there's a whole grove over there that I didn't know about. And then it turns out that grove is on fire. And we have to figure something out.

[Laughter]

>> TENENBAUM: No pun intended for fire.

[Laughter]

>> TENENBAUM: So one way is just the size and the amount of money spent, that's one way to prioritize. And so certainly Medicaid -- Medicaid by budget and Medicaid and public health by just quantity of data are extremely important. But the integration, as you all know, right before I started at DHHS there was a publication in "The New England Journal" by Aaron [phonetic] and Secretary Cohen on the importance of the integrating across different sources. And that's really the challenge. So when I joined -- or I guess before I joined, they created the data office

within DHHS. And earlier today I talked to someone, and I mentioned who I was or what I did. And they said, "oh, you're the IT person." And I bristled a little and said, "not the IT person." And I realize it's subtle to other people, but let me clarify that you can think of it as plumbing. And the IT people are the ones who build the pipes and build the systems that are going to carry the content. And we informatics, data-science types are the ones that deal with the things that flow through the pipes and how we're going to make use of it. So that is our focus.

[Laughter]

>> TENENBAUM: The clean water. Well, funny you mention –

[Laughter]

>> TENENBAUM -- the clean incoming stuff. I wanted to also clarify, you mentioned data quality -- or quality data. We use the sense quality in two different ways I think in our different worlds. There's the quality measures, the HEDIS. In my world we talk about data quality of fit for use. We know that we have a data. Data by nature is messy and dirty and noisy. And what conclusions can you draw? What can you not? And so that's a huge priority of ours to just understand the data assets. As you mentioned, Aaron, there's a huge number of them; so figuring out what data assets do we have? Some people have eluded to data sharing and the difficulties of that. I come from an academic background, so I was at Duke before this. And there's this sort of theory of, like, your data is my data, and my data is my data.

[Laughter]

>> TENENBAUM: And we're getting better. There's a little bit more of a culture of data sharing, but now the problem is metadata, understanding what that data is. Like, sure, I'll throw my data. Here it is. But I don't know what a XQV5 variable means. You need sort of the annotation of that and to understand how it was generated, who it was generated by to understand what you can use it for.

The other thing, the background I have in biomedical informatics, we talk about the central dogma of informatics, being from data, to information, to knowledge, to action. So we talked earlier about -- someone mentioned earlier that we are data rich, but insight poor group or just as a society. So we're trying to take all of data assets that we have at DHHS and use those to draw conclusions and actionable ones in particular. For our data strategy that we've worked out, we're looking at just the infrastructure, kind of the IT parts to enable this, the governance, the policies in how we do data sharing, the data quality to understand what conclusions we can

draw, and then the usage. How are we using this? To point about the machine learning and the sexiness of that, I love going back to Duke and giving a talk in which I show the deep learning network, and say this is what people in academia are concerned about. And it's the sexy buzz words. And then I show the slide that has a sequel statement that's "select with summarize," and saying this is really what the world needs, basically, counting. I love especially doing it right after the guy who is really into deep learning.

[Laughter]

>> TENENBAUM: No, but close. So I think I semi answered your question and then some.

>> MCKETHAN: Excellent. Thank you. So Matt –

[Applause]

>> MCKETHAN: Okay. Matt, so how many years does is it take to become a neurosurgeon?

>> EWEND: That's my whole question?

>> MCKETHAN: No, that's part one.

>> EWEND: Part one. Yeah, I tell my kids it's 27th grade by the time you're done.

>> MCKETHAN: Excellent. So 27th grade. Okay. You're not selling it, but we do appreciate all those 27 years. Thank you. So I'm impressed for many reasons having you on the panel. You're leading a lot of value initiatives, all the value initiatives at UNC. And I wonder just from as -- reflecting on what you've heard down the panel and what your experiences are so far at UNC in this transition, what perspectives can you bring from an information standpoint about where we are today and where we need to be?

>> EWEND: Thank you. So I watched the Super Bowl two years ago. I don't remember who won. I don't remember who played. I don't remember what Fritos or Pepsi did to be clever, but there was one commercial that really caught my attention and it was a Google commercial. And the tagline was something like, "do you know what your data knows?" And that day I was thinking more like a neurosurgeon. And I'd had a patient who'd been postponing their surgery because they're on aspirin, showed up for surgery that day, that's a bad combination with a brain tumor. And I thought, we should know this. Like, somebody knew that patient was on Aspirin. It probably should have been, I'll admit, but somehow, I should have known that.

And now, as I sit working with our whole team on value, we really have to know what our data knows, and we don't. And beyond that, I don't just need to know what the UNC data knows about our patients. I really need to know what all of you know about my patient. And Patrick says that things will be better than they were in the '90s because the data is better and the systems are better. And I believe that too, but we have to execute on that or we will recreate the '90s. And that's really my fear in all this.

So we're okay. We know problems. And we probably can put together a decent medication list for most patients and allergies. But if you start to say us, do you know what happens with procedures or with laboratories? We start to fall apart pretty quickly. And then if we get to pharmacy data or many of the things that we've talked about today that are really important for health, but don't show up in epic, we really have trouble; so getting our hands around that data and being able to use it. And as Annette said really well, we have to drive that down to the level of whoever the provider -- and I use that term very generally -- who's working for that patient. And so it's not just enough that all the data is sitting on my system or that we look at it and gain some insights. We've got to make it actionable in real time to our people. And that is going to be a formidable challenge. And I think the efforts of this great state are going to hinge on that a lot. And so I'm hopeful that our data scientists will manage both sides of the pipes and make that happen.

[Laughter]

>> EWEND: Yeah. We'll forget it really soon. I promise.

[Laughter]

>> EWEND: That's all. Thanks.

>> MCKETHAN: Thank you very much.

[Applause]

>> MCKETHAN: So I'm going to ask a couple of questions for anyone to take, if you like. I have an extreme bias, as you can tell, for simple counting and solving problems that are right in front of you. So the first question is related to that. And to set it up I'll just say, I was a federal official at The Office of National Coordinator Health IT in D.C. a decade ago now. And I remember giving the first grants to North Carolina to set up a health information exchange. And years go

by, and I eventually kind of lose track of it. And I come home thinking, where's the information exchange? And there's still discussions about, is there an information exchange? And the thing that I learned -- and now there is. Thank you, Kristy [phonetic], in the back. We'll talk more about that in a minute. But it required a state legislation to really get participating, which is my next point really.

There's often the folks who deal with data get yelled at because we don't have the data we need, blah, blah, blah. But it's often not a technical problem, but a business problem. As Dr. Cole so nicely said in the last panel about whether -- she asked the question, "do we really want to do something about disparities?" I think we have to ask the same question about data because there's a lot of ways to share data. Sometimes it's Excel spread sheets, and sometimes it's sophisticated data feeds. But the first question is: Do we want to do it? Are we really committed as a state to actually sharing with partners and to expose what we don't have or what we've typically held closely in the spirit of sharing and coordination? And I wonder -- I'll open it to anyone, but Annette, I'm giving you a kind of softball to talk about ADT feeds and the kind of -- how do we get out of the "I don't want share anybody's data" kind of mode? And where are we in that?

>> DUBARD: All right. I'll start with a patient story that it literally started a couple of days ago. One of our field teams that work in the southeast corner of Virginia was telling a patient story, a really remote, rural health clinical. They're 45 minutes from any hospital. Monday morning the administrator goes in, as she does every morning, and pulls up the app that we provide that lets her know which of her patients have been discharged from the hospital since last she looked; and so found out about a discharge, immediately called the patient, as she routinely does. And found out from that patient, "yeah, I went home Saturday. And then when I got home, there's a message on my machine. And it was confusing. And I think they were telling me not to take my meds. And I didn't know which one not to take." And there had a -- anyway, as it not atypical for any of us who work with patients with complex lives. There was a lot of confusion about what the patient -- so he had not taken any meds. She said, "you need to come on in."

Unfortunately, his blood pressure was sky high, and he had new EKG changes, so ended up right back in the ambulance and right back to the hospital. But the part of this story that I want to emphasize, is he had just gotten discharged from a Virginia hospital. And that's how she knew about it. Two, three weeks earlier he had been admitted in Mount Airy, right across the state, and transferred to Novant and discharged home and then bounced back. And we didn't know about those. So she didn't know about those. And nobody let the primary care practice know. And that patient has been a whirlwind of fragmented and costly care for over a three-week stretch.

Many states are struggling to bring alive the notion of health information exchange. And many states we have to work with multiple data partners to try to get hospital notifications to our practices. North Carolina is not at the head of the pack here. And it's been a struggle. And the HIE is making a ton of progress and working really closely with us to try to get ADT notifications to our practices, but I don't think it's widely realized that most health care systems, I think all of the major health care systems that I've seen here today with the exception of the UNC -- thank you -- are participating in the North Carolina HIE only to the minimal extent required by the law, which means I will send Medicaid and state health plan patient data. And that is not a whole population solution. That is not a multi-payer solution. That does not help us to actually drive systematic change and how we communicate and deliver care to the population. So I don't know what the -- I can't speak to the barriers, but we have to have the will. This is 2019. This is not technically hard to send discharge notifications. We have to have the will to get this done.

>> KOMIVES: I'll just pile on that one. I can't imagine doing good quality care management without, you know, real time ADT data. And I was actually shocked about a couple of things. One is that we still don't -- maybe you guys now 100% of the hospitals signed up. But I think there's also a gap with behavioral health facilities, which is a really important part of what we're trying to do with Medicaid, whole-person care, even within the standard plan, is to be able to manage patients that are coming out of behavioral health facilities who are also being cared for in primary care. And so we're doing this elegant workaround at WellCare hoping that we get a request for an authorization from the facility and then we take that out of our UM system and move it over to the care managers, so the care manager knows that they're there. And then the care manager can kind of ping the UM system for when they get discharged. And then the care manager can dive in and do what they do.

The other comment I have about ADT is when I was at Duke practicing, we had ADT within the Duke system that was instantaneous within Epic. We had ADT from UNC and other Epic facilities, if the physician there was kind of enough to ship it our way or if we were seeing the patient anyway, we could go out and see it, but it wasn't a push notification. But I will tell you that I called the emergency room a number of times when a patient of mine hit the door of the ER. And said, "here's what you need to know about that person that's not immediately visible in their medical record." And had it been a once-a-day, 24-hour thing, I would have missed that opportunity. And so that's the other piece of it. And I know right now we're working on a 24-hour thing.

And we've talked with you all about how at some point we can get it to be more real time. But ADT is just realty critical. Our care managers needed it. They knew when patients got out of the

hospital. We got a notification to them, and they were able to really follow up quickly with folks as they came home. And that's the most vulnerable time for patients. So it's a real challenge. The other thing is there are other solutions out there. They happen to be very expensive. We've poked around at all of them, and none of them are perfect. And so I think some of those are more multi-payer, but there's a big price tag attached. And it just seems like we should be able to solve this problem.

>> GETZEN: So I'll add something really quickly. The answer I think has been to yes. We have to share data, unless we're happy with the outcomes that we're getting, unless we're happy with the health care premiums we're paying, the quality that we're getting, and the experience. This is our shot here. We have information. It can be used. I think that there's a couple of things that are tough about it. One is that everybody -- I like the way Annette said it before, "your data is my data and my data is my data." Data as an asset is very, very valuable. I don't know if you guys saw the article in "The Economist." It was the lead article that said something like, "oil is no longer the world's most valuable asset, data is." So we have to get past this. We own something that's very valuable, but we want to give it away at the same time. The second thing that we have to kind of get past I think is there has to be an acceptance that it's not perfect.

When I became the CDAO of Blue Cross North Carolina, I had no idea what I was getting into on the data side. I knew the analytic side, but the data part, until you actually get into it, you don't really have a full understanding of how messy it is. And just raise of hands, how many of you guys have seen a flat file or sort system file and what it looks like? Good. That's way more than I was expecting, and it's almost nobody.

[Laughter]

>> GETZEN: What I would say is that when you see reports in your company, when you see information, it is so massaged, cleansed, worked on. If you see a sort system file and you see with the identifiers on it, you see all the holes in the data that you have to derive definitions on so that it can be used, it's difficult. So there has to be an acceptance that it's not perfect. And that when we go out and we start sharing it, it's not going to be perfect. And what I would say is that if you have a plan of owning this asset, keeping it within your company, and never sharing it, it's kind of okay that it's not perfect because you're not harming really anybody else. You get into a data-sharing environment, everybody wants it to be perfect. So there has to be this kind of path of getting there.

>> TENENBAUM: A couple of things to add to that on the ADT. So one of the things that I was asked to talk about, we debated whether to mention APIs. Because we don't want to nerd out

too much, but let me just mention APIs and that you can think of an analogy of the world we're living in today, we exchange the data as if we're sending snail mail. You kind of take something, you package it up, you put it in a box, and it disappears and you're not really sure what happened to that. APIs will enable us to do it more like e-mail. You send it. It gets there in real time. If there's something weird or corrupted, it gives you an error, hopefully an error you can understand. And you find out what happened to it. You've got some providence there. So we're moving in that direction to try to exchange the data by APIs. Another thing, there's sort of a common joke in data standards of the wonderful thing about data standards is there's so many to choose from.

[Laughter]

>> TENENBAUM: This seems to be the case with the ADT as well. We've got the HIE with the state. We've also got venders, a few venders that do a lot of this. And each of them get some partially, overlapping subset. And that's part of the problem. We need to be clever and creative about how to align those. And I'm not sure how, but know that this is a priority on the state side to try to work this out, so stay tuned.

>> EWEND: I was just going to say, first, it's so exciting to be a neurosurgeon and maybe have a chance for once month not to nerd out the panel.

[Laughter]

>> EWEND: But we've said and a number of people have said, and Mr. Koller earlier today said a little bit about changing the rules. The system that we operated under created the behaviors that we have about sharing data. So it would be a continued transition of the health care system that would suddenly make it in everybody's interest to share data because that data would become more valuable if I shared some of mine or a lot of mine, and you shared a lot of yours. We can legislate it; right? That's the other way to do it, but I don't think we'll shame folks into it. So we've really got to continue to encourage the movement of the system in a way that looks at patient health and that will drive us to share data, because that will make us more successful as participants in patient's health.

>> MCKETHAN: Great. I'm going ask one more question and let anyone to my left answer it or not, and then we'll take your questions. I'm not sure how much time we have because I think we were running a little late in the last panel. So if someone would just give me a high sign until I -- we'll keep going until dinner, if you want to talk about it. Ten minutes. Okay. Thanks. So my question is really about -- and this is sort of a question that could be asked on any of the panels.

But I'll ask it to this panel because this is the one we are in now. And that is about the time horizon problem in health care. You know, think about if you're insured by Blue Cross. And you're an actuary, Patrick, so you'll know the precise answer to this probably. But you're in that plan for some period of time, and then you switch to a different plan. If you're in Medicaid, just by the rules of the Medicaid program and eligibility classifications, you're just not permanent. You're there for a little while, and then you're gone. And if you're in Medicare -- increasingly, it used to be that in Medicare once you hit 65, you're in Medicare until you die.

Well, now you have Medicare Advantage, which is the fastest growing segment of Medicare. And you can switch from to plan to plan over time. So concerns me about this is the kind of chronic underinvestment in things that we know could work for a patient's health, but can't accrue the benefit to the payer paying for it long enough. And this seems to me to be a systematic challenge. And if you overlay on top of that kind of the political time horizon that we often operate under, it won't be long before there's a new election, new people coming into office with new priorities and so on. I just wonder how do we build toward -- this is a hard question so I'm just throwing it out there for anyone. How do you create an information infrastructure and make progress against this very difficult challenge of getting more information to the right people and building toward interoperability when you have all these time-horizon challenges of progress step forward, two steps back, etcetera? Anybody want to take that one.

>> KOMIVES: I'll jump into it. And a couple of thoughts, one is my first off-the-cuff thought, well, that's what the quality measures are for, right, in a sense. Because, you know, I hope -- I don't know any organization I've ever been part of that has said I'm not going invest in that because it's good for somebody's health, but they're not going to be a member long enough that it's going to pay off. But the quality measures -- I mean, honestly; right? There was an interesting article about tobacco that being a smoker actually saves Medicare money because they die before they get to Medicare. I mean, that's a sick statistic; right? I think it's true, but I honestly, every health care organization I've ever been in, whether it was a payer or provider, wants to do the right thing for the patients. And the quality measures are really kind of there as an insurance certificate to say, you know, here are the things that we believe are important for health.

Now maybe not Dr. Cohen's health so well, because we haven't yet really figured out how to -- how do we measure real health, but sort of the secondary and tertiary ways that we look at health. So that's all well and good. The other thing I will commend Medicare transformation as it's designed is that we're getting two years of claim data on the enrollees that are coming into the plans. And we're required by design to hand all that data off to the future payer. So it's

acknowledged that the Medicaid enrollee is going to move between plans on -- you know, a couple of times a year I think is permitted. And they may have other reasons to move even more often than that. And that data will go back and forth between us and the future PHP or back to Medicaid for service. So the one complexity in that is that I'm going to get data from and you, and then I'm going to hand it back to you. And then it's the same data that I already gave you. And how do I keep track of that; right?

So that's creating some nightmares for our data people to try to understand how they keep track of all that. But there is going to be a reasonably continuous stream of at least the claim data and all the off data and the pharmacy data going back and forth in the system, which will help mitigate a little bit of what you're talking about. I know Patrick can comment on this, but Blue Cross Unified, their IDs a while back, so that when patients reenrolled with Blue Cross with a new employer, they didn't lose the history that they had on that person. So we're getting better at it.

>> GETZEN: Thank you for saying that, Genie. Genie has actually back in the day worked with me on a lot of these problems. What I would say is that if you look at something like let's say a care management program. And you say, what's the ROI return? Let's say it's five years. And let's say that the turnover rate on your book of business is 18 months. You can really easily come to that conclusion of is it worth the investment? But I think that's a really short-sided view. And what Genie said is really the rational for that. With Blue Cross Blue Shield North Carolina, sometimes we'll say, hey, not only do we ensure a lot of North Carolinians, but if we don't have you today, there's a pretty good chance we had at some point in the past. And I think the way you got to look at this is even if you're investing in that person's health, you lose them, maybe your competitor gets them, you're going to get them back. And what's good for kind of the population health of the community is good for your company. I think the way I like to think about it is things that are good for this state, are also very good for good companies in this state. And so you have to get passed just competitive differentiation, and say, what's really good overall?

>> EWEND: From the provider perspective, one of the great challenges for us in building a value-base system is we not only have to figure out how to do it really well, but we got to figure out what day we're supposed to be good at it. Because if we arrive too early, that can be as big of a problem as if we arrive too late. And so we like to say in value-base care it's the second mouse that gets the cheese; right? The second mouse gets the cheese. So you arrived too soon, that can really be a problem. And so we need to partner with the folks that are guiding this, Secretary Cohen, Blue Cross, and others. There needs to be early successes for the providers that are willing to do this. They don't all have to be financial, but it needs to be -- it can't take

five years for each place to figure it out because there's too much of the role you described. There needs to be an onramp for folks who are willing with rapid education and a chance to be successful so that you can build some institutional momentum so that when these bumps in the road come with changes and systems, you can weather those.

>> MCKETHAN: That's great.

>> DUBARD: Just to add one quick -- I mean, the good news here is the payer is not taking care of the patient, the provider is. And the vision that we are collectively hopefully working towards is that we are trying to change the way people interact with people around their health and their health care. And we got to get a lot of little pieces aligned. We got to get the critical mass with more payers involved on making the right thing the profitable thing. But when they're working in practices and in our health care delivery systems around making the right thing the easy thing, those are systematic changes, hopefully, once we get to critical mass. And it's about interacting with patients and their communities in different ways than we have been doing in the past 20 years.

>> MCKETHAN: I lied. I'm going to ask one more question, then I'm going to audience questions because I think we have a little bit more time than I thought. So I'll ask the real last question. It is picks up on a theme from secretary's comments this morning also about the real asset here is the collegiately and kind of working relationships that North Carolina has that a lot of places don't. It makes it hard to externally sort of to transport this to other places that may not have that kind of social fabric that's longstanding. I so appreciated Pam's slides, wherever you are, Pam's slides from the '40s. It's not like we just started thinking about these things recently. There's been a lot of effort and a lot of people involved shifting from organization to organization, but still working together.

My question is for Matt and Patrick just to operationalize a little bit in the context of this Blue Premier system. Let me summarize what I understand about Blue Premier, and tell me if I'm right. But I'd like to get a sense from you about what it means from a partnership standpoint, really under the hood. So as I understand it, Blue Premier means we're going to sign an agreement together that's three, four, five years and that we're going to share data together and our teams are going to work together, etcetera. By some number of years in this five-year contract say, there will be an agreement to share a total cost of care, downside risk, as well as upside sharing. But the idea is that we're working toward that both on identifying the kind of problems that we can solve together to lower costs and improve outcomes, improve our patient's experience, but then actually acting on those together.

And I just wonder -- first of all, did I get that more or less right? Is that more or less what Premier is about? Okay. So from a data standpoint, and respecting your comments, Patrick, about you've got to work toward the workflow, how is that going to play out in Blue Premier systems, or how it is working now where you sort of co-create instead imposing Blue Cross tools on the unsuspecting system and saying please use them just the way we built them? I gather there's more of a co-development kind of mindset and partnership there.

>> GETZEN: Maybe I'll start. And Matt, you can add. So when I think about how we've worked with providers in the past and how this is different, we would go to the provider. And we'd say, hey, what kind of information do you need to manage a patient? And they would, say, well, I need this particular field of information. And we'd say, well, you have it. It's three columns over in the report that you have. And the reason we ran into those types of the problems is because we were developing things without really understanding what the providers wanted and what they could use. And then we didn't train them at all on the information we were sending. That was the second bad thing. And then maybe the third is that we gave the information on very non-timely basis.

So it wasn't really actionable; and so did a fair amount of work to really get very little value out of it. I think what's different about Blue Premier is we're going to our strategic partners and we're asking them, what do you need to do? How are you handling your patients? When a patient comes in, what information is it that you would need? How would you like to access it? And what time do you need to have a that? Because I think the ultimate goal is, we'd like to get insight into a provider's hands at the point of care delivery. That's what we're working towards. We're not there yet, but we're working towards that so that the provider has the best information available to them to deliver and make decisions and deliver care effectively. So I think that from Blue Cross North Carolina's perspective working with UNC and others, it's almost like starting from scratch and saying, what do you need? And how do you want to access it? What I can't answer, which I hope Matt will comment on, is how do you get into the provider workflow at that point? Once you have it, what will happen?

>> EWEND: So I think that's a great answer. I'd just add I think for us the difference that we feel is in the past arrangement I think your job was to get all of that on a disk or a floppy disk or whether you all call it.

[Laughter]

>> EWEND: And that's a more fancy term than I planned to use.

[Laughter]

>> EWEND: Yeah, sorry about that -- and hand it to us and say, here you go. And now I think we really are trying to co-develop. This is what we need to better take care of these patients. And there's much more discussion about what you call customers and we call patients, instead of just about the contact says we have to give you nine rows of this, and it's all there. I think we're done. And so that partnership I think gives me more hope that we'll be able to move the cost of care.

>> GETZEN: Yeah, and one thing to add, because I appreciate you saying that. We're more in a test-and-learn environment than we've ever been before. So it's not just, let's spend three years of development to get you exactly what you want and to the business specks that you gave us. It's more, let's try this particular thing, see if it works. Did it? No, we'll tweak it, and see how it goes.

>> KOMIVES: Can I add one last comment, having been on the other side of the Blue Premier when I was at Duke. So we needed to know who the patients were that Blue Cross thought were in Blue Premier at Duke; right? And the reason we needed to know that is because we were being held accountable for costs and quality. And part of the cost equation is making sure we're getting the coding right and all that. So the first thing we did is put flags in the EMR. We added them to our quality database. That meant that they showed up in the registries with an annotation about here's all the things that these people need. We were able to hand that off to care managers for workflow. So there were a lot of things that data -- you know, we immediately acted on it, when we had it available, to understand who the patients were and what they needed. And I'm sure I know Jan is busy doing all that same stuff at UNC as well.

>> MCKETHAN: So that last three -- thank you, all of you, for addressing that. To me, the next time the "New York Times" writes about North Carolina, which will hopefully be soon, I hope that this last bit is what is talked about. It's not the technical whiz-bang or the big announcements. It's the ability to roll up our sleeves, earnestly focusing on the health, recognizing there are very different interpretations, organizations designed very differently for different outcomes that are willing to go at it in a humble way and in an agile way. That's really exciting. I think that will be what helps us deal with the time horizon problem and legislative uncertainty and so on. All that said, what questions do you have? Yes.

>> AUDIENCE MEMBER: Thank you. First, I want to thank you for informing me that I'm probably one of the wealthiest people in this room, because I've had practice for 27 years. And I have a lot of data that I'm still trying to tackle.

[Laughter]

>> AUDIENCE MEMBER: But my question it is that. And it is in the private or in the independent practice setting. We do have a lot of data. We know what frustrates us, in regard to practice, kind of like, you know, the prior [indiscernible]. So we know that frustrates us. And we also know what causes burn out, a lot of those features. But we also know what makes us feel good. And we have the opportunity of actually thinking about office-based research and having this data that we can utilize for the care of the patients in our community, what's the potential for that?

>> TENEBAUM: So that's a huge opportunity. How many people here heard of the concept of the learning health care system or the learning health system? So the idea is -- Victor Dzau is raising his hand. I'm glad.

[Laughter]

>> TENENBAUM: The idea being that we've always done research to inform clinical care, but now with the adoption of electronic health records every single time you go to the doctor that's a piece of data could be collected. We could be leveraging that and learning from that as opposed to just leaving it on the table. The tricky part, and academic medical centers are already doing this, mining that data. There's a lot of ethics involved in this; ethics, legal, social things to say, you know, consent. What does informed consent look like? Important things -- from a smaller -- and I don't know if you're in a large practice or a small practice, here's where interoperability is key because any given practice, if you've got a roster of 1,000-or-so patients, that's interesting. And that's good, but they're probably pretty heterogeneous and there's only so many conclusions you can draw from that.

And so they're initiatives around the country to try to bring together large academic medical centers and the smaller places to say, if we pool our data, what conclusions can we come to? That of course brings up the problem of the data sharing. People are generally not comfortable saying, sure, we'll just throw our data out there and we can pool it together. And so that's created some innovative ways to approach and say, well, we're not going to all share our data and put it centralized, but we can ask a question. We can say, how many of your patients meet

these criteria? And then you can send the question to the data sources, and we can all pool that together and try to learning from that.

>> AUDIENCE MEMBER: Good afternoon. My name is Jacquelin Nicpoor [phonetic]. And I am a nurse. And a PhD student at Duke university. Dr. Ewend, you mentioned that on the day that you watched that Super Bowl commercial that and you didn't know who won. It was the Philadelphia Eagles. And as a die hard, lifelong fan, I will never forget that day.

[Laughter]

>> AUDIENCE MEMBER: But I will also never forget that day because I was working a day shift at the hospital where I worked. And literally, right before I left and caught my Uber to get home and catch the game before halftime, I had a patient who I was not caring for that day, but I had cared for many times in the past. And I had developed a strong rapport with. And she came up to me. And she was an 18-year-old girl. And she said, "Jackie, I just wanted to say goodbye to you. I'm getting discharged tomorrow morning. And I want to thank you for all that you've done for me, but just so you know, I'm not going to be coming back because I'm not getting the care I need here." And this was a girl who had a number of physical issues. I worked on a GI [indiscernible} and liver transplant floor. But she also has behavioral issue that were worsen her physical -- you know, she was somatizing her trauma and depression as chronic stomach pain.

And there wasn't the data or the coordination at the hospital for us to know what she had gone through before she showed up as a patient the very first time. And there's certainly wasn't the coordination to get her the care that she needed when she left the hospital. We kind of just said, okay, all of tests came back clear. We don't see anything physically wrong with her. We know that she has these behavioral issues that she's somatizing. So we're going to diagnosis her with a factitious disorder and discharge her. And that was all that happened. So my question for I guess that anyone that kind of wants to take this is: How do we not only get that data through these exchanges, but how do we use that to actually integrate our patient's medical care needs with behavioral health needs?

>> KOMIVES: So I'm going to tell a slightly different story, but it I think touches upon what you're describing. So one of the little data experiments that was going on at Duke when I was there, and I think they're still working on it, was natural language processing, looking at the electronic health record notes to identify what they called ACP-like conversations, so advance care planning. Because in the ICUs in the hospital where patients were critically ill, trying to figure out where in the health records somebody had said who the responsible family member was or had they had any conversations with the patient around what the patient would want if

they became critically ill or if things didn't go well with their illness? What were their goals of care?

And they were actually able to identify a set of kind of key phrases and then they put that together into a little map directly into the record. So that when the ICU doc was taking care of that patient, they could pull up that map and click on the stuff in the map, and it would take them to that place in the record. And then they could read it in context. And I think that that's an untouched -- it's very geeky. I'm sorry. But it's an untouched area right now in health care data. We're just learning how to touch it, which is -- there's all this really rich information in the clinical record. And the kind of thing you're describing may well have been more contextual than hard data; right? It's not an A1C value or a CPT code or an ICD 10 code. But it's what's the context around the patient that when they show up in the hospital, the hospital docs might not either have the ability to find or the time to find to kind of fill in the gap.

>> AUDIENCE MEMBER: This is somewhat of a rhetorical question. And I think you all were about to get there, but I didn't hear it. And so I want to say it. To me, it's not my insurance company's data. It's not my physician's data. It's not my health system's data. It's the patient's data. And as a patient, I want that data to be in the hands of everyone who is taking care of me to make sure they can make the absolute best decisions about my health. And I think we've got to think above that. And I kind of heard that, but the bottom line, that data shouldn't be proprietary -- excuse me -- I'm tongue tied today. [Inaudible]

[Laughter]

>> Go, dogs; right? [Inaudible] But, you know, ultimately -- I am just lost now.

[Laughter]

>> KOMIVES: So Greg [phonetic], you're an informed consumer. We had folks at Duke that wanted to opt out of the ACO data sharing. What that really meant -- I mean, we already knew everything about them. All it was doing was just allowing Medicare to send us the claims that we had already pretty much filed on them. And so I think there's a lot of suspicion by folks who are less savvy about health care. When HIPAA came around the first thing I did was raise my hand and, say, I want everybody to have my health data because I don't want to see a provider who doesn't know my health history. And my father actually wrote a letter and had them put it on the front of his chart, having a daughter who was a physician, saying "anybody who ever wants my health data, please give it to them." Because he had those same concerns around things being disconnected. But you're absolutely right. Ultimately, it's the patient's data. I think

when we talk about the value of the data, where are more thinking about aggregated data and what we can do with aggregated data. But the advent of my chart and the ability to put the health record in the hands of patients and let them read their chart notes -- by the way, we all get better at writing our notes, when we know our patients are reading them; right? And that's a good thing. That's a good thing.

>> DUBARD: I just want to rag on my fellow panelists a little bit. I think when you come from a health system background, you tend to think the world is your health system. And we have to realize that -- someone had kind of a great pyramid slide up earlier. You know, the amount of a person's life spent in the hospital system is teeny tiny. And the health determinants for that person are much bigger. More than half of primary care in this state is delivered outside of health care systems be independent and primary care providers. And it is dangerous the mentality that everything is in Epic is doing harm. We've got to share. We need to share an infrastructure around this.

>> TENENBAUM: I want to just quickly put out that FHIR and Apple has done some very interesting things using FHIR to enable patients to control their data and pull it from wherever they're getting their care and then share it with other providers. I'll leave that at that.

>> AUDIENCE MEMBER: I wanted to follow up on Greg's comment. I am Robin Huffman, and I'm the Executive Director of the North Carolina Psychiatric Association. So I'm working with over 900 physicians in North Carolina who are struggling with the ones who understand how important it is to communicate with their colleagues about a patient's mental illness and the ones who just are working with patients who would dry rather than have anybody know that information. And so as we look data breaches, I was going to finish your sentence, Greg, with it's my information. I want all my health care providers to share it. But that's the only people you want to have sharing it. And you don't want -- so I think we're still working in a world -- and I really appreciate Dr. Ewend, "the second mouse gets the cheese" comment. I think I was the one laughing the loudest. I think psychiatry, one, they were the one specialty that was not given the funding to be trained in how to do the work flow for electronic health records in their practices. So they're a little bit disadvantaged from that perspective, but we're also looking for a world where there isn't stigma about mental illness, where folks can talk about the medications that they take just the same way they talk about their broken arm or things like that. And so we are working back and forth in trying to increase awareness with the patient population and with our physicians, but it's still real hard. And there still are patients who would not get mental health care if they knew their information was being shared. And so we need all the help that we can get from a psychiatric perspective and support and help and how to do this better.

>> MCKETHAN: Any quick comments on that or amens? Amens or thumbs up? Okay. I'm giving the high sign. I see the next panel coming in. So let me do -- let me make an attempt to summarize very briefly and you can shout me down, if I get it wrong. But we started out by talking about health as the true north and how helpful it is to mobilize all stakeholders in that goal, particularly motivated by real patients. To earn the hype that North Carolina is getting, we're going need to get continue to build on our posture of humility to meet real information needs of all people, including patients recognizing their very important safeguards to protect, but a lot of different actors at the community level and in the provider community that need to take care of individual patients and populations, focus on solving real problems in the short run that can continue to build progress toward those longer sort of infrastructure things, and doing so in an agile way collaboratively and recognizing that sometimes that means this failed, let's try a better way and not giving up.

And speaking of which, to go ahead and quote an [indiscernible] guy Jim Valvano of not give up in the face of legislative changes and timelines, in the face of difficulties getting information, in the face of all kinds of others changes happening, we got to keep at it to earn this hype. So thank you all very much. Please join me in thanking these panelists for great comments.

[Applause]

>> MCGINNIS: The panel that we just heard, again, was very nicely summarized by Aaron and clearly is at the heart of where we're all heavy with respect to the potential for a continuous learning health system. We're now going to move to a discussion of what's necessary -- the workforce that's necessary in order to achieve that vision. And I think -- is our chair here? Jessica [phonetic]? [Off mic]

>> MCGINNIS: Oh, yeah, he was. Okay. He'll be back. I'll just introduce Gene Washington, although this is obviously a community that knows each other very well. It's part of the wonderful spirit of things in North Carolina is that you are a family. And Gene Washington is a strong member of your family. He followed Victor Dzau as the Chancellor for Health Affairs at Duke University and President and CEO of the Duke University Health System. And Gene also is someone who I've been a longtime friend and associate with in both in his positions here at Duke University and previously when he was at UCLA and before that even at UCSF. He's been an important player on the health policy scene for a number of years. And he also has been a real leader in academic medicine. Jessica, is he -- [Off mic]

[Laughter]

>> MCGINNIS: Is he out there taking a break? Well, let me, while we're finding him, read our list of panel members. We have on this panel, again focusing on the workforce, Erin Fraher, who is associate professor in the Department of Family Medicine at the School of Medicine and Director of Carolina Health Workforce Research Center, Cecil G. Sheps Center for Health Services Research at UNC Chapel Hill. Hi, Gene.

[Laughter]

>> MCGINNIS: We had a wonderful panel. And Gene is going to summarize all the comments that were made throughout the course of the panel.

[Laughter]

>> MCGINNIS: Also with us is Julie George, Chief Executive Officer at the North Carolina Board of Nursing; crystal Murillo, who is Director of Clinical Simulation Laboratory and Clinical Assistant Professor at the University of South Carolina College of Nursing; and Peter Buerhaus, who is Professor of Nursing and Director of the Center for an interdisciplinary health workforce studies at Montana State University College of Nursing. Gene, I'll turn it over to you.

>> WASHINGTON: I thought that was a break. The program said a break. I went to the bathroom, and we were already going.

[Laughter]

>> WASHINGTON: But at any rate, good afternoon, everyone. [Off mic] Okay. The others on a break. I am delighted to be participating in this symposium. And on behalf of all of our colleagues here in state of North Carolina, we want to thank the National Academy of Medicine and our colleagues for coming down to engage the broad community here. And I certainly want to thank everyone who's participated in this session this afternoon. Full disclosure, I am on two boards. I'm on the board of Johnson & Johnson. I'm also on the board of the Kaiser Permanente Health Care System. With that, I don't think our panel needs anymore introduction.

Okay. Well, great. Could we have the first slide, please. As we discuss this, we emerged around the idea of -- you know, if we're going to talk about the health workforce needs of the future, we need to be thinking about what are the emerging trends that would, in fact, influence how we shape that workforce. And among the many trends that we felt were important to underscore and help guide our presentations are the five that are listed here. Three of these,

just listening to parts of the previous session, I mean, they get connected real quickly: Value-based care, community-based care, and education and social determinants.

So I don't need to say anything about it. And each of our speakers will be picking up on these themes. We thought rural healthcare was important because as we think about the workforce, as someone indicated earlier, so much of the training is done in urban centers, you know, at our universities and our health system. But yet where we see particular in North Carolina is in many places that the rural health system, as we say, is teetering on edge. And so we want to highlight that as a particular challenge, but also a particular opportunity, if we really got to have an effective workforce for the 21st century. And then last, this idea about workforce trends, specifically looking at what's going on right now, where we have opportunities to seize the day today rather than just thinking about what the future is going to hold. So we're going to highlight these as we go through the presentations.

>> WASHINGTON: I'm delighted that Peter landed about 30 minutes ago and was able to navigate the traffic and be here to present first. So Peter, please.

>> BUERHAUS: Well, good afternoon, everyone. I've got to tell you, it's a thrill to be here because I contrast what you're doing here in this state with what we're not doing in Montana, which is to come together and think about our future and plan for it and not just react to it, but plan our future. So I applaud you for doing that. And I hope you appreciate this opportunity because I think it's great. So I want to make three points in six minutes or less, as I promised to Gene. The first big point, I think we all know this, but I want to put it on the table, it's just unrealistic to think that the physician workforce by itself is able to take care of the American population, particularly in primary care, particularly in vulnerable populations, and particularly in rural areas.

The second point is given that it's imperative that we use our resources wisely, including health workforce wisely. Third point is the lifting restrictions on nurse practitioners, scope of practice. Now, I know this is North Carolina. You've been through this before. You haven't been able to see your way there. And I hope in a few minutes you'll maybe reconsider that as we look forward. But I want to make the point, it's just not North Carolina that I look at here. North Carolina exerts leadership. And if you make that move, I think you will help others in this region start to reconsider their decisions as well.

So let's walk through these three points. The first one, physician workforce. It's just not realistic to think they all alone can do this. So we've got nearly 80 million people in this country with inadequate access to healthcare. The number of health per force professional shortage areas

keeps rising. We're now at just about 7,200. Two-thirds of the primary care and the mental health, behavioral health, workforce designated shortages are in rural areas of this country. And by 2032, according the AAMC, shortages of physicians could be -- primary care -- could be as high as 55,000 and 68,000 for non-physician – non-primary care physicians. Here's a slide that comes out of a paper we published in the "New England Journal of Medicine" about a couple months ago. Just focus in on that top line. These are the number of physicians per 10,000 population in rural areas. And we're projecting a decline of about 23% from roughly 11 physicians practicing for 10,000 in rural populations down to nine.

So this is not an encouraging forecast despite decades of public and private and billions of dollars of investment. This is a slide that if you -- there are a couple things going on here. The dark green is are the counties with the highest concentration of dual eligibles, so the Medicaid is paying for the Medicare premiums; typically, multiple comorbid conditions, complex to treat, expensive, costly. They bill Medicare way -- Medicare spends a lot of money on the dual eligibles. The orange dots are where we have federally-designated primary care physician shortages; high overlap between the duals and the physicians. You could lay over this cardiovascular disease. You could lay over this mortality from cardiac heart attacks, cerebral vascular diseases, stroke, and several others. The picture would look quite the same. Now, here's another piece of work we published again in the "New England" about a year ago, looking at the future supply of physicians. And if you sort of look at the last of -- the right of the chart, you see that the physician workforce will grow, these are total physicians. It will grow about 1.1% annually per year between now and 2030. The nurse practitioner workforce has been exploding since 2010. It is growing at unprecedented rates. We project that rate to be about 6.8% per year; and the physician assistant workforce growing not quite as fast.

This is the workforce of the future. It's like waves lapping up on shore. This is what it will be. And then the evidence around the nurse practitioners. And I just wanted to summarize the top lines here. What we see in our studies and multiple other studies, nurse practitioners, for whatever reason, are much more likely to be practicing in rural areas than their physician counterparts where there are increasing reductions of physicians and where the needs are probably the highest. The primary care nurse practitioners, again, multiple data, multiple evidence, show that the PNPs, primary care nurse practitioners, is far more likely to be taking care of vulnerable populations, women, non-whites, African-Americans, the poor, the disabled, the uninsured, the dual eligibles, it goes on. Primary care nurse practitioners we see costs Medicare less by between 10 and 30%, yet their outcomes are comparable and, in many cases, better than those of physicians. This isn't -- I mean, this is a pretty well-studied area. In the state level scope of practices they are not protecting the public from low-quality providers. What they are doing is restricting access.

And you can see this. This is the country. The grey areas are the most restricted states, including North Carolina. The lime green are the reduced-practice states. And the dark green is where there's no practice restrictions. Look at that. I think you can kind of get the picture, but this is some other data that we discovered that in the restricted states, the top line here, 34% of the population living in these restricted -- counties in these restricted states had access to a good capacity primary care system. The states with full practice without these restrictions, it was more than double. 63% of the people in those counties in those states had access. So these state-level restrictions do matter when it comes to access.

So in sum, I hope I've convinced you that looking at the physician workforce patterns, it's hard to see how if we just rely on physicians alone, we'll get all this care that's needed, particularly in rural areas and in this southeast. So we've got to use our workforces much more wisely, not just nurse practitioners or PAs, but others. And I think our panel will talk about that. But lift lifting the restrictions, this is a something you've dealt with. And I ask you to reconsider that this is a way to, I think, increase access. It's not the answer, the total answer. It will help. Other things will be necessary. But if you do this in North Carolina, I think the other states in the southeast will pay attention and say, look at North Carolina. They're leading. And so it's an opportunity I think for some leadership. Gene, thank you. [Inaudible]

[Applause]

>> FRAHER: Hello, and good afternoon. I have been struck all day by the notion of being really glad to be a North Carolinian with you at this point in history. Really, truly, this day has been incredible. So I'm going to talk about why we need to transform the health workforce to really get toward everything we've talked about thus far today.

So I guess my question to you would be -- we've spent a lot of time talking about new models of care. We've spent a lot of time talking about payment. When you are in your boardrooms or when you're back in your practice, people like to talk about payment. They like to talk about care delivery. I would argue we've spent a whole lot less time talking about aligning the workforce and aligning the education system for this transform care that we're going to need. And, you know, you look at the evidence, whether it's in "Health Affairs" or "New England Journal" or "JAMA," and they are lamenting the fact that early findings suggest we haven't moved the needle enough on cost. We haven't in these new ACOs and these risk-based models. We haven't moved the needle on quality. And I would argue and put out to you that it's because we're not paying sufficient enough attention to the workforce.

And so I worry that our current workforce is perhaps designed around professions, and the needs of professions and not patients. And I'm struck when I hear our own health system leaders, who I admire so much for the work that they're doing in these times and other health system leaders, I can hear it. There is concern about the fact that we have venture capitalists out there and private people and insurers who get that it's about the patient. And so we're going to bring Amazon -- basically the whole model of Amazon is bringing it to the patient, bringing care close to home. And so you've got city block here that has four locations in North Carolina, they get it. It's about not retrofitting care-delivery models and the workforce to meet the current workforce, but it's about thinking where and what our patient's unmet needs for care.

And we've talked a lot about that today, whether that's the elderly in their home who don't have a ramp or can't use the bathroom appropriately because they don't have a handrail. And I love that model that I used to talk about, that I heard about today, aging gracefully. It actually is similar to the capable model. And I used to joke that it was sort of like a joke that went like this: An OT, a nurse, and a handyman go into a bar, but in this case, they actually go into a patient's home. And it's a remarkable model because they're recognizing that there are multiple health care needs. And whoever thought that a handyman would be considered part of the health workforce, but critical; right? And how can we better design the workforce to meet those unmet needs? So this is a chart that's from 2000 to 2017. It's national data. And it looks at where job growth has been. And you look at the fact that jobs grew 11% in hospitals. But where did jobs really grow? Home health and ambulatory care; right?

And so all these new payment models that we've spent the morning talking about are shifting -- and frankly, you know, penalties that are fining hospitals for readmissions -- are shifting care. And when care shifts, the workforce shifts. But where do we train the health workforce? Mostly in acute care. And it's not just nurses. We also train physicians, pharmacists, and others, but that's not where care is going to be. And in fact, if you look at our North Carolina data, this is just for nursing, you look at the fact that there's been a 3% growth just between 2015 and 2018; 3% growth in hospital employment for RNs. But a 20% growth in ambulatory care for RNs. Granted most nurses are still employed in hospitals, but that ambulatory growth is going to grow really fast. And if you look at it for licensed practical nurses, we've seen a 47% growth in ambulatory care. So the workforce is in fact shifting, and we can see it in the data.

But let's talk about the fact that we've skirted around this all day. This is a chart looking from 1980 to 2018 of per capita physician supply in North Carolina. The top line is the physicians supply per 10,000 population in our urban, our metropolitan, versus our non-metro. You can

see that we had a gap of 6.1 more physicians in metro than in non-metro back in 1980. That gap has doubled. I want you to stop and absorb this chart. We have arguably the best AHEC in the country. We have five amazing medical schools, maybe a sixth coming online. We've got incredible universities. We've got a great state loan repayment program.

Why is this still a problem? It's a problem I would argue and pause it because most of our training is not just in acute care, it's in urban settings. And we've got to decentralize funding and decentralizing a bunch of -- much more sort of graduate medical education opportunities, training for nurses, and get them out into rural communities. We know that makes a difference. We also need to think about if we're going to think about buying health, we have to think about designing a workforce for health. And a workforce for health looks different than a traditional workforce. A workforce for health includes a much broader range of health workers. We're talking about patient navigators, home health workers.

I'm so glad that people brought up utilities today because medical lawyers are part of the health workforce. The clergy are part of the health workforce. Dietitians are part of the health workforce, but we fit we typically focus on nurses, physicians, pharmacists. And I want to call out, what I think are sorted the unsung heroes of these new models of care, and that's social workers. Are our health workforce center has done a ton of research looking at the role of social workers in new models of care. And they're doing three primary things. One, they're behaving as behavioral health specialists. So for patients with anxiety or depression, they're providing interventions. They're also acting as care managers, monitoring and coordinating health, and in the patient navigating the healthcare system. But more importantly, they're acting in a referral role. It's often the social worker who hears things that the physician doesn't or the nurse doesn't. And they're able to take someone who has admitted that they have a substance-abuse problem or is food insecure and connect them with resources. So social workers are also a group that has not typically even thought of as part of the health workforce, but is increasingly integrated into healthcare teams.

I want to end with this slide, which is near and dear to my heart. So this is some data that we published pointing out the total size of the workforce, these are national numbers, the number of new entrants every year and the percent that the new entrants makeup of the total healthcare workforce. Why did we do this chart? I wanted to show you that you can concentrate all you want -- I think it's noble and important -- to concentrate on changing the curriculum for the pipeline. But you know we really need to focus on? It's the workforce already employed in the system. Because they're going to be operating in a totally different system. They're going to be communicating differently. They're going to be working with new healthcare team members. They may not understand that health care team member's role.

They may not want to delegate to them. And they're not going to function as a health care team unless they understand that. They're going to have to do maybe oral health as part of screening in primary care. They're going to be doing more behavioral health. We've got to think about continuing education and care delivery models that allow this workforce to gain new skills. Thank you very much.

[Applause]

>> GEORGE: Well, good afternoon. I know that I'm the only thing standing between you and adjournment. So what could be better to have a regulator late in the afternoon after your break? Okay. How exciting. But I'm Julie George. I'm very happy to be here with you today. And as George [phonetic] said, I am the CEO of the North Carolina Board of Nursing. And so I'm really happy to have an opportunity to talk a little bit about nurses and their contributions to the health care and to our movement toward health in North Carolina. We regulate 160,000 nurses in North Carolina and that includes a little over 13,000 APRNs. There is a little over 9,000 nurse practitioners and then CRNAs, nurse midwives, and clinical nurse specialists, so the smaller groups.

And I believe nurses are really essential to having these conversations about health. Even across the country and in North Carolina, nurses comprise the largest single segment of the health care workforce. So I cannot say that enough. It is the nurse that is there when the patient often is at home or alone or at night. And nurses are quite accustomed to working in teams. And I think one thing that lends them to be quite an asset with the changing models is the nursing education, by virtue, is a holistic approach. So Nursing has always had more of a holistic approach to looking at the individual, the entire individual, the family, the community, etcetera, and not just a diagnosis. Having said that, as a regulator in our daily work, you know, we actually look for opportunities to collaborate with others.

Regulation, in and of itself, can be pretty dry and at times it can be quite the barrier. We heard this earlier this morning about the issue of food and how local food couldn't be delivered to the schools because there were all these regulations on food that it had to come from elsewhere. So that's a good example of bad regulation, quite frankly. So I think it's been our challenge in North Carolina to do what we normally do in regulation, as far as licensure and setting standards and approving education programs. But more than that it's been the collaborating and seeking opportunities to really work outside of our comfort zone, if you will, of regulation. And one of those great collaborations we have had, and I have to give a shout out to Erin and the Sheps Center, is our health care data that we share with the Sheps Center.

And I can tell you that at a national level and even international level, we are known. North Carolina is known for having the best health care data anywhere. And the boards have been -- our board has been contributing data to Sheps since 1979. So as part of that, one of the things that we try to do is track things, and they track patterns based on our data, our licensure data and renewal data, where we ask nurses if they're working, where are you working, what populations are you working with; and also just sheer numbers. So this slide, I think, is the state slide that Peter showed in a bit of a bar graph of a national slide, but this shows you over a period of time from 2000 to the current time the growth of nurse practitioners in metro areas.

The next line is in non-metro areas, below that physician assistant growth in metro areas, below that physician assistant in non-metro, and then physicians, both in metro and non-metro area. So as Peter said, I think this just reinforces. This is the trend of the workforce. So this is the current, but it is a sharp curve of growth. Some examples that I would like to brag on North Carolina a little bit about is you heard from one of our earlier speakers how we take pride in North Carolina being a cutting-edge state. We didn't want to say a bleeding edge, but a cutting edge, and kind of the star out there. We were first in flight. We were actually first in nursing regulation, 1903. That we were early on in nurse practitioners and PAs in this state. So back in the '70s that was just cutting edge. I mean, North Carolina was out there. We still are in so, so many ways. I can tell you that it's been fairly easy for me to even recruit people from other states and boards of nursing because they see North Carolina as such a progressive, a wonderful place to live, and to work.

So some of the things that we have done, some we've been approached by others and some we have done outreach ourselves, but we have what we call the ribbon project in North Carolina. Now, the board supports the data for that. Many of you are familiar. But this is where nurses are educated at the community college level with an articulation, a clear articulation plan, to the University. They get their RN degree first and one year later their BSN. So we track specifically those graduates. So that then Erin and her team years down the road we can see: Did they stay where they were educated? Did they go on for other education?

We do know from data that our community college nurses and our LPNs tend to stay more rural and local. So always to me it raises the question: So what if we want to step beyond ribbon? If you could still get that local nurse after a BS and with experience to be a nurse practitioner, to be a nurse midwife, to stay in these rural settings and provide care, how wonderful would that be? Our prep program is something we started back in 2000. And that really was a program designed to try to remediate rather than discipline nurses working with employers, hoping to keep -- particularly young nurses, in the workplace and encourage the reporting of eras and not blaming or putting that in a punishment mode. We work regularly with the Medical Board, the

Pharmacy Board, OEMs [phonetic], Department of Health and Human Services, and have a lot of joint position statements that we develop.

One of the most helpful, I think, has been related to the community paramedic. And so we've worked with OEMs to really give clarity when we talk about teams. Again, it's not just going to be physicians and nurses, we've got to look at everybody who can provide care. And the community paramedics, it's a relatively new concept. It actually started I believe in Minnesota, but we've had them for several years. And they've got some great outcomes. Situations -- again, we heard this morning about the lady that didn't her -- you know, she didn't have anybody, any support so she calls 9-1-1. And they told me that very thing. Well, we only get paid if we take them to the emergency room. But the community paramedic can check their blood pressure, can see if they're taking their medicine, can see if they ate something. And so it really -- it's had a great impact in those areas that have used that.

And lastly, I guess I want to talk about our partnership with Sheps. Because one of the most exciting things we're doing right now is a workforce study. So Erin's team is doing a supply and demand of the nursing workforce in North Carolina. This is the first time North Carolina has had the demand data, in what? Over ten years? So we're very excited about that. She'll be able to sort it by AHEC area, by metropolitan, non-metropolitan. She and her team can do quite the bag of tricks, as most of you know. So they just had our committee just enraptured a couple of weeks ago just showing what all they could do with this, but I'm very, very excited about that. Because I think that will give us in North Carolina some really valuable data about the projected demands and some models that we can look at. And so in closing, I would say to you, one of the challenges we face every day when we try to be innovative and try to look at the workforce is that tension of regulation between, you're the upholder of the standards, but you don't want to stifle innovation. And so that's always a balancing act. And I love -- this great slide was given to me by David Cal Becker [phonetic] my chief information officer. And it shows that we're first in flight. If you'll notice, yes, we may have not had the bicycle shop, but we got it off the ground here in North Carolina.

But I think in closing for me, I would just encourage everyone to continue these kinds of discussions because sometimes they are messy discussions, but we'll get through them because I have every confidence that for North Carolinians we have the resources. We're a rich state. We have the resources, the human resources. We just need to align them and empower them. Thank you.

[Applause]

>> MURILLO: So Julie gave you a bit of the false hope in saying that she was last between you and your next endeavor. It's actually me. So I realized that, when looking at the agenda so I thought, oh, I have to be really strategic in how I deliver this information. So I have the unique opportunity to present you an initiative that in -- I'm actually a South Carolinian. I'm a native South Carolinian. I'm at the University at South Carolina. And so I will be presenting for you an initiative that we've taken at the university to really -- when looking at the trends in particularly the nursing workforce, so to really take an action-oriented, explicit, formal, systematic approach to link our academic and practice connections to ultimately improve the lives of the patients in our state.

I will say, being here today has been invigorating for me. In the state of South Carolina we haven't progressed as much as you have here in North Carolina. And unfortunately, we've also seen some decreases in our patient outcomes and actually in the overall health of our state. And so it's clear that -- when I looked at this morning, I was like, oh, gosh, that might not be the best message that I intended to send. I see this is an opportunity to restructure what we're doing with the workforce in order to better meet the needs of the rapidly-changing health care system. I thought, well, you probably see the bridge collapsing. And I'm not implying that our health care system has collapsed. I am saying that the connections between academia and practice from an academic perspective, often we have little idea of what is really needed to improve the lives of the patients. We're largely focused on our competency or sort of end-of-programmatic examinations. It's not that we're not concerned.

In the state of South Carolina, we haven't done a great job of having those conversations about how can we best prepare our students for the workforce? And so I started out with just looking at some data of the nursing workforce. I wanted to know sort of where were in the workforce as far as -- you all may that know that nursing shortage is a rising concern. The shortage is expected to increase. There are many factors that contribute to that, but in the state of South Carolina what I found is that in these green areas we were ideally oversaturated with nurses. When I look at the health of our state, this also was where the health outcomes were most optimal. The yellow, the adequate, the nurse-patient ratios were rather adequate. And then in the red areas of the state these were where there were critical shortages of nurses. Also, in these areas the health outcomes were the poorest. These were also the most rural counties in our state.

And so at this point I was just in really exploration of what can I do in academics to be better informed about practice and to also be action oriented? So my background is in experiential learning, particularly simulation. I don't know if all have heard of that. But I thought about how can I use what I do in academics to really make a difference in practice? And so ideally, you

know, it would be, well, place more nurses in the counties, which one strategy. Place more nurses in the counties where there are critical shortages of nurses. Well, I can't do that, at least not in the most immediate. And so the efforts for this model that I'm going to present to you focus on the most rural counties, which are indicated here with the arrows. You'll see here to the far left, this is not -- the arrow does not indicate a most rural county, but we were looking at programs of nursing in addition to practice sites. And so there was no program of nursing in this most rural area here in the red.

Another thing I found, when I looked at the data was that we have a large difference in the demographics of our nursing workforce in South Carolina and the patient population in South Carolina, particularly with our minorities. And so when I looked at the health of our state, what I also found was that our racial health care disparities were worsening. And so I thought, well, from the academic perspective, how can I fix that? Well, ideally, I think the two things that can decrease, eliminate, whichever word you're most married to, racial health care disparities would be diversifying the workforce and culturally-sensitive providers. So I realized that I can't diversify the workforce, at least not in the time period that I had for the grant funds, but I could possibly make providers or provide training for providers to be more culturally sensitive. Because again, the health of our state shows that our racial health care disparities are worsening.

So what I did was I said I have the background and the expertise to be able to produce, if you will, culturally-sensitive providers. I can also develop curriculum to train that. But one of the concerns that I have when I look at what's happening in practice is, we've been asking the question for at least ten years now. And I think, Erin, you're doing some of this work, how many nurses are needed for optimal patient outcomes? And another question that I think we've been asking is: What are critical competencies that are needed to optimize patient outcomes? So I know from an academic perspective what competencies are needed. And the exams actually -- the licensure exam test for minimal competency. What we don't know is in practice, what are the critical competencies that are most needed for nurses to provide optimal care to patients?

So what I said for the state of South Carolina is in those five areas that were identified in the picture where our racial health disparities are worsening, what are critical competencies that the nurses would need? And I am focusing on nursing because that's my area. What are the critical competencies that nurses in this area of the state would need to most impact patient care? Well, the practice sites and others said, well, you know, we really don't know that. And so what this experilearn [phonetic] model proposes to do is actually identify in the five years at least three critical competencies that would most impact the racial health care disparities in the

region of the state. And so we collaborated with academics, with practice, with the Office of Rural Health. And this collaborative group is probably one of the first to really move forward in the state of South Carolina. We're actually quite siloed between academics and practice.

And so what we're doing in phase one is identifying what these competencies are, and then this group will serve the information or informing of a curriculum that we'll actually use. It's an experiential learning curriculum using simulation as the conduit. So what we're doing to do is have the nurses in practice participate in this curriculum that largely focuses on the racial health care disparities specific to their region, and we're going to measure them. So this is a very early attempt to identify critical competencies in regions of the state that the patient outcomes are really the worst. Ideally, what we'd like to see happen is that -- so in academics we focus on sort of the end goal for us is licensure. In practice, it's recertification. So what we'd ideally like to see is that these competencies become a part of recertification. Because what happens in practice, at least from a nursing perspective, is once nurses are licensed and in practice, they recertify, but there are not specific competencies required for recertification. It's typically just a number of hours worked that's required.

So an end goal -- so those are sort of our short-term outcomes is actually identifying these competencies, developing a curriculum that could also be used for us in academics to prepare our students for the workforce. And in South Carolina we're not quite seeing that shift from acute care as quickly as you all are here in North Carolina. And so the current design is really acute care focused. So the long-term goal is to use, again, the critical competencies for evaluations of the current workforce and that also institutions could use these competencies for higher decisions and to evaluate new graduates' true readiness for practice, which ultimately, we hope to see improvement in our patient outcomes, particularly our racial health care disparities in the state. Thank you.

[Applause]

>> WASHINGTON: Okay. We've set -- do I need to hold it? Okay. We've set the stage for the discussion now. I have a series of questions I plan to ask our panelists, just to prime the pump, but I'm going to limit it to two questions because we're pressed for time. We really do want to engage you. First question is: Looking at today and thinking about these five emerging themes, what's the opportunity to improve on something that's right in front of us today? I mean, each one of the alluded to something. You certainly talked about Peter lifting restrictions at some very specific. Erin you talked about looking at the other professions right around us so that our workforce is being fully utilized, when we shift to focusing on patients. Julie, you even mentioned about using community paramedics, particularly out in rural areas.

And so if you want to prioritize, what jumps out? You probably walk around. Crystal, you have ideas here. Some that you're saying, okay, if I could do one thing right now without something new, but taking advantage of something existing, what would it be? Anyone can start. [Inaudible] Yes. Testing.

>> BUERHAUS: Can I do two?

>> WASHINGTON: Oh, sure.

[Laughter]

>> BUERHAUS: Well, the first one I think is the nurse practitioner workforce. I've seen estimates that if the country did that, we could quickly get to 40 million people with access. As I said earlier, it's not going to get the whole job done. It would be something relatively quick. And there's a good body of evidence that suggests that is something that could be done. The other thing that I would like to see us do is sort of rethink, what is the goal of what we're all doing? And you have this chance and we have this system that we've built, which is to produce good medical care. And I think we do that. We could go to a system that says, well, let's produce good health care and that would look a little different than just medical care. Or we could have a system that says we want to reduce or eliminate health inequities. And that would be something yet different.

So I think part of it is to say, what do we want going forward? And then sort of as Erin said, then align our workforce and all our capacities to achieve that. And, Julie, I loved your talk about it's messy, an alignment. And I think it's there. It's going to be hard. And I hope this is one of those steps that is challenging us.

>> FRAHER: All right. It's the end of the day. And I'm going to touch the third rail just to make sure everyone's awake. So I'm keen on really highlighting the fact that I believe we spend a lot of money in this state on training. And we don't get a very high return on investment. We know, for example, we track our medical students five years out. 2% end up in rural primary care in North Carolina, 2%. We invest a lot of money in this state in medical education and graduate medical education as well. And we know what works. We know, for example, UNC Chapel Hill has a program called the First Program where we accept medical students from rural communities. We put them in medical school for three years instead of four. We put them in a family medicine residency for three years. We put them out in rural practice. It works. We know

that retention is much higher. We know that there are models of training and education that develop pipelines that work.

And so I really think we've got to be honest and transparent about the money that we're spending, both nationally and in this state on training. We have to ask, where is the return on investment? I am not asking this just about physicians. I'm asking this about nursing as well. Let's be honest. Let's be transparent. Many of you know, I've spent my life producing data that really irritate people. I vow to continue to do that. But it's really important. I do that for a reason. I'm really trying to shift policy and get people to recognize that there are models out. If I were queen for the day, it really is increasing transparency on the amount of money that we invest in training and asking ourselves, where does that money need to go to support a North Carolina for health, rather than a specific profession?

>> GEORGE: Well I would have to say, tagging on to Peter's comments, if I were to pick one thing and be queen for the day, I would like to see North Carolina be the leader in the southeast and look at removing restrictions from nurse practitioners, from nurse midwives, and whether that's pilot programs, whether that's widespread. I think we've already begun to have some meaningful conversations, but as I said earlier, it is messy. It takes work, but I think it would be worth it. It's something that would not cost one penny to the state of North Carolina. And it would save money according to at least a lot of economic studies that have been done; the Chris Conover study from Duke. So it doesn't cost anything. It would save money. The data shows the outcomes are very good. The data shows there is an increase in access if we do this. So I'm not at an APRN. So I'm not speaking from a personal point of view, but I think we are remiss if we don't take this opportunity to really ask the hard questions and do the work.

>> MURILLO: Well, so I'm not a North Carolinian, but I think in the state of South Carolina when I think about racial healthcare disparities increasing and I think about even in academics educational disparities. I think I'd like for our state to really be clear and honest. Because someone made a great comment earlier, which is that the outcomes that you receive are really a result of the system that you have. So I think I'd really like for our state to be clear about what is it that we really want? Because what we're getting -- if what we're getting is what we really want, then I just need to leave South Carolina.

[Laughter]

>> MURILLO: I'm a South Carolinian. All of my educational programs are in South Carolina. I am invested. [Inaudible] I'm invested in the state. And so I think the thing that I'd like to most immediately happen would be for us to be clear about, what is it that we want? What are our

goals? I don't know that we have completely shared goals, at least when I think about the academic and practice connections. We're very siloed.

>> WASHINGTON: So [off mic] -- that's now today. Let's look toward the future. And the future was kind of defined for us -- [off mic] [inaudible]

>> WASHINGTON: I am a preacher's kid. I like using my hands.

[Laughter]

>> WASHINGTON: Okay. But the panel is 21st century health workforce, not health care. Just hearing how difficult it is for us to really focus on that -- most of what we've been talking about has still been health care. And I am looking at Michael Miginus [phonetic], and I just drew out your pie chart that published a couple of times. [Inaudible] -- really talking about health, health care contributes and best probably 25%. So if we go back to one of the emerging themes that we listed, it was social determinants of health. So my question here is in the context of the future, let's redo those graphs you had up there about what the trends look like now. Let's take off the doctors. Let's take off the nurses. Let's take off the physician assistants. Let's take off the nurse practitioners even because we know them. We have the numbers on them. What does that graph look like? What are the categories? What are the new workforces? Then we can talk about how we begin to train. Actually, I said I only had two questions. So this is my last question. And then we turn it over to -- please go on.

>> MURILLO: So I think one of the things when I read about -- and I realized that social determinants of health is an uncomfortable term for some. One of the things that I think about with social determinants of health is that we largely teach individuals the knowledge of, but where do we or when or how do we teach individual systems how to act upon? I think without this, we further perpetuate. And I don't know if that really answers your question, but for me, when I think about social determinants of health, can we give people more than just the knowledge of them? Let's tell and train people what to do about it.

>> WASHINGTON: I am just probing a bit. Who are we training to what to do about it? In other words, who are we training to provide that beyond the doctors and the nurses and the physician assistants?

>> MURILLO: Well, the patients as well. I mean, I think it's communities. It's obviously those in practice, but it's communities. It's those in our educational systems. I think in general when we think about social determinants of health, it involves humans. So that's who we train how to

navigate through it. I can tell you what a social determinant of health is all day, but what does that really mean? What does that really -- I think it's rather abstract.

>> GEORGE: Is this on? Okay. I would say in looking to the future, I would like to see a workforce that was educated to focus on health and not health care and to focus, actually focus on the individual. We give a lot of lip service to patient-centered care. But if you as a patient sometimes have sat there and feel that you're not really being seen or heard, that's not patient-centered care. And I think the population of the future with technology, somebody mentioned before, they are going to want convenient care, quality care. And in order to do that in North Carolina, we would need high-speed Internet access for the rural communities so that with smart devices their blood sugars and EKGs and things can be monitored remotely, that people would have access to looking up things about health to knowing how to stay healthy and not just depend on the provider to tell them what to do. So I think being able to know how we can both support, but interact with the consumer as a peer and colleague and not from a top down.

>> FRAHER: Okay. So I guess I have two key points here. One of the greatest honors of my career has been being able to work between professions and specialties. It has been the most incredible experience to work with physicians, nurses, and others. But I would be honest with you, this is messy work. The professions get quite particular about their scope of practice, and this is my scope and you stay over there. And so my dream for the future is, and I think it's perfectly -- we can achieve this dream, is if we sort of take what I keep calling a Copernican revolution approach; so right?

So we've designed a healthcare system, I would argue, around health care systems and professions. And if we redesign around patients, so we say, we're going to totally flip it around patients. We're going to start to sort of define what are the essential health care needs that people need close to home? What do they need close to home? They need primary care. They need behavioral health. They need obstetric care. We talked about that today, prenatal care. They need trauma, some procedural care, and they need long-term care. And my dream is that in the future we stop talking about specific health professions. And we start talking about patients and populations with healthcare needs, and we define what they need around their community.

So maybe in their community they have a certified registered nurse anesthetist instead of an anesthesiologist. Well, great. Let's use the CRN combined with a general surgeon combined with a primary care doc -- maybe their primary care doc is an internist instead of a family medicine. Maybe they have social work. Maybe they have a psychologist. Maybe they have

medical assistants that are practicing full-scope. What I want to leave you with is, let's stop talking about designing the workforce for the needs of the workforce and the healthcare system and start designing it for patients. And so that's sort of my dream that it would be truly practice. That it would be truly team-based. Everybody would have a scope of practice. The incentives would align with understanding that your scope of practice might overlap with my scope of practice occasionally. And that's good. And that's okay for the patient. So I just sort of want to take -- you asked me to dream big, Gene. I dream big. That's my future.

>> BUERHAUS: I think you're asking a huge question and a fundamentally-important question. [Off mic] [inaudible]

>> BUERHAUS: No. I'm taking it kind of a different tactic because if we believe that sort of, like, 80% of health care is determined by factors outside of medical care. Okay. If we believe that, and so we're thinking about transportation, housing, education, employment, those kinds of things, then for me, if I'm going to be the queen –

[Laughter]

>> BUERHAUS: -- I will be the queen. I would want to know where am I going to spend my next dollar? And so would it be in transportation? What's the value of a dollar spent there versus somewhere else, or housing, or education, and employment? And if I spent that dollar, would it be connected so that the people that are in transportation or housing or education or employment or wherever are connecting their jobs to a health goal or an inequity goal? And I think that will vary by state, by region, by marketplace. So I would want to know, where do I spend that dollar? Because without that I'm going -- I know where I'm going with medical care. And sometimes it's terrific and sometimes it could be better. I feel because I don't want to shift all these resources into an unknown set of structures that could be implicitly -- have flaws. So I would want to know that. And that would then give me the answer to where do I invest for the future health workforce? Because I think it's in those areas. Does that make –

>> WASHINGTON: Oh, yeah. Absolutely. I am going to open it up. I see quite a few hands here. Okay. Victor, you're going to get the last question. Yeah, you're going to get the last question. I'm protecting my panel up here.

>> AUDIENCE MEMBER: Dr. Buerhaus, this question goes to you. I'm Dave Kellyback [phonetic] with the Board of Nursing. And one of the things I do is I'm also a legislative liaison so I've been down at Jones Street for 15 years and I hesitate to bring this up down there, but I'll bring it up here. And that is that I'm aware of a state in the Northeast that is expanding its -- or it has

expanded its Medicaid. But now they're going a step further. And your response to that last question intrigued me. Because they are taking a good amount of their expanded Medicaid dollars and they're putting it in nutrition and housing.

And I wonder if you know of -- that state is Massachusetts. I can't utter that down at Jones street. But my question is: Are you aware of other state -- what other states or models should we look to? Because that addressed what you, Eugene, you were talking about. We may be talking about; do we need more farmers or we need housing? And they realize this is a big issue in their state. And is this something that we're overlooking? And do you know of other states that are looking at things that are this interesting?

>> BUERHAUS: I wish I did, but I don't.

>> WASHINGTON: Well, I do. You're in one. I saw Mandy [phonetic] early. Is that someone here from the health department who can expound on this? [Indiscernible] Tell them about what's happening right now in terms of the Medicaid Waiver.

>> AUDIENCE MEMBER: Sure. So I forget what year, but sometime recently North Carolina got what's called an 11 to 15 Waiver from CMS, which essentially says you can do creative things and innovative things with Medicaid dollars. And so in North Carolina the Healthy Opportunities program and the NCCARE360 is part of that that was mentioned, that's the platform to enable it, that in addition to paying for medical visits and x-rays and doctor visits, they're also going to be able to use Medicaid dollars to reimburse for food scarcity, transportation issues, housing issues, and interpersonal violence counseling. So it's a really exciting program.

>> WASHINGTON: And with some real dollars. Initially $650 million that right now their proposal is being -- more than that? Okay. Because we have the deputy director here too. [Off mic] [inaudible] That is what I am saying, it's for pilots, but the pilots will involve real people. Yeah.

[Laughter]

>> WASHINGTON: No. It's a great question because, you're right, it is going to help us get at those social determinants. Okay.

>> AUDIENCE MEMBER: I think over here.

>> WASHINGTON: Oh, please.

>> AUDIENCE MEMBER: Yeah, so Pam Silberman [phonetic] again. I'm just curious, and this can be for any of you all, as we especially in North Carolina give in the whole move to healthy opportunities and we are now moving upstream and we're trying to address the social drivers of health, we are -- there's all this other workforce. And, Peter, you've mentioned that you could be bringing in, in terms of addressing these housing and transportation. The one foray we've gone into it is with community health workers. And we are medicalizing them.

And this is a big issue that has been raised within North Carolina whether we should require credentialing for the community health workers. Number one, does it excluded certain workforce who might not get into it? But are we now taking a workforce that existed before and now creating little medical workers that have to be credentialed and turning our social system into a medical system? And I just like people -- I understand for reimbursement purposes that may be needed, but I'd like to hear some comments on that.

>> FRAHER: So I will jump in here. I think it's a really important question. So I would see that question as fundamentally a question of you have a workforce that sort of come up through the community, specifically to address community needs to actually act as almost a nexus between the community and the health care system; right? That was their real benefit of using community health workers. And so we're sort of at a point where we're thinking, do we standardize their education and training? Do we get better outcomes if we do that?

It's the same argument with medical assistants, actually I would argue in this state. Medical assistants are actually a group that can do almost anything in North Carolina if a physician delegates it to them; right? But one of the problems we have is that we do not have a standardized education system, in many cases, for medical assistants. And so you end up with this tradeoff between the degree to which you let the health care system have flexibility to have a workforce that meets their local community needs, to the degree to which you standardize it and credential it. And I would say there's a fine line there between standardization and flexibility. And many medical assistants are certified. For example, we have certified medical assistants, but in many practices they are not using certified medical assistants. So it's I think, as we are talking about community health workers, we've sort of been down this road, to some extent, with medical assistants as well.

>> BUERHAUS: I think you're raising a good point. I think I would be a little cautious about just saying because it's medical that's necessarily -- there's a negative connotation. I think there's some good things that we should think about with sort of a medicalized approach. But if it's -- and it might be that in some areas you want a little bit more medical than other areas. For that population at that particular time that may be the best thing to improve outcomes or in

equities. So I wouldn't be blanket. I would challenge us though to be very aware of that kind of tendency and history to do that because we could be sort of baking in a new set of trouble. So I think it's a good question to bring up. So I appreciate -- Sean [phonetic], I think you want to weigh in on this part. I'm sorry. I'm taking over your job.

[Laughter]

[Off mic] [inaudible]

>> AUDIENCE MEMBER: Thank you. John Lumpkin [phonetic], Blue Cross Foundation. Yes, I'd like to weigh in, but first by saying a couple words, two words, actually: Public health. That was not mentioned, but when you think about a workforce, and particularly across the nation and including in North Carolina since the Great Recession, that workforce has been decimated. And certainly, that may be part of the reason why we continue to focus so much on caring rather than preventing. The second, on the issue of community health workers, last February I went to Alaska. And one of the fascinating things about Alaska is they have a tiered system for individuals in social work and training, which means that people from the very remote villages can come in to some of the local areas, like Bethel, Alaska. They can get a certain level of training. And they can get a certificate. And then they can work. And then they can come back and get some additional training, and then they can get a bachelor's degree. And then they can go to the University of Alaska, and they can get an advanced degree from there.

And what that does is begin to develop some of the economic development of those communities. And so we should think about workforce and the communities that are under-resourced and how these individuals who are different types of practitioners, and include community organizers in that, can actually be able to get employment and bring resources into their community by working and helping their neighbors.

>> AUDIENCE MEMBER: Good afternoon. My name is Debra Porterfield [phonetic]. I'm from UNC Chapel Hill. And first of all, thank you to all the speakers. And I appreciated the balance that we heard, especially in the last speaker. Because workforce is the composition, and it's who's in it and how many of them and what percentage of different types. And we heard a lot about we need some new types in, but it's also who they are and this qualitative component and what competencies they have. So I guess maybe to turn it back to the other members of the panel, what are the other competencies -- we need new types of workers, but what are the new competencies that those workers should have? And a related question, part two, we also need leaders. And we need the leaders who decide it's time to pay for the transportation. And it's time to dial up the number of social workers and dial down the numbers of somebody else.

And so what are the competencies of the leaders of the health care system or the health system of the future, and what are their competencies?

>> MURILLO: Well, I don't know -- I don't know if I can effectively answer that question, but I think it's a great question. And I think honestly, I know from the South Carolina perspective, those are answers that we don't have. I think it's important that we begin to collaborate to answer those questions, because as it relates to nursing, I will say, in practice we know that they are minimally competent when they graduate from their programs, but beyond that, we don't really know what competencies are needed for the patient outcomes. And so as it relates to the new roles, those are new competencies that will need to be developed.

>> GEORGE: Two things that come to mind for me is cultural competence more than clinical competencies, but cultural competence for the future and also, technologically, technology competencies. Because you still have some of the workforce that are very resistant to the use of technology.

>> WASHINGTON: Well, I get to answer a question; right?

>> AUDIENCE MEMBERS: Yes.

>> WASHINGTON: I'm not violating rules am I, Jessica [phonetic]? Jessica's giving me the look. But at any rate, on the leadership part, again, I go back to what we talk about, but seem to then move away from it. If we really want to improve health, we got to be addressing housing. We got to be addressing jobs. We got to be addressing transportation, food. We need a multi-sector, multi-stakeholder coalition to do that. And so at the top of the list of competencies for a leader is an individual who appreciates that and has some facility with building them and/or participating actively in helping to drive them forward.

>> FRAHER: So I think this is a great question. I just want to add a couple things that totally dovetail with what we've talked about today. Number one, we don't have enough behavioral health workers in this state. So we're going to have to diffuse more behavioral health knowledge out into the generalist in general workforce, number one. Number two, we don't have enough geriatrics or geriatricians.

So we are going to have to do the very same thing is really bolster curriculum around dealing with our long-term care population. The other thing we don't do enough of, and I recognize this is really hard to do -- we are or trying to work towards this, the American Medical Association is leading us in this -- is we have many health care workers who have no idea about health care

system change. They have no idea what value-based care is. They have no idea what's happening. And so trying to help our learners and help our existing workforce understand and educate them about the colossal change that is underway, will go a long way towards engaging them as partners in this change. I really worry that many of our physicians, many of our nurses, many of the other folks have no -- they sort of see the words, but don't really understand what it means for them. And if we can educate them, we can engage them. And so I think that's a key competency.

>> BUERHAUS: I would just -- just to a piece that I haven't heard. I would like our future workforce, whoever they are and all of them, to be capable of engaging patients around personal accountability and co-managing care. It's a lot of resources. It's being distributed from some to others. And I think we are accountable to ourselves and to our health. And we need to pull that part in it. And I'm not an expert, but it just seems to make sense.

The second thing is people who are able to leverage the goodwill of human beings. I think a lot of us want to do the right thing. We're stuck in a world that pays us for this. We really want to be over here. And we can break out of that, but I think we need to leverage the goodwill in in our co-workers or people that we're dealing with, our community. And we have tremendous resources then that could be unlocked. But how do you do that? Don't look at me for those skills.

>> AUDIENCE MEMBER: Greg Griggs [phonetic] from the North Carolina Academy of Family Physicians. So I will share a primary care bias. I want to talk about some of the underlying drivers of the rural workforce. And I think it's much deeper than a regulatory driver. You know, the economic viability of rural practice today is very, very difficult. And that doesn't matter what your degree is. As we have critical access hospitals closing, it's even more difficult to recruit health care workforce to those areas. And then the workforce we need the most in these rural areas, primary care, behavioral health, general surgery, are the least paid, least appreciated part of our workforce.

Then on top of that, we have this bad circle with our social determinants. Because if your spouse or partner can't find a professional job in that community, you're not going to move there. If these school systems are really poor in that community, you're not going to move there. So I think as we talk about recruiting to our underserved areas for a broad health workforce, you are teaching me, I think we've got to really look at some of these other areas and really broaden thinking. And I don't have the answers. I will tell you, I live the life though. I work in Raleigh. I live in Henderson, North Carolina, about 35 miles up the interstate from Durham. It is 35 miles from Durham and worlds apart. And we can't even keep our social

services people in our community there. It is constant turnover. We can't recruit a doctor. We can't recruit MPs. And my colleagues and across the state in places like Bladen County tell me the same thing. So we've got to address these underlying areas too.

[Off mic] [indiscernible]

>> AUDIENCE MEMBER: Yeah, I am Julie Freischlag. I am CEO and Dean at Wake Forest. And I just wanted to have a couple comments. So the students, you know, how do you get a medical student to go into fields that we need? And I would tell you, they have to see that early in their career. And they have to make up their mind. So if you have teenagers at home, start letting them make up their minds, because they can't make up their mind. They take forever. How many gap years can a human take? But if you look, they gap a lot. And they gap in the middle of medical school. And then we actually focus them on hospitals, right, great big hospitals, because we're having the same trouble up in Wilkesboro and smaller areas to do that. So work on your own kids to make up their mind, but I think part of it: Could we show them the joys of that earlier? And I think that's important not only for the social determinants of health, teaching our kids how to brush their teeth and teaching kids how to go to school.

There is a stat out there, if you don't read third-grade level at third grade, you will not go far and you may actually die early and be in jail. I mean, you really have to read. And so we're doing a lot of that, as all of you are. But for the students, I think we have to get them out into the rural and also show them. I also agree though, you can't send them out there. They don't want to go. And so using an example of pathology, which probably doesn't sound like it has much to do with it. You know, pathology is dead tissue and it's also dead. Kids don't go into pathology. But now with artificial intelligence, it's going to be an amazing field, because now you can do all that mundane stuff with AI and read the simple pathology and do all the lab tests, and then you get to spend your 5% doing amazing pathology, which is still dead tissue, but it's amazing pathology.

So we think we're going to re-categorize interest. So could you do that with our telemedicine and big centers? We've seen a big difference at Wake where we do telehealth, like many of you do, to these rural hospitals. Now you do need a touch and you need a social worker. You need someone to care about you, and you need food, but when you need a doctor, you could actually do that. We do that in Northern California when I was at UC Davis too. And then you get that doctor real quick to make it happen and it actually works. So with the system that we have, and actually many of you know we might get a little bigger soon, I think attaching these little places to big places so you can zap that in and then they could use their local resources for food, education, hugs, all that other stuff you need.

But the main thing is, how do you get the kids in? And then make those medical students -- how do you get yours to make up their mind, Gene? And I see Wesley Burks [phonetic] was back there too. They have to make up their mind. And then they see a heart surgeon, and it's over; right?

[Off mic] [indiscernible]

>> BUERHAUS: A few years ago we published a study in "JAMA." And we looked at who are physicians marrying? And women were marrying highly-educated spouses far more than the men, but they're kind of closing up. And we found that those physicians were 40% less likely to be in those rural areas. So it's a huge barrier. And it's getting worse. Physicians are just continuing to marry these folks. So I'm really -- [indiscernible]

[Laughter]

[Off mic]

>> BUERHAUS: So I feel there's a bit of, man, we're never going to get past that. So I like what you're saying about the telehealth care and getting those physicians that get help at rural health on the team that can advise that nurse or that social work or can be available directly or indirectly to really be a team, but they may be in your medical school working. [Off mic] yeah, oh gosh, yeah.

>> WASHINGTON: So we have one more question from our president. Oh, okay, one more question, before our last question from our president. And then I'm just going to make three points by way of summary. I'm going to ask each one of our panelists to make your concluding statement. Crystal, we are going to start with you. We wrap up, and you're going to have the last word. Okay. So with that, please.

>> AUDIENCE MEMBER: Thank you so much. I'm Chad Walker [phonetic]. Coming from the perspective of a hospice and palliative care provider that looks at the holistic care and the whole family dynamic, how do you see this future workforce really training them to support family caregivers?

>> MURILLO: We endeavor. I think that's the challenge. We found at the University of South Carolina we had through survey many of our students had very little experience in their educational programs with palliative care, interestingly. And so we developed simulation experiences. And so we have been able to provide the palliative care experiences, but I think

we're challenged with shifting the focus or expanding the focus to the caregiver. So I can say from our perspective, we haven't figured out how to do that.

>> GEORGE: And one thing I failed to mention in my presentation, from a regulatory point of view, we have partnered with North Carolina Home Health and Hospice so that nursing students can get clinical rotations in the home and hospice setting and working with them also to develop more of orientation and support programs so that, number one, you can recruit the workforce and future workforce into that setting. They'll understand palliative care, and they'll be more likely to stay, if they're supported in that.

>> AUDIENCE MEMBER: By the way this, this is my first question today. And but being the last one, I think most of the issues I want bring up is somewhat covered. But perhaps I can make a couple of comments to emphasize some points.

First of all, by the way, this is a great panel and great audience participation and everything you said I think resonates with us and [indiscernible] myself. The two points I want to make is one, informal workforce; actually if you think about most of the care is given by family members and others. And that's entirely [indiscernible] workforce that's been not discussed. I think the last person kind of addressed it, but I'm not talking about hospice. I'm talking daily chronic disease; what do you do about that? I think that's a really big part of your workforce in the future. I would love to hear how you're going to be to be able to educate them. And, as you know, in some countries they even get reimbursed for that kind of work. How do you see ourselves in the future? I think that's a big question.

The second is kind of what Julie started talked about, which is the technologies of future. And by that I don't mean to get anything away from professional relationship, compassionate care. But think about every day the digitalization of everything that we do. And Julie started talking about telemedicine, but, in fact, I would think that even your workforce in remote areas have to have some competency with regards to understand how to use data technology, etcetera. And then taking all the way to AI and how that's can be employed or deployed is in context of workforce development. I'd love to hear what you guys think.

>> MURILLO: Well, so we are looking at digital literacy. And that's sort of the horizon report for those in education, lists digital literacy as a priority. But I think -- so can I also move into our takeaways, or am I jumping ahead here? [Off mic] [indiscernible] So I think thinking about the informal workforce is a major takeaway for me. I know in the state of South Carolina we have many caregivers who are essentially providing care. And so I think moving forward, I will take that piece back to the state and see how we move forward with that.

>> GEORGE: And I think it's an untapped, certainly, workforce as well, but I think that regulation is often stifling that. We have so many regulations of what family can and can't do and what a nurse has to do versus an unlicensed person. And when years ago at the Board of Nursing I was a practice consultant, we would continually get calls from these families with disabled children that, you know, they can't leave them, but yet they can't afford the care or an agency wouldn't be able to provide the care. And there are a lot of restrictions that we, regulation, have put that I would say to you just don't even make sense in this day and age.

So that's one of the things I think we need to take a hard look at is what's keeping that work -- what's hindering them right now? So and my closing takeaway would just be that if I were queen for a day, I would have -- and we could do these things right now -- I would have quick strep test and flu test at drive-in pharmacy. So when you're a working mom and your child is sick, you wouldn't have to miss work the next day. You could drive through. They could give you the quick results. And that pharmacist could have a protocol and either give Tamiflu or have a protocol for a prescription for strep. And as someone who was a working mom, that would have contributed a lot. But if I were queen for a day, I'd have us do those two things.

>> WASHINGTON: Okay. Well, this is a technology hub we're in here. So there's some entrepreneurs in here. You've got your latest lead.

>> FRAHER: I'm going to jump on the technology question, because I think it's really important. And I'm struck by the fact that we do have regulatory barriers in our state and in our nation, in terms of the delivery of telehealth that I think need to be addressed. The other thing is I'm really struck as my own family medicine clinic at UNC Chapel Hill moves to a full capitation model, we're trying to think about, how do we do more e-visits? How do we do more e-referrals? How do we actually provide care virtually? And that's a very different model of care. So who answers the e-mail? Where does it go? Who picks up the phone? Is it a triage nurse? Where does it go after the nurse triages it? So I think it's an incredibly important conversation to be having. I mean Kaiser is doing 50% of their primary care or more virtually. We're behind the eight ball here.

So I am really intrigued by the workforce implications and delight actually just to shout out to the Duke endowment that's actually funded us to look and study this move to capitation and family medicine. Because it will have profound workforce implications. My closing remarks are going back to the fact that we invest a lot already in health professions. So I want you all to think about the fact that we have numerous places that we can re-engineer the way we're doing this. Number one, we can recruit more students from rural communities. And we're doing that in many places. We have to build the pipeline. Because this is about access to education.

It's about access to good jobs. If we recruit them, we need to provide training opportunities close to them.

One of the reasons that you see that nurses are better distributed than physicians and licensed practical nurses are the best distributed is because they have local training opportunities in the community college. So we have to diffuse education out into rural communities. Once we get them through education, we need practice supports. A shout out to the North Carolina Medical Society Foundation and others who have really supported rural physicians and rural nurses once out in practice. And we've got to let them practice the way they want to practice. So you get people out in rural practice who can't practice full-scope, whether they're a general surgeon and they're not able to do full-scope procedures because they don't have an anesthesiologist or whether they're a family medicine physician who's not doing OB.

People went into this because they wanted to practice full scope, whether they're a general surgeon, a family doc, whoever they are. So we need to provide the supports to be able to have them do that. And loan repayment, we need to be much more strategic in this state about where we invest in loan repayment. So it's across the trajectory, whether it's a physician, nurse, pharmacist, or someone else.

[Applause]

>> BUERHAUS: Just a point about the hospice. I think -- I'm glad you raised this because to me we are going to have an astounding number of people dying over the next 15 to 20 years, more than we've ever experienced. They'll be dying in institutions, etcetera. The toll they will take on their informal caregivers will lead to their early death, if we're not careful. It's something that we really -- I really appreciate that you brought that up. On the other end, I think the other thing that I would say to you, Victor, is school health, school nurses.

Now, it may not be school nurses, but I think we need to be enclosed by schools so we pick up these issues early. We can intervene. We can head them off. And I would love to see our organizations -- you know, we adopt-a-highway. Let's adopt a school nurse so they're not stranded. They have ways to connect and get these resources. The third thing is digital health. It scares me, but I'm also thinking, man, this is a future that, boy, if we do right, could be extraordinarily efficient and helpful and great, but I think we have to be careful about it. We just have to be thoughtful about that.

My last comment then is, I think we decide what kind of a world we want to live in, we create it, versus just see what the future will be. And if it is about some of these things that we've talked

about, health or getting rid of inequities, I think we could end up with a happier and a more confident workforce. Because we're starting to see what we're doing connecting to things that matter. People are more educated. There is less gun violence. There's less behavioral health issues. There are less suicides. We're connecting to something that really matters. We can have our medical care as well in all that, and it has a role. But I would like us to have a workforce that is confident, secure, happier. And I don't think that is what we're seeing in today's world. So I think the framework needs to shift so that we can bring that resource with us and really turn it loose.

>> WASHINGTON: Just a couple points by way of wrapping up. One, each of you has underscored and that is, we already have so many opportunities that we could better leverage, just multiple -- [off mic] [inaudible]. And then the last point I would like to bring back to us was somewhat provocative, but the truth is I think it does point the way for the future. And that is in response to my question about the graph. The graph is not about types of people, that if we really do start with what the people need. I'm saying people, rather than patients. Because in a value-based care world, we're going to have lives attributed to us, and we don't want them to be patients. And so if we start at what people need and work back from that in terms of competency, then we frame a session like this in a very different way. And so I thank you all for pointing us to the future as we go forward. And again, echoing Victor's comments, I want to thank my panelists. You were superb.

[Applause]

>> McGINNIS: That's a wonderful closing comment, Gene, and suitable for a really wonderful panel that in many ways tied together so many of the themes of the day. It sets us up well for tomorrow.

One of the things that occurred to me as I was listening to the speakers, including my colleague, former colleague, John Lumpkin, was John and I worked together as colleagues in philanthropy at the Robert Wood Johnson Foundation, and one of the axioms in health philanthropy is that our obligation is to comfort the afflicted and afflict the comfortable.

[Laughter]

And what's very clear is that those who have achieved, or still are, at some comfort level in their profession, are clearly already beginning to feel as if they're afflicted. And they're going to feel more as if they're afflicted if they're not responding to the changes involved that are

necessary. And yet we, as a society, are some distance from the training and education and financial capacity to make those changes that are necessary to help them adjust to the circumstances. I think that those lessons came home very well throughout the conversation and laid the groundwork for not only what can be done here in North Carolina, in South Carolina, what probably is already being done at some level in Montana, and certainly for what we can do at the National Academy of Medicine. So thanks to each of you.

We go now to a reception. Tomorrow morning, we begin at 9 a.m. with the keynote from Karen DeSalvo, who also will be very integrative and inspiring in her comments. Again, thanks to all of you.

[Applause]

DAY 2

>> DZAU: It's great to see so much energy still left in this group. I was saying that yesterday was a long day, but, I felt not tired, but actually exhilarated because of the great conversation we had, and how all of us are really committed towards improving the health -- I guess I have to speak loud –

[Laughter]

-- of North Carolina and of the nation. I thought I would begin just to recall one slide, which Mike McGinnis actually talked about that I didn't. That is: What is vital directions? And how I thought everything about this meeting is re-looking at these important priorities. So, as you can see, this was an initiative we did in 2016. Mark McClellan and I co-chaired this with an outstanding student group and 150 experts that put together 19 papers on different topics of health, which are really written in a way for policymakers. As I told you yesterday, it's been extraordinarily useful in so many different ways, including the conversation to repeal. But, importantly, what we wanted to do is to look at this issue, this vital direction, and how it's playing at the state. And it should be very clear to you, if you listened carefully to yesterday's conversation, that action really happens right here. I think you can be in Washington and think about what direction you want to go. Until people really take this on, embrace it, and implement it, when things really happen. And I want to give North Carolina

a lot of credit.

Of these areas, as you can see, there are four priorities. Actually, if you think about the topics we touched on yesterday and today, we are looking at each one of those. Pay for value, a big topic for today's discussion. Empowering people. And how much did we talk about that yesterday? Activate communities. And importantly, connected care. And certainly we touched on all those things. We also look at the infrastructure needs, as many talked about the needs in this state. But if you look at them, it is measure what matters most. Certainly we had a whole session about the skills of the workforce for the 21st century. Accelerate real-world evidence. And, of course, advancing science. So I would say congratulations to North Carolina. You really are right on track, if not ahead of the pack, in many of these issues. I want to -- I look forward to the rest of the day in seeing where we are going to go. So, with that, I'd like to ask Mike McGinnis to come up here and run the session.

>> McGINNIS: Thank you, Victor. Welcome back to all and thanks for your attendance and leadership on the issues that we're talking about.

As Victor mentioned, throughout the process of developing the vital directions from the national level, the most often repeated theme was the fundamental importance of state and local initiative and leadership. It was really that dimension that prompted us in some ways to go back and look at cross-cutting issues that could be applicable at any level of our health system. There's no question that, as Victor noted, North Carolina has provided fundamentally important leadership on each of these dimensions. Especially the first six, which are clearly dependent upon state and local initiative. We heard testament to that quite clearly all throughout yesterday with the important activities under way. The reason that we heard that testament I think was not only because of the great activity here in North Carolina, but because of the very skillful work of the planning committee that Victor and Secretary Cohen co-chaired in putting together the agenda. With a finger closely on the pulse of the activities, the planning committee was able to bring out the extraordinary initiatives under way here.

Governor Cooper -- I'm just going to run quickly through a few highlights and the flow of the agenda as a reminder to those of you who were here, and as a quick update for those who weren't able to be here yesterday. Governor Cooper led off the day, emphasizing the importance of non-partisan leadership to create and engage opportunities, to decrease fragmentation and increase access to everyone in the state to health as a goal. Secretary Cohen followed with a description of the broad health gains that were accessible with the

right initiative and emphasized the kind of strategies here that were going to make those health gains possible through alignment around common priorities, as well as through building the infrastructure necessary to engage them.

We heard from an extraordinary group of participants on five panels that were focused on North Carolina's health and health care priorities. Secondly, the importance of place in health, health care disparities and health equity. Thirdly, the need for integrating physical, behavioral, social endeavors to approach the issues in a whole-person manner. Fourthly, the panel on connecting care through seamless information flow and data sharing. NC360, a great example in that respect. And fifth, the importance of fundamental shifts in perspectives, incentives, and training to create the workforce necessary to carry forward the priorities.

The discussion throughout the day was so rich, it's virtually impossible to capture that richness in a summary fashion and certainly not in sound bites. But there were several sound bites that I noted, found, as I was looking through my notes. I'll just read a few off. The Governor mentioned lives of purpose and abundance as an inspiration. We heard about the importance to keep it simple, keep it real, keep it practical. We heard that there is a different way, let's base our margins on keeping people healthy. We heard that choices depend on opportunity. And we heard the voice of Pamela Avery, shared with us by John Lumpkin. I never knew I could have a vision for the community. We heard about systemic exclusion. We heard the term "segregated by design." We heard about Ward A and Ward B. We heard participants and not patients. We were reminded to be culturally humble. And we were reminded that payers play by rules, but they need to change the rules. And we also heard that we need to know what the data know. And finally, and in many ways best capturing the reason for our conversation, we heard North Carolina has the It Factor. Which we all resonated with. Especially those from out of town who are treated to this magnificent weather and scenery, and these creative ideas.

Today we'll be discussing in the following series of panels. First of all, health care transformation and moving to payment for value. We're going to hear about community engagement and its importance, its centrality for better health and well-being. Then we're going to end the day with a call for action, a panel that's going to review what we've heard throughout this session, and identify priorities, practical, actionable steps that can be taken by all of us in the course of our movement forward.

>> McGINNIS: To start us off today, we have a very, very special treat. We have the privilege of being joined by Karen DeSalvo, who is an individual who brings really

unparalleled experience, insight, passion, and leadership to the full range of the issues that we discussed yesterday. Karen has provided leadership in medicine, in public health, information technology, health equity, all of these repeated themes. And not only has she provided leadership, but she's really been at the forefront, at the tip of the spear, on these issues at the national level. So to complement what we heard yesterday from Secretary Cohen, we're going to hear a national perspective from Dr. DeSalvo.

Let me just tell you a little bit about her. She's currently a Professor of Medicine in Population Health at the University of Texas, Dell Medical School at Austin. She's also a Senior Fellow at the Bipartisan Policy Center. And she's on her way in just a week or so to Google, where she is going to be the Chief Health Officer for Google. We're all very, very fortune that they have made that decision. But let me tell you a little more about Karen. In the Obama Administration, Karen served as Assistant Secretary for Health, which is head of the Public Health Service, the health side of the programs. So she obviously worked closely on the health financing side with Secretary Cohen. It's really a privilege for us all to have that dynamic duo with us here today to identify our opportunities. Prior to her position as Assistant Secretary for Health, she was the IT czar for the nation, the Director of the Office of Health Information Technology. The reason that she was tapped -- or one of the reasons, she may tell you what the real reason was -- for that position is that before she came to the Federal government, she was the Commissioner of Health for the City of New Orleans. And she was instrumental to efforts to restore health after the devastation of Katrina. And relied not only on her activation of community forces and leadership, but on the use of IT to help jump start the progress in rebuilding the health sector throughout New Orleans. Before that, she -- actually, I should say that she also has a deep reservoir of experience in academia. Actually, her time here at UT Austin is a passing element; but prior to that, she was at Tulane, where she was Vice Dean for Community Health Affairs and Health Policy at the Tulane School of Medicine, and Chief of General Internal Medicine and Geriatrics. So we have with us here today someone who is an extraordinary talent. She is also, in addition to her day jobs in medical school and with the Bipartisan Policy Center, she's co-convener of the National Alliance to Impact the Social Determinants of Health. She serves as the Director on the boards of Humana and Welltower. She's a member of Verily Life Science Advisory Board. She's a Commissioner on the Medicare Payment Advisory Commission. And she's the current president of the Society of General Internal Medicine. And the honorary vice-president for the United States of -- for the American Public Health Association. She earned her MD and MPH from Tulane University and her Masters from Harvard University.

Karen DeSalvo, thank you very much.

[Applause]

We're going to have an informal conversation.

>> DeSALVO: Who needs a mother when you have a guy like that?

[Laughter]

>> McGINNIS: I actually could have gone on for a lot longer. And maybe after this session, I will.

>> DeSALVO: How are you all doing? Good morning.

>> Good morning.

>> Howdy.

>> DeSALVO: Howdy.

[Laughter]

>> McGINNIS: Welcome, Karen. We obviously are delighted and very grateful for your being here with us. This is a conversation. It could be very wide-ranging, given Karen's wide-ranging experience and expertise. But we're going to start with a focus on a theme that has coursed throughout much of our conversation, and that is social circumstances and the way social circumstances shape our health prospects. And more importantly, in many ways, at least by example of stark contrast, the way we -- how we have come to be in the international community such outliers in the health arena. You all know the figures. You saw them yesterday. Despite spending 50% more than our closest second spender, we are ranking somewhere in the 30s with respect to overall health importance. And when you look at that importance in terms of returns on investment, it's not just poor importance, it's disastrous, given the amount of money that we spend.

So it would be, I think, very helpful -- that doesn't matter, Karen.

[Laughter]

>> DeSALVO: Shave ten minutes off.

[Laughter]

>> McGINNIS: Thank you very much. Thank you.

>> DeSALVO: Chief resident.

>> McGINNIS: With this right here. Which is an Academy's report, consensus study report, on integrating social care and delivery of healthcare, moving upstream to improve the nation's health. Karen, you were on this panel. This is a -- it's issued a vitally important set of determinations and recommendations for us as a nation. Could you talk a little bit about the high-level recommendations of the report?

>> DeSALVO: I will. Let me start by saying thanks for inviting me and having me here. I'm a fan girl of Mandy's. Have been since I first met her. There is an extraordinary team of talent in this state, so you're at a unique moment in time. I know you know this, but the world really is watching, and I want you to feel a lot of pressure because you need to get some stuff done so that others will feel empowered to go forward and that we can really learn from what you're doing. I think one of the most -- we can talk more later about the way that I think you've structured things, and I hope that we will get a chance to, but it's not just the what you're doing, it's the how. So there's a lot to be learned of how the team has been organized, how you're taking the best of the best from across the country and not feeling a need to reinvent everything, but you want to assemble a strong strategy.

My experience with the social determinants of health, like many primary care docs, happened over and over at the bedside or in the exam room. And usually it was please don't tell me that you've got, you know, whatever, food insecurity, a challenge, because I just don't know what to do with it. And that's happening just as we speak all across the country. There are doctors and other clinicians that are worried that the conversation is going to go beyond medical. But what you do know is that it has to or you can't really get to the root of the challenges that folks face. We saw that really clearly after Hurricane Katrina as we were rebuilding the health care system because, just like the country's journey, when we looked at our stats in Louisiana and said, well, let's not rebuild what we had because the system was designed to create the highest cost and worst quality in the country and some of the worst overall health outcomes. Let's redo the health care system when we

have this opportunity and base it on primary care, and digitize it, and focus on quality. And many of the things the country has been doing. Right? But we did that locally. It became very clear very quickly, though, for some very visual reasons. The entire community was destroyed. We lost 250,000 houses. 80% of our community was under water for at least 30 days. People didn't have schools and jobs and bus lines and anything to get their work done. It was -- when people came to clinic, yes, they were concerned about their diabetes, but they were much more concerned about when will the schools open or when will we have electricity back in this neighborhood. They were telling us every minute of every day in a flood that you couldn't avoid, that the non-medical drivers were more important to them. So we began to build that into our clinical systems. But for me personally, and many others, it became really clear that the bigger and more significant statistic to track on was the 25-year gap in life expectancy we had in New Orleans based upon where people live. Like, a whole generation, literally a whole generation of difference based upon what's about a four-mile difference. I'd been practicing medicine for 15 years, thought I was all knowledgeable about community health, part of community. I had no flippin' idea what was really going on when I stepped out of my box of medicine. The storm also caused us to have to step out of our box and be in community, talking to people, hearing from them, and shaping not just the health care system, but then public health.

Our journey, as I've learned over the course of time, has been happening in communities all across the country. I think the grasstops of the world picked up on this in the last few years. Some of us have been pushing the agenda, so we're happy the grasstops have been thinking more about this as an opportunity, again, to not only do things like drive down cost and improve outcomes of health care, but really genuinely improve health. Big public health indicators like maternal mortality or life expectancy, or frankly, just quality of life and well-being. So, the National Academy's interest in this space, which is deeper than the last couple of years but I think is really importantly ramped up, I think is a wonderful signal that the most important institutions in our country are recognizing that health is more than health care and that there needs to be not only action on the front lines, but supportive building of an evidence-base for policy and action. And a policy basis that can support what's happening on the ground. So this opportunity of one of -- there are now a couple of other reports that this built on and there will hopefully be more from the academies, that integrating social care into the delivery of health care, we were charged -- Betsy was on this and Chris, he was here yesterday, was also on this group. We were charged by the resources given to the committee to talk to the medical community about what they could and should do around understanding social drivers in either the context of health care or the context of populations and communities they served. So I just want to very clearly stipulate that. We all struggled with this because we're all of a mind that let's go upstream,

let's go upstream, we need to do more to change context. But really where we were charged is to focus on what the health care system and clinicians could do. So the recommendations in the report are in that vein of moving medicine upstream.

We tried to get a frame on what is -- there was so much activity happening on the front lines. Some of it in the peer-reviewed literature, some of it published, so that it could be assessed and evaluated and said, yes, this actually is a good approach, or to anything we want to do. A lot of the work happening in social determinants, especially related to the health care system, is in the gray literature or on someone's website about how wonderful they are. So, hard to know if we can believe it. Right? And the -- so the committee tried to cast a broad net to look for promising practices. You all will not be surprised that North Carolina is in there. It's particularly in the data and tech chapter, talking about NCCARES360. But we have other models in the public and private sector. And tried to shape those into these five A's. First -- they're not necessarily in a continuum so I don't want to say it that way, but my experience with health systems is that this kind of is the continuum. That first they become aware. They have to assess the need of not only a person or a population or a community. And then they begin to think that they might need to accommodate in some fashion. So if there's a lot of transportation issues in a community, should we be doing more telehealth or, you know, going out to community, or not requiring people to come in to us as much.

The third is helping to fill some of those social needs or address some social goals for individuals in particular; but thinking about, for example, providing ride-share or vouchers for taxis for transportation.

The fourth area is about aligning. This is really when we start to move more -- the team part is in the assistance in particular. Maybe all those first three. But you start to really think about community when you talk about alignment and advocacy. So how does the health system, health care system, align with other sectors? Food sector? Housing? Public health? To begin to understand what are the assets in a community. I use that term as broadly as possible. And where there are gaps. And how can they work together to fill those?

The final area is about advocacy, which is not just, for example, say, you're going to assist somebody with transportation so you give them a ride-share coupon. Or you want to align the transportation, align with the transportation services in the community and start to put health centers on a map of the bus routes. But rather, start to add bus stops or other public transportation. As an example, there could be other options to really change the fabric of a

community. Some organizations like Kaiser Permanente are further along in that journey. Bernard Tyson and other leaders in the organization I think have really -- they moved very swiftly from we know there's a challenge, we're trying to help individuals, but really there's more we could do with our organizational heft as health care to advocate for better public transportation, better housing, living wage, these really structural, conceptual changes that are going to make the difference over time.

So the five A's really are just designed to give organizations and communities a way to anchor what the health care system might do. We have a set of recommendations in big areas around workforce, digital, and technology and financing that are pointed largely at the public space; but there are a quite a lot that the private sector can do. Some of those efforts are either under way or we have good hope that they might be helpful. And we might talk about some of those later. I do hope that you all will take a look at the report, not only because of the opportunity to help frame as you're talking to health care systems and to health plans, this is the sort of five A's ways to think about it, or to individual clinicians; but also to think about what are the changes that need to happen with respect to the way we do business as health care. Again, the report is designed to talk to health care. We don't believe that's the whole be-all and end-all, but it's -- the Academy was charged with beginning to have that conversation to help medicine, move medicine upstream.

>> McGINNIS: Thank you, Karen. It was a really wonderful overview from a very practical ground-level perspective of the issues and opportunities. Two or three things prompted in listening to you. One observation and two questions. The observation was that we really lost a very important ally when Bernard Tyson passed away a couple of weeks ago because what Kaiser has been doing has been extraordinary. One of the questions picks up on the notion of what's required in the way of linkages with other sectors in engaging it. I'd like to come back to the question of how do we play out, identify, and cultivate those partnerships; but first I want to pick up on a self-centered perspective and that is ask you what you think the National Academy of Medicine, the National Academy, might be doing to help advance the evidence base in order to mobilize and provide resources to and prompt the kind of activity that you see as necessary and that you, in the course of your committee work and elsewhere, beyond the notion of just health care and the linkage between health care and community, what is it that the national academies ought to be doing or has the opportunity to do in order to help move the frontier?

>> DeSALVO: I'll answer that if you promise me you'll get back to other sectors.

>> McGINNIS: Yes.

>> DeSALVO: Okay. So, short of changing the name of the Academy to the National Academy of Health, but --

[Laughter]

[Applause]

We -- I'm personally very concerned about the squishiness of the evidence in this space. So that's one area. And what I mean by that is if we proceed with the speed the country is going to develop policy based upon pilots and ideas and don't have a stronger evidence base about what we can expect would be the return for that, for health, or for cost, we might wake up in five years and think that we went through this interesting fad that didn't -- of addressing social determinants of health that didn't make a difference at all, so, pfft, forget that and move on. And that would be terrible for what we need to do for the health of this country. On the other hand, if we are more intentional about making certain that we are having a harmonized way of evaluating and measuring impact of whatever is happening on the front lines and taking advantage of different kinds of methodologies than randomized controlled trials, for example, but using -- taking advantage of implementation in embedded science, using synthetic populations to understand what the impact of policies might be at the institutional or at the community level, we would, I think, have more speed in the work, and we take advantage of the experiments happening on the front lines. But there would be some methodologic rigor and analysis and evaluation associated with that. This could be stepped up and funded more through federal groups like NIH or ARC. PCORI is another resource for that. But also, institutions, centers of excellence, could be funded to do this kind of work in the way that we did with the HIV epidemic. We set up a network of AIDS clinical trial units and --

Those depths of despair are related to underlying issues around racism, lack of economic opportunity, social isolation. The data seems to point in that direction. Right? So if HIV was a significant epidemic and we applied scientific rigor with all due haste across the country, we should be doing the same thing around the social determinants and not relying on front line projects to do this. We need to be more systematic. But I want to say this, two other things about the science. The Academy could help by calling for and, frankly, helping to shape out a scientific agenda and a strategy, and getting the attention of the key leaders who could provide the funding, but also help develop the talent that can do that kind of work because not everybody is trained with that kind of research skill.

The second piece is that this is interprofessional work. And if we rely solely on the house of medicine to understand the outcomes, we're going to end up looking at outcomes that benefit the house of medicine. And we need to be including social scientists and others in this work. This is much more complex. This is a new field. This is a new thing that we're creating. We just haven't articulated what it is, and I think the Academy could be very helpful to understand what's going to be the best science in the area.

The third thing I want to say about the science is maybe more worrisome to me than having bad science that doesn't give -- that we build policy on that then falls flat, is that we think that the good science of a randomized control trial of addressing food insecurity for dually eligible populations, post-discharge, and we show that you can reduce hospitalizations by whatever they show, 23% -- I don't know if Seth is in the room, but he's in North Carolina, so I'm picking on his science. Seth works with some outstanding scientists. On the other hand, if you present that kind of data to policymakers, their inclination is to say, oh, great, we're going to add to the fee schedule, asking about food insecurity, and pay for addressing it through payer programs and then when -- and we're going to create some measures that will show that that improved and we're going to check that box and we have dealt with the social determinants of health. And maybe at dinner -- remember when I was sharing the story about my grandmother-in-law? Was I telling you about that? Please forgive me, I don't mean to be glib about this. But I think she's such a -- I think about her a lot. But I also think about this example of if you asked Monna, "Are you food insecure?" Think about this, her doctor asks that, checks a box, and then they send her some food. She would say yes. But she has enough food to last through the Apocalypse in her house. She has more canned soup than the grocery store has. But she is food insecure because shows lonely and she can't drive any more and she might need something at the grocery. She -- all the other reasons. Right? And we all know this from the people in communities we talk to, people don't have one social determinant or social driver. This is bundled stuff. This is generational issues that are contextual and not just about the person. It's also about where they live. So the complexity of the sciences -- this gets back to that middle bucket of it being interprofessional -- is it's going to require ethics and other kinds of thinking; but also, I don't want us to go down a pathway of creating crisp, clear, randomized trials that draw the attention of actuaries and policymakers to think if we solve these one or two things, we've kind of done our job.

>> McGINNIS: And the data infrastructure that's being developed here as part of the secretary and health director's initiative is going to be helpful in advancing that embedded science that you've identified.

We will take those suggestions on what we should do to heart. And I'm confident that I can speak for Victor and myself that we will give a stronger measure of attention, certainly as strong as we can, to advancing that science base.

>> DeSALVO: Thanks. Can I say one thing about that? Just in case Francis Collins is watching.

[Laughter]

Back to the house of medicine. When the NIH says go left, every academic medical center in the country goes left. And what that means is that not only the scientific pillar of the training -- I'm going to be very doctor-focused, but this is true for nursing -- is it also begins to influence what the students are exposed to. So the teaching enterprise and the clinical enterprise are effected. It's really powerful. That's a very powerful tool in the toolbox of elevating the respect and appreciation and the credibility of the social determinants of health. So part of it is the funding and the building of a new enterprise. But it's also just to have the scientific community like the Academy say this is real, this is not fuzzy stuff. There's actual data that shows that the social determinants of health effect your biology. Right? And your physiology. So there's a grounding. And this is not fluffy, qualitative research. So hopefully Francis will continue to lean in. I'm being a little facetious, but he is a very credible leader, and we need folks like that, like the Academy, to do just what you're doing and step up and say this is really important for the health of the country. We need to do all the other work we're doing to build better drugs, or better pathways, better payment models; but we also need to understand that there's more to health than health care.

>> McGINNIS: Well said. Signals matter in a very big way. And we need to take full advantage of that. So, as I promised, back to partnerships. Health improvement is a collaborative enterprise. How do we in the health sector ensure that we are identifying and collaborating in a truly purposeful way to make the changes necessary?

>> DeSALVO: Yeah, you know, I worked my way through college working at the Department of Public Health in Massachusetts, so -- and then I got a degree in public health when I was getting my MD. So you would think I would have been better at understanding the powerful importance of public health, to start there, as a partner. But when I -- it took me more time than I care to admit to recognize that we weren't going to solve this just out of health care. This being our challenges in Louisiana and that's going to be the same for the country, that -- it was that sort of Galileo/Copernicus moment, like health care is not the center of the universe, that there's actually something else that is. It's called the person in the community and that maybe we're not -- we can go as far as we can, but we've got to meet some other sectors on

the other side. And public health is a partner we had pretty tightly bound to medicine for a lot of years until the -- through good intention, but I think over the course of generations, those two fields have split off and have different language and professional tracts and accreditation and different rooms in which they work.

>> McGINNIS: And resources.

>> DeSALVO: Very different resources. And it's just, I think it's really hurting the country. We've disarticulated that in governmental processes. And I, by the way, think that is part of the secret sauce of North Carolina is the vision to have somebody like Betsy, who is deeply experienced in public health, also be part of leading the Medicaid program and bridging those worlds to think about Medicaid as a tool to improve health broadly, not just as a way to reimburse providers for services that they deliver. I hope that this kind of example, we stop disarticulating public health from various other really important health drivers. We have even done that with environmental health. All across the country. Preparedness now is sort of separate and apart. It really worries me that we're not in the same rooms working together for the same shared goals. So, a part of this change that I think we're going to have to do, not only in the research strata, but also in the work strata, is to bring the -- do a forcing function, to bring the fields together at the policy and the practice, the practice level. When I went -- I became Health Commissioner. And I didn't want to do it. It was like nine months of talking to Mitch Landrieu. I was like, I'm not going to do that. I'm going to find you somebody to do that. I don't want to be Health Commissioner. I was -- and I talk about my -- I talk about that woman. I don't know who she was, but she thought she was so important. She was at the academic medical school, she was a vice dean, she wasn't going to be a health commissioner of the city or whatever, but she was going to find someone to go do that. And I went down the street two blocks from my office to City Hall, and, I mean -- I still get goosebumps, I'm getting goosebumps right now thinking about it. I thought: What has been going on in my head? I had no idea that there was this powerful, brilliant workforce of people who had spent years understanding the community, being on the front lines, doing this incredibly important work, who were this resource that we didn't even think about. Right? In the academic environment. And that we -- we looked down on them. I'm just flat out saying that. We thought, well, they're just -- that's public health, we'll deal with them later. There were so skilled. And needed resources. Needed to be modernized. Wanted it badly. Were hungry to be a part of the -- to be at the table and lead at the table. It was -- if anyone ever has the opportunity, particularly to work in local public health, even if it's a short tour of duty, I think it should be required for everybody in medicine because you don't see how valuable that partnership can be.

I had this very visceral experience. And it has forever changed the way I see that part of the world. But I also learned a lot about the social care sector. I'm still learning about it. And I particularly learned about it because we were running WIC programs, a program I didn't even know about because I was an internist, and -- I'm embarrassing myself, I guess, for perpetuity, but it's just the truth. There is a lot that medicine has to learn about who our partners can be. That's sort of step one.

I think step two was I couldn't believe how poorly resourced they were. I was the chief of general internal medicine, and we're like the -- we are the -- except for family medicine, we're the least resourced –

[Laughter]

-- in the school -- yeah, School of Medicine. But we, I mean, we couldn't afford coffee cups if we wanted to have a community meeting. We're paying for that out-of-pocket. We had no budget for stuff like that. That's not New Orleans. That's what's happening all in this country to one of the most important partners, who, by the way, is not just skilled and experienced and in touch with the community in a way that medicine, in my opinion, cannot be, because the agenda for public health is about health and not about sickness. And medicine, as hard as you try here in North Carolina, you're still on the backbone of a chassis that is about we're going to find sick people and do stuff to them. Public health has a completely different frame. And is statutorily accountable for the health of everybody in the community, everyone who lives, learns, works and plays there. And there's no other entity that doesn't do that because it's a fad or because it looks good to do this because the cool kids are doing it. Public health gets up -- does this 24/7. And so we need to not only recognize and welcome them and have them at the table or leading at the table and be structural in our thinking about how to include them, not just a handshake, but really create structure. But we need to resource them. I'm not going to go on a tangent about it. I have written about it, if anyone is interested, in the "American Journal of Public Health". We published a paper this last September talking about public health infrastructure, financing. That's important. But the social care sector also, and I'm using that term -- it's a very broad term. I think the housing sector is doing a super smart job of creating public/private partnerships and being more sophisticated about financing models than other sectors are yet; but the social, broadly, the social services providers and the social care sector are less resourced than public health. I don't even know how that could happen in this country considering how important it is. And it's a real strain. So, we, as we go on this journey and we want to -- and we are reaching out to the social care sector, we as a country, we're crushing them already. And I think there was some conversation about that yesterday. I'm hearing a lot about that in the field. That already,

organizations, health care systems in particular, that are further on the value-based care journey, that are on those downside risk models that cause them to want to have these more structured, aligned relationships with social care partners, they're running out -- the social care partners are overwhelmed. There's long-listed queues. There are -- social care providers are learning how to pick and choose the less needy folks that are coming to them since they're getting kind of paid a flat rate and they as a mom and pop, soft money, housing, support agency, don't want all the super sick people with behavioral health disorders. They're trying to balance their books. And they don't have good digital infrastructure, et cetera. So there's a lot of need to really assess that space, to quantify the need, and then find a way to provide resources. And modernize it, I think is the other piece. So there's some interesting work, like, Len Nichols, Lauren Taylor, wrote a piece about this. And I mention a manuscript because sometimes manuscripts do change the world. This is one in which a really thoughtful economist is talking about new ways of particularly local, private sector engagement to share in the gains, to pool resources to address social determinants of health for individuals; but maybe it's a bridge towards further upstream work. But there are others. Stuart Butler has written about this, a very conservative economist. So back to this sort of the grasstops national landscape. Folks who spend a lot of their brain injury on health care -- brain injury --

[Laughter]

Sorry, Mark. Brilliant people like Mark McClellan, Stuart Butler, and Len Nichols, who are very well-respected economists who have been thinking a lot about health care policy are starting to think about health care more broadly and social determinants. This is a wonderful turn of the tide. It's the step towards getting the Congressional Budget Office and Office of Management and Budget to really begin to think from an economics and actuarial basis about helping more than health care. What are the other component partners? And what kind of resources do they have and might they need?

>> McGINNIS: I can't believe it. I've just gotten the sign that we're running out of time. Because I, for one, would like to sit here for the next three or four hours and talk with Karen. But, let me ask you just two more questions.

>> DeSALVO: I'll try to be really fast.

>> McGINNIS: Yes. And short answers.

[Laughter]
>> DeSALVO: That's not my best skill.

>> McGINNIS: Question one. You were a very senior official in the Obama Administration. And you, obviously, have inspired ideas about things that could happen across the board to yield a healthier nation. If you were not Assistant Secretary for Health, but you were President of the United States, and you had to balance everything -- you know –

[Laughter]

[Applause]

>> McGINNIS: If there was a write-in –

>> DeSALVO: All the family medicine docs are like, yes.

[Laughter]

>> McGINNIS: A write-in a year from now and low and behold, President DeSalvo is here, but you have to balance all these competing priorities. What would you do? What would be the single most important thing you think you could do to advance progress in the health of the nation by engaging the social circumstances that people face? How would you help people at the state and local level through federal policies?

>> DeSALVO: And I have one minute for that?

[Laughter]

>> McGINNIS: Yeah.

>> DeSALVO: That was not on the list of questions –

>> McGINNIS: Somebody once said -- put this kind of challenge to me saying you know you are going to go to the White House and you've got one chance in an elevator ride to think about what you're going to say.

>> DeSALVO: Let me just start by saying that while I was in the Obama Administration, there was a lot of groundwork being laid to spread the notion that there's more to health than health care. And people like Rahul and Mandy and Patrick and others were working on accountable health community models and Medicaid programs in New York, and Oregon and other states were already under way. So folks were thinking about it. We had Public Health

3.0, which was a call to arms for the public health community to address the social determinants of health, which is a report that my office put out. And even in the technology space, we rewrote the strategic plan and included in it a pathway to a digital world that could address the social determinants of health. So the groundwork was there. I think this is an important take-away is that states can innovate because you have a rapid cycle of change, proximate, and you have local health plans and local public health and local philanthropy that allows you to do fast work. But the federal government has a longer arc. But I think that -- I guess I'm going to say a couple things. And I'm not trying to be political. But I think the first thing that I'm going to say is more in the health care space. I would just like to just stop talking about coverage expansion. I want it to happen so that everybody has access to affordable health insurance. Can we just clap for that? Yes. Including in North Carolina.

[Applause]

Because it sucks the policy oxygen out of the room and there's no space to talk about the other important things that we need to do to actually get to health. I also think that we need to marshal the Office of Management and Budget, which I believe could be a much more powerful resource at understanding the assets that we already have that can drive health -- being selfish here -- but health is a pathway to well-being and economic prosperity. And begin to really, truly evaluate the benefit out of those programs and be as clear as possible within -- and figure out how far we can go within statutory authority and then what Congress needs to do to help to allow us to pool resources on the front lines. I think the siloing of, not just data, but of money and of personnel. When you are working on the front lines, it's a ridiculous morass to get through. And what people need is as much flexibility as possible within current -- and they need clarity through clear guidelines. And it needs to come from the White House, not just from HHS, because there are important opportunities in labor and housing and commerce and USDA and other departments. So this isn't just about what the House Secretary can do. It is actually something that the White House can do. And the reason I go to OMB is because they know where everything is, and they know what all the rules are, and they can bend them or decide where we need to go to Congress to get changes. But I actually -- so, to maybe say it more simply. I think we've got a significant structural problem in the country. And I've said that in different ways. The structural problem is we keep separating things into different rooms. And I wouldn't want social determinants to be separated into a different agency or department. I would just want all of the potential opportunities that we have to drive health. Maybe I'll just say one more thing because I know you care a lot about this. This is kind of a -- well, I mean, a health thing. Is, we actually -- this may surprise some of you all if you haven't been in federal government. But, the President or the Secretary doesn't have a dashboard of health for the country that's near term. So the

Secretary doesn't find out until a couple years later how folks are doing. And it's terrible. In Cuba, the Minister of Health finds out every morning what happened the day before, the day before. And there's an action plan to make change. A model like that, we ought to, with sophistication, be able to do here. And the reason I mention that, it's another structural issue. We're looking in the rearview mirror all the time. We don't have any -- we can't forecast and we can't now cast. And we have to do a better job of that as a country so that we can get ahead of things like an opioid epidemic or whatever is about to come next. And I know that I'm done, but can I just say one more little thing?

>> McGINNIS: You're not done.

>> DeSALVO: Okay. You have one more final question. Alright. I have one more thing I want to say. Whatever the question is, I'm going to say this.

[Laughter]

>> McGINNIS: Last question. I know she can't go on too long about this because we have asked her to reflect on all the national policy issues, which she, obviously, lives and breathes. She's about, in two weeks, to be living and breathing the digital private sector world. You're not at Google yet, but you will be. And I know you can't say a lot about what you're going to do with specificity; but you can reflect briefly on what you think the digital world can do to help change the dynamics we see in the social determinants of health.

>> DeSALVO: Okay. Well, this is good because I can still say what I wanted to say, which is -- and that's probably good mission alignment for me, that I'm taking a job where it allows what I think is probably the most important. Technology, and data, and analytics are a tool that will give us more time and space and emotional depth -- not depth -- emotional energy to think about and treat people like human beings. It's not a substitute for that work. But absent really understanding context, and that's a place where data can be helpful. Understanding trajectory. That's a place analytics can be helpful. And technology to help meet people in communities where they are. I think we're too busy trying to deal with all of that cognitive burden. If we can reduce that through some augmentation and also use it to better communicate, I think we can get back to what's fundamental in all of this. This is not -- it's science, but it's not really rocket science. This is about us as a country taking a breath, and not thinking about people as a patient or a beneficiary, or community as pockets of need; but these are our friends and neighbors and family, and we have to be willing to open our hearts and minds to understanding how all the resources that we have in this great country can come to bear to move that line in that direction for life expectancy from going down to going up,

and eliminate the disparities in it across populations.

>> McGINNIS: Thank you very much.

[Applause]

>> McGINNIS: With apologies for the next panel, which is our opening panel for the day, I'd like to invite Mark McClellan, Rahul Rajkumar, Brian Klausner, Alice Pollard and Hemi Tewarson to come up. They're going to engage us in an exploration of multi-payer strategies to shift health financing toward value and population health. Let's welcome this panel. And the co-chair of the Vital Directions Planning Committee, Mark McClellan.

[Applause]

>> McCLELLAN: Great, Mike. Thank you very much for introducing us. It's great to be here with all of you. I'd like to add a belated welcome to those of you who aren't from North Carolina here to the state and this conference on vital directions. There really are a lot of opportunities to share experiences and to learn, starting with the discussion that we just had with Karen and Mike.

We're focusing here in this session on payment reform. Payment reform gets a lot of attention in health care transformation efforts here in North Carolina, around the country, and actually around the world. And this is about here in the state moving to alternatives to fee-for-service payment. As Karen just mentioned at the end of her remarks, this is where the rubber meets the road on moving the resources to the kinds of things that we would like to support more effectively for improving the health of our population. I just want to emphasize, the motivation for this work isn't incentivizing health professionals. It's recognizing that the kinds of reforms in health care that are needed to shift the focus to improving health and addressing disparities more effectively require different ways of allocating resources, different ways of paying. So, approaches that we've heard about yesterday and there's some great panels coming up to address around enhanced primary care and team-based care, integrated mental and physical health, the use of telemedicine, and digital health technologies, care coordination across medical and community service providers, integration of steps to address social drivers of health. None of these are reimbursed well under our traditional fee-for-service payments. So it's really not possible to sustain new kinds of care models built around these potentially important approaches to improving health and lowering health care costs. So behind this notion of moving to alternative payment models is the notion of providing resources for care in a way that gives those involved in delivering care together in

new ways more flexibility in how they do it, in conjunction with some more accountability for improving the kinds of key measures of population health and care experience and cost of care that Karen was just describing, too. So, more flexibility, but also more accountability to achieve reform goals.

Nationally, there's been steady, if incremental, steps under both Republican and Democratic administrations towards moving from fee-for-service to alternative payment models. Another national effort I'm involved with, the Health Care Payment Learning and Action Network, is estimating that around 40% of payments nationwide are now in alternatives to fee-for-service payment. But so far, most of these payments have only been limited shifts away from fee-for-service. These are like the so-called shared savings models that some of you may have heard about. They show some evidence of improving health outcomes and care experience and some limited cost savings; but they're still mostly fee-for-service-based payments. So it's perhaps not surprising that the resulting care reforms have not had that much of effect on costs or many of the issues that we've been talking about today and throughout this conference. So, here in North Carolina, through a combination of changes in commercial payments, bigger and more rapid changes in Medicaid payments, in Medicare payments, both Medicare Advantage and traditional Medicare, through approaches like advanced accountable care organizations, the state is on track for a much larger systematic change in payment that would take the share of payments in these alternative payment models here in North Carolina from something like 30% where it's been in the past year, to over 70% in the next five years. These aren't just the modest shifts away from fee-for-service. These are ones that would involve substantial so-called downside risk. What that means is much bigger movement towards payments tied to people and not just specific services that aren't necessarily the things that make the most difference for health. And that is an unprecedented pace of change for the United States, and I think anywhere else. So, as you've heard, success in these reforms is going to be challenging. That's why most health care organizations, most places around the country, have chosen to go more slowly with only incremental payment reforms. It's not so simple as just adopting a new payment contract. New capabilities are needed on all sides among health plans, among health care organizations, among the social and community-based organizations; and certainly some new expectations and experiences and involvement for patients and consumers as well. This means new organizational structures organized more around patients and their needs. Integrated practices, not just individual services. New kinds of care models that target all of these potentially valuable interventions to the right people. And along with that, some real tougher steps to avoid unnecessary costs. All of this has to happen with what Karen I think rightly described as squishy evidence at best to help guide it. I think payment reform is interesting and I'm really glad to be part of this panel

because it brings together a lot of the other steps that we've been discussing throughout this conference. We're going to hear some perspectives on the panel from different parts of the North Carolina health care system. And as part of that, you're going to get to hear about what's going on now with payment reform, what we've learned, what some of the challenges are, and what some of the opportunities are to address them from both local and national perspectives.

We're going to start first with hearing from Rahul Rajkumar, who is at the Blue Cross and Blue Shield of North Carolina. And Rahul has been closely involved in leading many of these efforts for Blue Cross. Looking around in the audience today, I see people like Anita Backman, others, United Health, again, Medicaid, Commercial, Medicare Advantage plans that are also part of these efforts. I hope we'll get a chance to hear from them as well. And in addition to Rahul, we'll also hear from Brian Klausner, who is the Chief Medical Officer at WakeMed Key Community Care ACO and the Medical Director of WakeMed Community Population Health. Brian and his colleagues are in the midst of these transformation of capabilities and expectations on the health care system side. Or I guess I should say the health system side now. And also really glad to have with us Hemi Tewarson, who is the Director of the Health Division of the National Governor's Association. So North Carolina is trying to do a lot at the state level with state leadership on health care reform. A lot in a limited period of time. There are a number of states that have been at this for a while longer and have some very important experiences that can inform work here and also provide a complementary perspective.

>> McCLELLAN: Very glad to have all of you with us today. We're going to start out with some opening comments from each of these perspectives on health care reform. Starting with Rahul. As I said, Rahul, Blue Cross, is in the midst of helping to lead many of these transformation efforts, not only in Medicaid, but in the commercial world and the Medicare Advantage world, too. Maybe we could start with your introduction to where we are, where we're headed, what you see as some of the key issues in this big transformation effort with underlying payment reform in the state.

>> RAJKUMAR: Thank you, Mark. Especially happy to be here today and see so many of our partners in the audience -- do I have to do something? Okay. Especially happy to be here today and see so many of our partners in the audience, and Brian up here on this panel.

I thought I might just start by a description of what's at stake. You can come at this from a number of perspectives. But let's start with the level of our national finances. We spend

about 18% of GDP on health care. That share is growing, despite our very best efforts to control it. And what that means is that no matter your political orientation, over a generation, there will not be enough money left to do whatever you think our other national priorities should be. That could be addressing climate change. It could be building roads. It could be educating our children. It could be defending our country. So we are in the midst of a profound national crisis that continues. I see a sprinkling of Blue Cross people in the audience. You can look at this from the perspective of our company. If we don't control the rate of growth of health care costs, we can all just go home. Nothing else matters.

The third and most important is, as North Carolinians or as Americans, for our members that hold a Blue Cross card, so these are people that are insured, we believe that 25% of them spend more than 10% of their income on health care. That is their premium plus their out-of-pocket cost as a share of their income. That means that over time, we need to control the rate of health care cost growth to less than wage growth. That has not happened in my lifetime. I believe that we have a fighting shot at that in North Carolina. And I believe that the year that we can get those lines to cross is 2022. And I'll tell you why. And we need to sustain that for one generation in order to make a dent in this problem. Now, it will help if wage growth cooperates with that statement. So best case scenario, we see 3% wage growth, or 3% GDP growth. That's optimistic. If we can beat that by 1 percentage point in health care cost growth and sustain that for a generation, we can make a dent in affordability. Of all of the things that we have learned about in health care cost growth and the science that we have developed -- so we've built an evidence base -- the most powerful tool we have is shaping the path for providers and changing the incentive architecture that they face. And we've done this at incredible cost. So, I personally spent, with a team of 400 people, and Mandy Cohen, who is in the audience, $10 billion of your money to figure out how to do this. And it took us seven years to learn about five things. And those things are that it can make a difference if you have a primary care physician that is accountable for total cost of care and quality, if that physician or system is an up-and-down risk. So it matters to be in downside risk. It matters to control the rate of unit price growth. And it matters that there is a lane for independent primary care physicians. I see Annette DuBard in the audience from Aledade. We don't want to promote further consolidation in the health care industry, but there's a lane that enables primary care physicians that are independent to remain independent.

So, we at Blue Cross have pretty ambitious goals. And the goals are that by the end of the year 2023, 100% of our members will have a provider that's accountable for total cost of care and quality. We think we can get halfway there by next year. We are at 48.4% right now. I just

checked the numbers this week. It depends, of course, on what you include as a denominator. So there's some -- there's a string of footnotes attached to that number. But let's assume that we get to 50% by next year. In order to do that, we have had to play at three levels of the health care delivery system. So there are systems. There are ten systems in North Carolina that have revenues over a billion dollars. Seven of them are in this program which we call Blue Premier. We announced the two largest last week, which are Atrium and Novant. There are three that are outstanding. Those are Mission, New Hanover, and Vidant. But seven of the ten largest are in the program. The second layer is independent primary care. So, for primary care physicians that are independent, we have a deep partnership with Aledade. We have given them our contract. We hope that they will staple it to the application of the Medicare Shared Saving Program and go out and recruit independent primary care physicians. With a program that has slightly different features. So there's risk in it; but the risk is asymmetric, because an independent doc doesn't have the balance sheet to take a symmetric two-sided risk. So it's right-sized risk for independent primary care physicians. And empowered with the arsenal of tools that Aledade brings to the table. And the third layer is for advanced primary care practitioners. There are unique practices around the country that you may have heard of, like Iora Health, CareMore, Cityblock, that we have partnered with, that we have recruited to North Carolina, that have a completely different way of delivering primary care. They operate at radically reduced panel sizes. They do things that are unrecognizable to most Americans like, you're a newly diagnosed diabetic, your Iora health team will take you on a tour of the grocery store. CareMore docs are famous for clipping their patients' toenails in their health hubs. Will send a physician to the patient's home if the patient can't get into the office. And they finance these models of care by taking enormous amounts of risk and winning under those risk contracts. And so we have a third lane for advanced primary care physicians' practices that are willing to take on the incredible amounts of risk.

Our goal is to do this in deep partnership with providers. We have a long way to go to be a better partner to the providers that we serve. Brian, you can speak to this, but I just want to –

>> KLAUSNER: That's fine. I'm not –

[Laughter]

>> RAJKUMAR: That's okay. The last thing I'll say is that to be a good partner means to be in a long-term partnership. So the contracts are long-term. That we commit to sharing data with providers. That we have a rational and simple approach to quality measurement. We have a long way to go on that, but that's our commitment over time. And that we walk in

this journey with the providers that we are partnering with. And the very last thing I will say is that getting this far has been the hardest thing I have done in my professional life, but it is nothing compared with actually changing the way in which we deliver care. So if I think of the jobs that people like Brian have, Matt Ewend at UNC, Tom Owens at Duke, they're clinical leaders. They are now in these contracts. We've thrown our hats over the fence together. And that work is incredibly difficult. And our job as the payer is to walk with them in that journey. Let me pause there and I'll turn it back over to you.

>> McCLELLAN: Thanks very much, Rahul.

>> McCLELLAN: I would like to turn to that provider side. Brian, Rahul talked about the transformations happening on the payment side. Again, it's not just Blue Cross, although Blue Cross is leading a lot of these efforts. Many other payers in the state, including efforts who align with Medicare as well. This is creating some expectations around transformation on the provider side, too. We're not just talking about adding a few capabilities. There's a lot of new expectations and capabilities to go along with it. And really nothing short of culture change on the part of the way health care providers think about their role and their responsibilities, and how they work with their patients as people and the community. Your group has been a leader in these efforts. Would very much like to hear about how that's going and what you see as some of the big achievements so far; but also the big challenges ahead.

>> KLAUSNER: Sure. Just to be -- I think I confuse a lot of people because I have a couple of jobs. Which my wife never gives me grief about, but -- first one is -- and I think all these kind of allow me to have a boots-on-the-ground type perspective. So, first, I'm a clinician still. I've worked hard to maintain 40% clinical time. Work in a downtown clinic in Raleigh, primary care clinic; but also that serves as a safety net for our Hot Spotter program, which I'll talk about in a second. Usually homeless patients with severe social determinants will end up in my clinic. My primary care background is really around homeless medicine. I came down from Boston. People always give me slack (sic) because it takes me about less than a minute to mention that I came from Boston Health Care for the Homeless. But that's where I started. We were really doing population health before everyone knew what population health was with a patient population whose mortality is in the mid to high 40s. With that background, came down here. Chief Medical Officer of WKCC. So that's been a really fascinating job. I've been CMO since 2014. But how we -- we have over 400 docs. It's a combination between WakeMed, the hospital system, and a group of what we call fiercely -- not just independent docs, fiercely independent docs. And how we kind of have worked and navigated what is kind of an oftentimes messy, complicated, and even a slow path toward value-based care, which is getting accelerated here in North Carolina. One of our challenges, honestly, is when you look

at outcomes in terms of cost and quality, we're 100% with quality in Medicare. We're top 10% in over half of our commercial quality measures. And high patient satisfaction. It presents a challenge. I'm not just saying all that stuff to brag, although I am a little bit. But I'm saying that to say it's a challenge to how you engage and how you continue to improve and how you kind of deal with what we see as record burnout rates from a primary care and from a physician perspective. So, how you navigate providers through this evolving world, away from fee-for-service where mainly they're still dealing as fee-for-service as you kind of referenced, toward this evolving world of value-based care. An example of that is, even though if you look at our costs, which a lot of times are thousands per beneficiary lower than a lot of ACOs around the country, but from a Medicare perspective, we haven't got any shared savings from Medicare. And we see a lot of these ACOs -- I won't pick on Texas or Florida -- but you see a lot of ACOs with high benchmarks who profited on the way up who are now profiting on the way down, whose benchmarks are still thousands above ours who are actually getting shared savings. Because one of the issues with shared savings is you're judged against yourself. So, you know, one of the historic evils around that is that it does penalize people who are high performers to begin with. And so it's been a challenge. But definitely facilitated by payers who get it and payers who recognize this, and kind of a collaboration -- which we'll probably talk with at a panel perspective. So much more collaboration between payers, between providers, talking through these issues as we try to align goals around patient care.

And then the third and final position is, I manage our community population health. And if there is any silver lining of lack of Medicaid expansion, which there's not, there's none at all; but what it's done, honestly, in North Carolina, it's forced us to realize, as we keep talking about moving to risk and how we do that -- I think a lot of the hospital systems in North Carolina have looked up and realized what we have always realized, but realized, wow, we're fully at risk for our uninsured patients. And that makes you -- we've always known about that. But as we evolve toward value-based care, I think we've been able to put it better in the context and the language of value-based care that we're all talking now. And we look and we start doing different things. And it's very -- it's very, very simple. It really is. I mean, it's this intuitive idea that has conveniently, or even strategically, has been ignored in a fee-for-service world. The fact that that has happened has literally almost bankrupted our country. But the secret is healthy patients cost less than sick patients. So, you know what? We should probably work to keep patients healthy, and they won't cost a lot and they'll be happy. It's amazing how intuitive that is. So when you're in a fully at-risk model, it forces that on you and it forces you to get out of your silos, get out of the medical hospitals and the clinics, and you get into the community around you where pathologies live and disease lives and cost lives. And 80% of all health care costs are in the communities, are outside of our silos. So how do we address social determinants? How do we address mental illness? That's

been a fascinating explosion of collaboration across health care systems. I'm biased, but I think the collaborations -- we all have competition -- but between the three systems here of Duke and UNC and WakeMed, we're all meeting and we're talking, and we're having groups about how we manage these patients, and collaborations with the community, with the community-based organizations and with governments and local governments. So it's really kind of accelerated, I think, our perspective on value-based care when you look up and you realize, wow, we are fully at risk. And hopefully, one day we won't. When I say we're doing these things, it's for a very small percentage, but it's a start. Those are the ones that are hemorrhaging money and hemorrhaging bad outcomes. All of that are avoidable if we're able to engage. So we've been able to prove the intuitive.

To Karen's point, we're really, really busy. There's patients literally dying all around us. There's a lot to have the time to publish that and look at that. We're just going full sprint just to save the next ten patients that are popping up on our dashboards. But internally, and I think across the community, we've been able to prove the intuitive that if you do get outside of the silos and you actually manage health, a lot of the things that are theoretic in other realms have been very practical. And we've seen it play out for our hospital.

>> McCLELLAN: Great. Thanks very much, Brian. If you look at your program, you see also listed was Alice Pollard, who is the Director of Health Access for North Carolina Community Health Center Association. She is very sorry she can't join us this morning because of a late emergency that arose. What Alice is doing -- just picking up on Brian's comments -- is, through the community health centers, has had to take a lot of steps in the presence of a high rate of uninsured patients, working with hospitals who do have, especially in the absence of coverage, some strong financial and economic reasons to try to find ways to keep some of these individuals healthier, to find effective models for doing that. One of the things that Alice wanted to emphasize for this panel was the importance of really directly engaging people. So, getting consumers on the boards of health care organizations that are trying to become more focused on what really matters to patients. And finding ways to track what -- whether the concerns that are most important to these individuals really are being addressed. And, Brian, I think it's very complementary to what you and Rahul were talking about where there is this kind of new alignment that comes with limited resources, and trying to focus the resources on people and accountability for outcomes that supported all of that. Maybe we can come back to some of those issues in the discussion.

>> McCLELLAN: Hemi, I'd like to go to you. You've seen a lot of reforms in states around the country, many of which have been going on for a lot longer than the ones we're talking about here in North Carolina. And I'm sure in other states, just as here, things don't go forward in a

completely linear fashion without bumps like not having a budget agreement in place and things like that. I would really appreciate your thoughts on reflecting on how we're doing in progress and how North Carolina might fit into a broader national set of experiences in these reform efforts.

>> TEWARSON: Well, first of all, I'm really happy to be here. And I'm very impressed, spending the last two days listening to all of you and what you're really trying to achieve here in North Carolina. It's an ambitious plan. It's a plan, as Karen said, we are watching, us along with lots of different states across the country. One thing just to say just to preface my remarks. In the National Governor's Association, we have to focus on what the Governors care about. It's our mission. This is what we do. And I sit in the Center for Best Practices. And what our job is is to figure out what is the innovations going on across the country. Whether it be in the private industry. Whether it be another state taking the lead. And how do we bring those learnings to other states. So we, of course, are watching this unfold in North Carolina with rapt interest and really are supportive of what you're trying to do here.

I was reflecting on what I could share with you because I could talk a long time about what's happening and what we've seen. But just to give you a snapshot. One of the things I love about my job is going into each of the different states and seeing the distinctions between how they're operating, both in their market, what their economic drivers are, what their populations need. And just to give you a sense, in the last three weeks, I was in Kansas, Pennsylvania, and Wisconsin. So now I'm here in North Carolina. And they are all different. And there's things to think about amongst those differences, but there's also some common themes. So what I thought would be most helpful is just to give you a snapshot of what we've seen. We're constantly being asked by different states, who has solved this? Who has figured out multi-payer alignment? And how have they solved social determinants of health? Because we know that's driving up the health care costs. Who has done it well? Where can we get the evidence? And what can we do in our state to make that happen? Because really, at the gubernatorial level, when you see something that's worked, you want to borrow. There's no need to create something new. You want to learn from it and say, oh, that worked over there, we're going to try it over here. But, unfortunately, we're early in this journey. Right? Even though there's been states trying a lot of different things. And North Carolina is now the latest on the list. We don't know yet what is exactly working. So what I thought would be helpful would be to share kind of what we've seen just at a very high level and we can get into the discussion of kind of where we go from there.

A couple things we've seen. Historically, the Governors have been focused on Medicaid. Medicaid has been the big budget driver. 30%, on average, of state and federal cost of their

budget. They actually have to balance their budget, as we talked about yesterday. They can't print money. So they have -- a lot of the innovation from years past has been focused on the Medicaid program. How do we ensure it's an efficient program? Oregon, of course, was kind of out front thinking about how do we cap the cost of our program. I think I would say the past two to three years at the gubernatorial level, we've seen a renewed interest in what about these other markets? Even though we don't control the commercial market, we're hearing from people in our state that health care costs are too high. And there's a lot of reasons that's happening. There's different types of commercial health insurance plans where people have higher deductibles and they have higher copays. And they're feeling it. And then, of course, they're coming and telling their leader of their state, hey, you know, we can't afford health care, you need to help us. And so there's a renewed interest, at least from where I sit, on looking kind of across payers. Which I think is an important shift because really if we're going to solve this, we have to look across our markets. It can't just be in Medicaid. It can't just be in commercial. It can't just be in Medicare. So what I've seen is this renewed interest of how do we align. That's also coming from the providers. The providers are experiencing -- and I know you're having this in North Carolina -- all these different arrangements. Right? Like Medicare is over here doing what it's been doing. And it's some great work. Some of the commercial payers are trying different things. And, of course, there's Medicaid over here. Really hard to manage that. We've been in stakeholder groups in different states trying to talk about this and thinking about alignment. And that has been a continued challenge. How do we really figure out a uniform way? And right now, there's not a clear path to that. But there are a couple of states -- and I just want to share those with you -- where they've tried to do a little bit of this. So we have the Tennessee's and Ohio's and Arkansas's of the world who thought, you know what, we're going to do episodes of care. It's a discrete way of thinking about how we can do multi-payer alignment. Tennessee got their commercials to come in. They couldn't quite get Medicare to agree with what they wanted to do, but they got Medicaid and they got commercial. And that's because they had a really strong managed care system historically in place that they've rebuilt since 2008 where they could basically tell the commercials plans, well, you're going to play in my Medicaid market, you've got to do the same thing on your commercial side. And they combine that with focusing on primary care, medical home, as a sort of comprehensive look at what to do. I would say Massachusetts has had -- and I'm from Massachusetts, too, so, great state --

>> KLAUSNER: There you go. Took you two minutes –

>> TWEARSON: I know. Took me longer to say that, yeah. Born and raised, yeah. So in that state they said, okay, a big investment, we're going to have health care cost commission, we're going to have benchmarks across all of our programs, because we know we cost a lot.

We have a really good system, but it costs a lot of money to get health care in Massachusetts. So they had their state legislation in place. They are fortunate to have a lot of investment to build that system, which other states don't have. But there's a lot of learnings from that. What did they build in terms of building benchmarks across all of those programs? Has it improved outcomes? You'll see Rhode Island and Delaware, two smaller states, are following that suit, learning from Massachusetts and building that. Oregon, who I talked about earlier, who had a cap on their Medicaid program, has now got legislation to apply to commercial and they're looking to that model as well. So that's another thing to kind of follow. I think there will be a couple other states that follow on that as well. And then I just wanted to mention Washington State and then I'll stop talking. It's something I think that would be interesting for you all to look at. I know the state has been looking at that. We helped them with their waiver back in 2016, so they're a couple years into it. They had a mature managed-care system on which to build. And they had a big, ambitious waiver they got approved by from CMS where they said, okay, we're going to push to value-based payment. They're organized where they have authority that's over their public employees and their Medicaid folks and teachers all together. And they said we're going to go, in five years, to get to value-based purchasing, 90% of our state-financed health care and 50% of our commercial market. And our health care cost growth is going to be lower than national average. And we are going to implement BBP across all these programs using the same philosophy. They got big investments to actually build what's called accountable communities of health where they had nine regions where they said, okay, these community organizations where we have all the different partners in the communities, figure out what that region needs and then we will invest in infrastructure and programs that serve those needs. Which I think, as we've been talking about for the last two days, really important component, building in the local need into whatever reforms that you're going to push out at the state level. Really, really important. Because it matters and it's going to make a difference. So they're a couple years into their journey. They exceeded their targets. They did an incremental increase on the value-based purchasing. They've exceeded their targets on that. I think they're still trying to figure out what the outcomes are. Part of their piece of the labor was to also invest in social determinants of health. They chose supportive housing and supportive employment, and the Medicaid program, to invest in those two pieces. So I just kind of throw that out there as things for all of us to care about. I could go on and on, but I'll stop for now and then we can talk more.

>> McCLELLAN: I'd like to follow up on a few of the topics that you all brought up. And maybe starting with cost growth. Obviously, that's right front and center on the mind of Americans heading into an election year. As Rahul very eloquently said, we haven't solved this problem. I'd say even despite a lot of efforts, Hemi, many of which you reviewed, the impact so far of these value-based care and payment reforms on costs has been pretty limited. And back here,

getting us back to North Carolina, just listening to Rahul and Brian, there's several things happening at once. One is, some big, bold efforts to try to really improve population health in ways that we haven't even tried to undertake at this kind of scale before. Second is, we're doing that in a way that we'd like to get cost down, as Rahul emphasized. And third, as Brian said, because the health care costs -- we're not Massachusetts, we're not number one in the U.S. -- I guess they've moved to number two behind Alaska, so that is progress with Massachusetts' value-based care reform. North Carolina started out further down. People are still hurting here, as Rahul emphasized. So that seems really tough, both getting the costs out and taking on all these new steps to improve health at the same time. You can't do everything at once. Would appreciate any reflections from you all about what you see as the biggest feasible focus for getting costs out of the system in a reasonable time period as we're doing all of this. I get the point about investing in health and helping improve long-term outcomes for, say, people who otherwise might go on to develop diabetes or other chronic conditions. But that's not going to help with premiums next year. At least not in a big way. So what is the attention you're paying to really get at these cost issues in the short-term?

>> KLAUSNER: These microphones are so complicated.

[Laughter]

I think, for us -- and I'm biased because we started and developed a Hot Spotter model. But when you look at population health, and it's overwhelming, you look, okay, we have a panel of 65,000 uninsured. Where are we going to get started with population? It's overwhelming. So you look at those stats of -- so you start with that 1%. You look at the 1% that are driving 25, 30% of your costs. Not only because that's where the low-happening fruit is; but that's also where you can kind of develop and mature population health skills. So when we looked at our analysis, and it's the same almost in every single patient population. You're going to have a large percentage of costs due to very small minority of patients. Some of those are catastrophic, comas and car accidents, and things that aren't impactable. But there's a lot, especially in the uninsured Medicaid population, where it goes right to social determinants. For us, as we look at these, to be honest, both from an ACO perspective and from an uninsured perspective, it's helpful to start with that. Because one of the ideas, I think, that we really push, especially in the Hot Spotter models that we run, is avoidable expense -- and people in the room have heard me say this before -- but there's a lot of avoidable expensive human suffering that we can get at. If that's -- as we all kind of start the transition, you develop those skills and you can then start applying it to your top 5%, top 10%. I think from a boots-on-the-ground perspective, that's a tangible way to start. When I go to my -- the ACO providers, and they have panels of three or 4,000. That's a lot of patients. But let's look at

your highest risk, highest cost patients. Let's look at your top three ED utilizers. And it goes to a lot of the CareMore models and the very, like, the small panels, intensive care, kind of a concierge type model for population health. But that's where we've focused a lot of our efforts to begin with.

>> RAJKUMAR: First of all, I want to say, it's hard to think of a provider organization that's been more courageous than WKCC. And Brian as a leader of that organization, I have tremendous respect for you. Let me say what you may be uncomfortable saying. WKCC is one of the first Medicare ACOs, took risk, was in NextGen, ACO model. So really a leading ACO in the United States. And certainly in North Carolina.

So we as a payer think that there are a few tactical areas within health care where we can make deeper investments. One of them is in primary care. So increasing the relative payments to primary care. We spend about 7% of our total book on primary care right now. We think that number could be 10% or higher. So just trying to move the needle for primary care. Our risk model and most of the risk models that exist that are effective treat the primary care physician as a quarterback. And that quarterback needs to be well-resourced in order to better direct care for the patients that we're giving them.

The other is behavioral health, which is an area where we as a nation have dramatically under-invested. As a result, we now have an access problem that we're all waking up to. And suddenly find that when you call a behavioral health care provider, they may not answer the phone because half of them are in cash practices. We need to invest more in behavioral health. Our approach to doing this is through an alternative payment model for behavioral health care providers where, similar to primary care physicians, if they can help us reduce total spend, they will get a cut of those savings. But we think that this is a major area for investment where we can reduce the total health spend by making a tactical investment.

And the third is drivers of health, social determinants of health, which you just had a speaker on, so I don't need to comment more on it. But I agree with Dr. Cohen, Dr. DeSalvo, on developing that evidence base for the drivers of health.

The last thing I would say is -- just to pick up on something that you said, Brian. With providers like you, I often feel like we have to deliver a finely-tuned message that we respect everything that you have done, but I still think that every provider still has room to improve. So that is the challenge of comparing you to a provider, say, in McAllen, Texas, that improvement for you, I recognize, is harder. But still important.

>> KLAUSNER: And let me address that. Because that's actually a strategy for our ACO is we absolutely will say, guys, not everybody is great at everything. So our strategy, really, our main strategy, is getting our providers their individual data and saying, go, look for your area for opportunity. We mandate PDSA cycles. And we think that we haven't even really scratched the surface. So, yes, we're doing better than others; but, to your point, there's absolutely room to go. And the strategy is through analytics, getting the data, getting the analytics, saying where's your area of opportunity, address that in a quality improvement cycle.

And one quick point to Rahul's point. Just practically, how this actually works in the state, where we -- one of our messages to primary care is this is happening with or without us, might as well be with us. This is going to be your career moving forward, we're moving toward value, accept it and let's go and let's try to take the lead. So we have pod meetings. We have, every quarter, we have all our 450 docs come and we'll talk about what's important, where our strategies are, and what we need to focus on, what are the tools and what are the resources. We meet with Blue Cross every quarter. We talk about, okay, this is what -- we were at the pods, and their teams will come back and say, okay, this is what we're going to do. The behavioral health was a perfect example. So we had Blue Cross come to our pod meetings last spring and talk about the behavioral health initiative, which is really, if you look at it, you could do a whole hour on that. Very innovative. It's trying to lower medical costs by better addressing behavioral health costs, because we saw in our analysis that our medical cost was double in patients with mental illness. Not the mental health cost. The medical cost was double. And we weren't adequately screening that, addressing that. So we go to Kate Hobbs Knutson, and we say, "Hey, this is the data we had." And she said, "Well, we were going to come to you. That's the data we had, too, across our population." And this roll-out that probably wouldn't happen, you know, five, six years ago in terms of provider engagement. And it's been incredible. Because providers are finally saying: "You know what? I can better manage my patients. I always knew that patient had severe depression that wasn't addressed." We got to predict the modeling. We were able to sit down. We were able to take the time. I realize that this is going to cut their cost in half, likely, if we better address this. And it's resonating into recognition of impactability and actually application at the clinic level. But that's a sore thing when you're in a state where you know you're moving toward value. The collaboration, I think, is unique in North Carolina between providers, between insurance companies and hospitals, because we know we're all going the same way. We know we're doing it for the right reasons. Right? So it's been just kind of a practical example of how this actually works from a clinician, day-to-day clinician, getting these tools and resources to them because that's where population health lives, at the individual provider and patient level.

>> McCLELLAN: I do want to come back to the effective strategies for new kinds of collaborations. That seems so important in all of this work. But first, Hemi, I was disappointed to hear there's not some secret NGA manual somewhere on how states can reduce costs and improve outcomes at the same time. But any tips to add on this issue around how you get the cost savings?

>> TEWARSON: Yeah. And I just wanted to reflect. The past five years, we've invested in complex care populations. Working with, I think it was about 12 states. Figuring out who are the high-cost, tiny populations, and how do we build a system to actually address that? And I love that you brought up behavioral health because our last project was about behavioral health. And North Carolina participated in it. It was actually highlighting the work that Arizona did. They have done -- they have a very mature managed-care system. And I think it's really important to have a strong managed-care system. In the way they actually rolled out their project. That's something that North Carolina is going to work towards. But the way they did it was they built a very strong stakeholder engagement process, but they also figured out the financing. And I always feel like that is the trickiest part of all of this. They figured out how to blend, not just Medicaid dollars, but also the block grant dollars, and other funding that these providers are getting because many of behavioral health providers may not bill Medicaid. They're used to block grants. So they have built a system where they're bringing people along. And we modeled them for other states because of their, I think, incremental success in doing that. And a couple things I just wanted to share with you is, they have identified who are the complex care, you know, the highest need patients where we can really focus the interventions. And they had a pool of money to then allow payments for Medicaid providers who actually met certain benchmarks for integrating behavioral health, to help them come along and build up their infrastructure systems and then actually support them in the actual implementation. And I think that was a really helpful piece to bring providers along the way. Those behavioral health providers specifically.

The other thing I just wanted to mention, which I haven't heard about yet on this conversation is justice-involved populations. That's another piece that they really have taken on. I think it's really interesting. I just share that for you all for your consideration. Through this pool that they have, they established 13 co-located with probation and parole integrated health clinics statewide. To serve probationers and parolees. And they're providing on-site MAT, physical/behavioral health services, employment support, support for food insecurity, housing, and forensic peer and family support. And they're doing that because they're realizing that people are circulating in and out. Right? Maybe they get MAT while they're in the corrections setting, and they come out and they're not connected with the right services. And guess what happens? They cost the system a lot because they go back in. So I just share

that for you all as you're on your journey here because we see a lot of promise in what Arizona is doing. And I also can't emphasize more that really figuring out the financing and how you incrementally bring these providers along is so important.

>> KLAUSNER: I think my microphone is actually broken. I'm going to steal yours and just jump on one comment. Because that is -- and you develop these things out of necessity when you really look at the analytics. What you're attesting to is what we've seen from the uninsured perspective. And one thing that I think we're missing from a social determinant perspective, and it's a big one, is the bidirectional nature of social determinants. Right? That our hospitals are full of patients with unmet social services -- with unmet social needs. But our social services are full of people with unmet medical and mental health needs. Right? So when you look at -- and we started doing this, to Sech [phonetic] Hutchinson's credit, here in the front row -- we developed a Wake County Population Health Task Force that had the jails there, the schools there, all three hospital systems, DHHS, Wake County Health Department, and we talked about how do we -- with what we learned in our medical silos of population health is data drives everything. Right? We can say all of this intuitive stuff like, oh, we need to better treat mental illness. When you go back and say we need to treat mental illness because it's doubling our medical costs. You've got to slap people in the face with analytics and then continue to emphasize how important it is and we just can't ignore it. So we're looking at developing whole-person analytics. So not only getting all this medical information, not only getting the utilization data from Duke and UNC and WakeMed; but getting jail data, and getting EMS data, and getting homeless data. And coming up and saying, okay, the total societal cost of this patient, if we don't do something, is going to be $350,000, $450,000. If we do an intervention like housing -- and they've done this in some cities, including Los Angeles and in the Silicon Valley --

>> RAJKUMAR: And Washington.

>> KLAUSNER: Yeah. And that is -- you know what? It's going to drop cost. The FIT program. The prison re-entry system. That's exactly. So right now we have a committee that I co-chair with Lorrin Freeman, who is our District Attorney at Wake County. And she is interested because of exactly what you're saying. We had an example last year where we had three people come out of jail without their Medicaid reinstated and completely detached. And two recommitted and one was in our hospital within a week. And it was absolutely, 100%, inevitable because these were patients with severe mental illness that were discharged without follow-up or medication. And it's like, what are we doing? Not only from a humanistic perspective, but from a cost perspective. Like, what are we -- so, I think, to do everything you're doing, but to -- analytics is so important behind all of this. Not only hospital, but

community-based analytics. Because, hopefully, that's going to drive, not only the social determinant, but the bidirectional nature of it, which will then get communities involved, and local governments, and jail systems, and police forces, and the homeless services.

>> TEWARSON: Amen to the data.

>> McCLELLAN: Yeah. Just on -- and we talked a bit about that, had a great panel discussion on that yesterday. Just would emphasize from what I've seen here that seems quite distinctive, and fits with some of Hemi's comments, too, is that there is critical attention to finding the most important data elements. Not necessarily getting everything, but bringing in important information that can enable timely decisions for patients and for improving health and avoiding costs, whether it's in the incarceration setting or otherwise. But to make that possible, there is this kind of collaboration, new kinds of collaboration, that reflects a level of trust and a level of shared engagement with the financing behind it to start that's making a big difference, too. There's a lot more we could talk about on this. I would like to open this up to questions from -- and comments from those of you who are here. There are a few more things I'd like to discuss, but I'll try to work them in to comments from all of you. I know there are a lot of people here who have been deeply involved in these efforts and have a lot to contribute to how we can make payment reform work successfully to achieve all the goals we've talked about. Who wants to start? Pam? And let us know who you are, even though I know who you are, but –

[Laughter]

>> SILBERMAN: Okay. I'm Pam Silberman. I'd be curious, actually, for Rahul, and maybe for Brian as well. The research literature talks about the fact that safety net organizations generally don't do as well in value-based payments. And when you move to payment reform, that is based on quality. And there's always a concern out there that organizations may try to drop their riskiest patients as we move to value-based payment arrangements. So what is Blue Cross/Blue Shield doing to ensure that we don't have systems that include cherry-picking? Or a new term I just heard, lemon-dropping? For the riskiest patients.

>> McCLELLAN: I just would say, great topic, Pam. It's not just a Blue Cross issue. This is a system-wide issue as we're trying to move in North Carolina to aligned payment reform to make sure those aren't building in kind of a systematic worsening of health disparities. How do we really make sure these steps are addressing health disparities at the same time as they're improving quality and lowering costs?

>> RAJKUMAR: Yeah. I really appreciate the question. Let me just say that the literature on the interaction between income and different models of payment, and whether pay-for-performance, ACOs, bundled payments, advantage or disadvantage safety net institutions I think is emerging, complicated, and also controversial. And there's an explosion of complexity in that question that -- I'm not the world's expert on this. But I just want to acknowledge that it's not a -- there's not a simple statement that I could make on that literature.

A lot of the literature comes from the CMS Hospital Readmissions Reduction Program, which basically looks at performance at arrays of hospitals nationally, into quartiles, on their performance. Our programs don't do that. A health system or a provider, as Brian said -- and Brian may prefer to be compared to his peers -- but our program compares you against your own historical performance. So historically, if you had a high number of extremely sick, low-income members, that's what you're compared against. It rewards you for your quality of care, for your baseline efficiency; and also for changes in risk. So that risk has to be captured in diagnosis codes. But if the risk of your population is changing, if it's getting worse, we give you a kicker in how we trend the benchmark forward. So it's built into the math of the program. Of course, every provider that we talk to will pick it apart and make the assertion, rightly or wrongly, that they're advantaged or disadvantaged. But it's a great question. It is not our intent to disadvantage any type of provider. It's to treat everybody fairly.

>> McCLELLAN: Brian looks like he has something he wants to say, too.

>> KLAUSNER: Yeah. I think it's a scary question because I think you might be identifying the fatal flaw of value-based care. You really might. And there's some studies and some evidence to suggest that this push toward value-based care is worsening health care discrepancies because when you look -- and you guys have probably heard this a lot throughout the conference. 80% of health outcomes and costs are related to social determinants. Yet, are we -- is the individual provider, does that even get taken into account with the risk scores that we're held accountable for. And I had a perfect analogy, or a perfect example. Three years ago, I was in my clinic and I had a -- two patients, both with diabetes and CHF. One was a local CEO and one was a homeless patient. And we went through -- the CEO came in with his wife. He had a trainer. His outcomes were great. His A1C looked great. I get credit. I look good. All his care gaps were up to date. And within 12 minutes, he was out, we were giving high-fives, this is awesome. And we bill a 99213 and we're set. Homeless guy comes in, and we're 45 minutes in, I'm still going through his bag of medications trying to figure out how we're going to give him insulin. Still the same fee-for-service reimbursement code, although I did 99214. But his A1C was 11, and I was doing back flips because it was 14 and that truly backs him way

off the cliff a little bit. But, I think the issue is is that we, while we recognize the social determinants, we're held accountable for cost, not pure costs, risk-adjusted cost. When you look at it, we're not taking into account the social determinants that truly drive the outcomes. But, I think it does point to the work that Mandy is doing. We can't give credit if we don't know, it's not in our systems, we haven't screened for it. We don't know how much food insecurities will add to the risk because we've never screened for it. It's not something we can capture in our data. These risk scores are all extracted out of claims. Some are starting to go into kind of census tracking and zip codes; but even that is an imperfect science. So the first step, really, and this is why we have to move on this, I think, or else if we don't, this could all fall apart if all the sudden we start cherry-picking away from new patients. Or more to I think what Rahul is saying, being judged against our baseline, I think that's really helpful. I think that gets it. But how that incorporates new patients or -- so the first step is to screen, study, analyze, and then build it into risk codes and do it in an expedited manner because, if not, we could all, two or three years from now -- and I always say, are we going to repeat the biggest sin of our fee-for-service past right from the get-go? Right as we go into value-based care, are we going to once again create a system that discriminates against people based on socioeconomic lines? And there's some evidence that's happening. And that's really scary. I think we all have to be conscious of that. When I talk about it to people -- I just want to share -- it's pretty frustrating because I don't think any of us have an answer besides we've got to get moving on how we track and screen and identify and get credit for the social determinants that we're taking care of.

>> McCLELLAN: Yeah. I'd say that's why -- just a few more comments on this topic. I know I'm the moderator, but we think about this a lot in the reform efforts here and elsewhere. First of all, remember, this is not about fee-for-service. So, unlike the hospital, you know, incentives around a DRG payment where there are things that you might do in terms of fundamentally reforming your care but you really aren't shifting the resources to enable that to happen. It becomes easier to do things like drop the patient, change an admission to an emergency department visit, shift the patients away. This is about more fundamental changes in care, not just billing the 99213s, but getting to, like you were saying, a whole different model for taking care of the guy who's not the CEO.

On top of that, the data is really important. And here in the state, there's been a huge emphasis first, as you just heard from this panel, on getting key social drivers, social determinant information included. And that is a foundation for risk adjustment, for further steps, and certainly for monitoring more effectively where there's a problem. I just want to come back, too, to the importance of culture and engagement here. This is a point I think Alice was going to try to emphasize, that if these steps are undertaken with just an attention to

payment models and traditional measures, we're going to miss. Instead, by having community-based approaches, which people like John Lumpkin and others talked about yesterday, having an opportunity for really putting the culture, Brian, that you're trying to develop front and center and in collaboration with the payers. Doesn't mean we will solve these problems, but it does mean that as we move away from fee-for-service, there's much more attention of really keeping the eye on the ball of what we're trying to accomplish and what kind of new culture in care and health that we're trying to build.

Yes. Or whoever is next.

>> UNIDENTIFIED SPEAKER: I'd like to switch this to some action steps for the future of this collaboration. You've touched on a number of things related to this whole issue of the population, Brian, and the task force that y'all have developed. I think horizontally, we need these types of models even though there's not much research attached to them, to get out across the state. And particularly in our rural areas. We're not addressing in the state, the total social decline of our rural areas, particularly eastern North Carolina. When you look at I-95 and go east, if we were the 51st state, we would be the poorest in the whole nation. Let's -- Appalachia is doing better than eastern North Carolina is. But we've never -- we've never addressed that. And on the issue of mental health. It's like mental health is the stepchild of health. It's the part that we don't want to deal with. And in North Carolina, what we really lack is programs in dual diagnosis. The substance use people and agencies and systems, still act as if it's an issue of willpower, not brain disorder. And so the costs keep rising for Medicaid and private insurance; but we're not addressing the causes of that rise. And so we're looking at setting up a model diversion program in Robinson County on dual diagnosis to stop the repetitive prison sentences. And then philanthropy could play a really key role in this by looking at some of these models and issue some RFPs. So I think we really need to look horizontally at the creative things that are happening in North Carolina and the nation, and really be more proactive in seeing how we could spread out the creativity that's happening in the state and the nation here in North Carolina.

>> McCLELLAN: That's a great comment. I just want to be mindful of time and bring in blending funds together. We talked a little bit about mental/physical health integration. We haven't talked about rural health and some of the real tough issues, combining access, low income and economic development, and efforts to improve care. I don't know, Rahul, if I can put you on the spot for that. But, you all are doing a lot to try to extend these models to rural and lower income communities.

>> RAJKUMAR: Yeah. I mean -- sorry. Yes. So one of the unique challenges of North Carolina is

that most of our state is rural. Even our largest markets are -- really only have one city that is considered to be a national-sized market. And so a lot of the care models that we are financing were really developed for more densely populated areas. You heard me talk of three tract systems: Independent, primary care, and advanced primary care. The advanced primary care providers all exist right now in densely populated areas. And so we are working with two of them to deploy a slightly different variance of these models in rural areas. It requires just a different way of thinking, of hub and spoke, bricks and mortar. You may have a care center and then have mobile vans that can reach different rural areas within a 100-mile radius. How you size a model for Charlotte is different than how you would size it for Fayetteville or Asheville. So it's one of the great things about being in North Carolina is that we're -- the problems that we are solving here are of applicability to the entire nation. We have every type of region, every type of city, town, village, here in the state.

>> McCLELLAN: It's really diverse. We've got just a few more minutes and I want to try to get in as much questions and comments as possible. On this side, was there -- I know there were some hands up.

>> POPIN: Thank you. My name is Mal Popin. I'm an MPP, second year at Duke. My question is, as we talk about reducing costs while improving outcomes, we should talk about who is defining the outcomes. There is a ton of metrics for providers, for payers. I'd love to hear your perspectives on the role of patient-reported outcomes when we talk about value.

>> KLAUSNER: I think you're right. And I think that that is one of the things from an outcome perspective that can overwhelm a provider. Especially if you're in four different commercial contracts with all the different outcomes. And the quality measures. That's where the strategy really is how do we push through this while not burning out our providers. I think from a patient outcome perspective, again, this isn't a capitated model. It's not all about cost. It's about cost and quality. But it's also about patient satisfaction. So, the triple aim. And so I think that's one of the -- we really are -- there's been a lot of focus on cost and quality. There's a couple of patient satisfaction and patient experience questions in there. But actually, Blue Cross, we just had a meeting -- I'm on the Physician Advisory Group at Blue Cross and -- with Dr. Kee. Had a great meeting on Tuesday about how they're going to further incorporate that, how they're going to structure that. Do we coordinate around getting back that patient experience? Not even advocate not only patient experience, but also can we start tying in about patient empowerment? The lowest hanging fruit in population health, if everybody -- if we were able to convince everyone to exercise and eat right, and a lot of the innovative stuff. Blue Cross has a partnership with the YMCA now. If we have, like, prediabetics, if we can get them into the Diabetes Prevention Program -- and Blue Cross helps to reimburse that. And

we're able to get that patient exercising, dieting, so in 13 years from now we're not paying for a diabetic amputation. That's the long-term, cross-generational. I do think, yes, tying into the patient satisfaction and some patient measures; but also trying to involve that a little bit more from patient empowerment. How do we as providers empower our patients to improve their care?

>> McCLELLAN: Hemi, you look like you wanted to add something on this.

>> TEWARSON: The one thing I want to just chime in on is, I think the quality measures and the uniformity quality measures including the patient perspective is so important. And I just throw out Vermont and Minnesota have done a lot of work on that. Really digging into figuring out -- and it was hard. It took them years. Like what is a common set of measures across all the payers? And I think it's been important in some of the work that they've been doing. So I just share that for you all.

>> McCLELLAN: Yeah. There is a lot of interest in this. As we've been involved with Duke Margolis in aligning, especially on the commercial side, meaningful measures, and making sure across the board that the measures are tied to outcomes that really matter to communities and the people in them. Definitely getting a lot of attention here.

Do we have time for one more or -- one more. Okay. This side maybe.

>> BAKER: Hi. Cedric Baker, Food Pharmacy. I have a quick comment, which could lead to, hopefully, discussion from --

>> McCLELLAN: It's not going to be a long discussion, but --

>> BAKER: It's a quick question. It's a fundamental issue. Dr. DeSalvo mentioned it and it segs into something Dr. Rajkumar said. And that's medical education and the education of health professionals, and potentials for innovation, and how this training can impact social determinants of health. Tulane had this program -- actually, her alma mater -- where they had a teaching kitchen. They had a physician come in and teach medical students. They would go shop and they would make these healthy dishes. And in the analysis, the first analysis, 600 medical students had yielded novel rewards that led to a downstream cascade of various benefits in training for social determinants of health. And that segs into what Dr. Rajkumar said about concierge service of shopping with diabetic patients, with physicians.
And just the last point is our community pharmacists are our most accessible health care professional. They could do nutrient drug interaction screenings of every patient on

medicines. This is very much an under looked at area. Because you have a lot of drugs that cause nutrient deficiencies or toxicities.

>> McCLELLAN: Lots of potential opportunities out there, yeah.

>> RAJKUMAR: And this is one of the things that gives me the greatest hope. If we were to end this panel on a note of hope, that -- I finished my training at Brigham and Women's Hospital in Boston about ten years ago. And when I finished my training, half of my class went off to do cardiology fellowships, half did other specialty fellowships, and I felt like I was walking off a plank because this field, whatever you call it, population health, or leadership, or systems change, wasn't a thing. Now it's a thing. And there are -- there is a cohort in every leading program, every medical school, of bright and committed individuals who are smart, who want to do this work. And that is amazing. And this has happened in less than one generation.

>> McCLELLAN: I'd say the same thing from what we see at Duke. A huge amount of interest. Not only among physicians, but nurses, other allied health professionals, people in law, et cetera. It's changing.

You had a comment, Victor? Okay. Well, thank you all. I want to thank the panel. We could, obviously, go on for a long time, but -- this is where the rubber is meeting the road. You're doing a great job.

[Applause]

>> McGINNIS: Our next panel is moderated by Dr. -- Mr. Benjamin Money, who is the Deputy Secretary -- thank you, Mark. And as we invite up Ben Money, and Ada Amobi, Randi Byrd, Josie Williams, and Michael Zelek, let’s offer them a warm welcome and also a thanks for the last panel.

[Applause]

Ben Money, as I mentioned, is the Deputy Secretary for Health Services at the North Carolina Department of Health and Human Services. And also a member of our planning group. Ben, thank you very much for your contributions. And the floor is yours.

>> MONEY: Can everyone hear me? Okay. Very good. Thank you so much. We had a wonderful day yesterday, as well as today. Our focus is going to be on community engagement and empowerment for better health and well-being. And there were so many

comments that were made yesterday that really align with our discussion today. I want to just kind of go through a few of them just to reframe our thinking from this session.

First one is: Change only happens at the speed of trust. Every system is perfectly designed to get the results it achieves. The choices people make are based on the choices available. Health equity must be addressed to address health disparities. The critical task is to create the conditions where communities can be successful. We need to reduce health care fragmentation and implicit bias. Place cannot be understood in the South without examining race. There is a divide and disinvestment in communities. Structural racism has a way of recreating itself. Zip codes matter more than genetic codes. The building power is in communities. The greatest barriers are between cultures, professional communities, and grassroots communities. Communities are concerned with how it's done for them. Doing this work is uncomfortable, and you need to be ready for this. If it matters, meet weekly. Be professionals with a grassroots perspective. And my first commitment is to transform myself. Be humble. Come in on community's terms and be willing to hear some things that are hard to hear. Systematic exclusion, rather than saying the term "underserved." Be humble, align, and adjust systems. Advocate for change. Don't get trapped in return on investment arguments when other parts of the health system aren't held to the same standard. We have to address staff beliefs about deservedness in receiving charity care. Need to decide do you really want to do this before you proceed. And you have to be uncomfortable with conversations, but be willing to listen. Acknowledge truth and hold yourself accountable. Sometimes, the messenger is more important than the message. Cultural humility versus cultural competence. If you're not part of the culture, you never reach competency. We have a lot of data, but we don't have much insight. The second mouse gets the cheese.

[Laughter]

That one really made me think. That one made me think. And it reminded me of a time where -- and it wasn't long ago, it was a few months ago. I was at my Community Health Center. As many of you know, I was previously the CEO of the Community Health Center Association. And I go and continue to go to a Community Health Center as my primary care provider. That's my medical home. And it's a Community Health Center in southeast Raleigh. Low-income community. Predominantly African-American community. And I like to go to my appointments early because I like to just sort of hang out in the waiting room and have conversations.

[Laughter]

The health center is new. It was built with a facility improvement grant from the federal government. It's bright. It's shiny. It's really a beacon in that community. And I was telling Sig Hutchinson, who had to leave just recently, I was going to bring this up. But, there's a brand new YMCA combination school, public school, that is diagonal to the Community Health Center. And the health center was involved in that. It's something we're very, very proud of. It's a school that has a pool. So one of the things that they've been doing -- you may have read about it if you're in the North Carolina area -- is actually teaching kids in the community how to swim. Right? How to swim. I mean, I'm so excited about this. And I was at the health center at my visit right when that YMCA pool was getting ready to have an open house. So I saw some gentlemen that were sitting with me, and I just struck up a conversation. These guys are about my age. Right? Early 60s. And I said, "What do you think about that Y? Isn't it beautiful? The YMCA school." And they're like, "Well, it's not for us." And I go, "I know. It's the children there. The children are going to have the opportunity to learn how to swim. Did you see the pool there?" "Yeah, but, there was a flea market there. And they took our flea market. And I used to be able to go to the flea market and I could buy used things. Where am I going to buy used things now? I can't go to Walmart and buy used thing. I don't have Internet. I'm not going to go online and shop online for used things. Where am I going to get my used things? I liked that flea market. And nobody asked me how I felt about the flea market. And everybody is all excited about this new school. But, you know what? It's not for us. What's going to happen is, they're building all this stuff, and then as soon as all these things get built up, they're going to gentrify, just like they're doing a few blocks away. They're going to gentrify the community. They're going to push us out. All this new stuff and all these new programs are for somebody else. They're not here for us." And all I could do is sit there with my mouth open and go, "Well, my appointment should be in about five more minutes."

[Laughter]

Sometimes there's kind of an advantage of going incognito and not letting folks know that you're the Director of the Health Center Association and you had a role in this. Huge lesson learned. Huge lesson learned. And so, we've got a panel here of folks that are taking on these huge lessons, and having these difficult conversations. And have a lot to share. And so, first of all what I'd like to do is introduce Dr. Ada Amobi. She is the Physician Lead of Health Equity for the Health Equity Institute at the Rhode Island Department of Health. Also, we have Josie Williams. Josie is the Director of Community Engagement at the Greensboro Housing Coalition. And then at the end of the panel here, we have Michael Zelek. Michael is the Health Promotion and Policy Division Director at the Chatham County Department of Health. Welcome these panelists here to our discussion.

[Applause]

>> MONEY: So I just shared a little bit about a humbling lesson that I learned. And I've been doing this work for over 30 years, and you kind of feel -- a lot of times, you're comfortable. You're grounded in the community. Here I am. I'm present. I'm engaged. I'm participating in the work. And then, you know, every day is another lesson. Right? So, let me just pose this question: How are you engaging the community in the work that you do? But first of all, tell us a bit about the work that you are doing so that we have a better sense of your programming, your challenges in the community that you're serving. Dr. Amobi.

>> AMOBI: I can start. Did I get the broken mic? I can start. I took the liberty of bringing a short video instead of slides just to bring that community voice to actually explain what's happening in the community. And so I'm going to press play and hope it works.
[Video as follows]

>> With Health Equity Zones, the Rhode Island Department of Health, and all across Rhode Island, we believe strongly that everyone deserves the opportunity to live a healthy life, regardless of their zip code. The Health Equity Zones is not just a project, it's really a movement.

[Music]

We know we have social, economic, and environmental conditions that need to be addressed. We know about the disparities. We know about the numbers that exist. Health Equity Zones gives us an opportunity to go from talking about those numbers to putting an infrastructure in place that puts the community's voice front and center and gives us the opportunity to do something about those numbers.

>> Particularly in communities here like Olneyville where we're part of the HEZ, we know that living in poverty is a toxic stressor which can negatively impact brain development. We know that with the [indiscernible] program as part of social, emotional learning, we can teach them healthy coping strategies for success in school and life.

>> The impact is seen daily. We have a walking school bus. If you live less than a mile away .9, .8, you have to walk to school on your own. When you're five, six, seven-years-old, it can be a little scary. The walking school bus ushers them to school safely and brings them home safely.

>> The great thing about Sankofa Market actually is -- especially in West End and the Southside community, there's not a lot of grocery stores that provide these fresh foods. So the goal of the market is to have the chance to provide fresh produce. And we also provide a lot of nutrition to those in the community that may not have access to it.

>> Hi. My name is Aleisha, and I went through the Youth Police Initiative. It was important because I felt like I was more safe in Providence now that I got to understand where the police was coming from and I feel like the police got to understand where we were coming from. Yes, I see them pull children around, and they always wave to me.

>> It's important to have healthy, clean, quality, affordable housing because if people don't have a home to go to, and they don't have a place where they can focus in, they can't thrive. They can't perform at work. They can't perform at school. They can't think about progress because they're too busy surviving.

>> We've addressed the housing by forming Neighbors for Revitalization, bringing community members out to get engaged in their lives, in the course of their lives, and what happens with housing in their neighborhoods.

>> I really appreciate the work of our HEZ groups. I think that, as a mayor, their voice is really helping to instill the fact that there are many concerns that sometimes we don't see, that we might overlook. And one of them is the health. I think that this ordinance will help control the run-off by planting more trees. It will help clean the air. And more importantly, for those who like to exercise, walk the streets, there will be safety for them to do so. The Green and Complete Streets was an exciting initiative for Central Falls. And we were happy to get behind it. The principal message behind this ordinance now is that we're going to look towards the future and make our investments that will help serve all of our residents. So I really have to appreciate everyone who is involved in the HEZ. But more importantly, our community residents who really got involved and spoke out about these matters.

>> It was an amazing process. Ours was unique for Newport because it was community-centered. We had meetings that were informational. We had workshops. And then the draft that we came up with for the ordinance, we presented to the experts in that industry so that we can get fine-tuning and see what things we need to improve on. And now it's with our City Council getting revised.

>> We're creating spaces to let residents come and be able to contribute what they have, their talents, their gifts. Everyone in the community has something to give back. And we

are here to create those spaces in order for them to invest into the community they live in.

>> Just to let us know about how they felt there weren't enough services in mental health. So our group formed a working group, the Substance Abuse Awareness and Prevention Working Group, and we met to discuss the needs. At that time, much of the funding was going to prevention programs in the school district; but they weren't going to address the needs of the adult in our community.

>> In both of the communities where we facilitate the HEZ, the opioid crisis has been pretty devastating. In Woonsocket, at least in 2016, there was the highest rate of death as a result of opioid overdose in the state. Almost twice the state average. West Warwick has been among the top hardest-hit communities as well. So it was really important to us and to the community to focus on this issue. In 2015, Governor Raimondo also launched the Task Force to Prevent Overdose, and rolled out the strategic plan to reduce overdoses and save lives. In our HEZs in both West Warwick and in Woonsocket, we made the decision to implement on a hyper local level.

>> It's what you're doing together here that makes this so special. And this is a really important SAMHSA grant, and one that I hope will become a model around the country.

>> The collaboration that we fostered through our Health Equity Zone was critical to us being able to receive this grant. We've got two hospitals, four health centers, our community mental health center, all collaborating on this effort. Zero Suicide is an initiative that is done typically in one health system; and what we're doing is taking a population health approach.

>> Policies are changing. Outcomes are changing. Health Equity Zone residents and members are starting to run for offices and become elected officials. That's how Health Equity Zones is making a difference. And that's going to positively impact everyone across the state.

>> The HEZ is going to make –

[Video ends]

>> AMOBI: I'm just going to pause it there. I'm going to just summarize what's in the video by just letting you know, the model basically is a way for us as the Department of Public Health in Rhode Island to really put our money where our mouth is when we talk about

shifting investments from more health care-focused work to more community-driven work. And so we essentially funded community collaboratives all throughout the state. And you saw people who are actually, you know, physically working, doing the work in the communities, talk about what they're doing. As you can see, they're doing all sorts of different things, which is because every community is different and their needs are completely different. But I'm really proud of this work and looking forward to talking more about community engagement and how to really dig deep and support communities. Thank you.

>> WILLIAMS: Thank you. First let me say it is an honor and a privilege to be here, and I am so -- I feel so blessed and fortunate to be in a room where this many people are trying to get it. If you don't get it, you're trying. I can work with that.

[Laughter]

I cannot work with a closed fist, non-open-minded stuff. So, I just -- hats off to everyone in the room. Just to give some context about my work. I do have some slides. Okay. Let me try to do this fancy-dancy thing. Great. I just want to start off with just some context. The Collaborative Cottage Grove is the community engagement group. It's a multi-sector group that includes Cone Health, our health system partner, Guilford County Department of Health. It includes, of course, our agency, and a host of community-based organizations. And more importantly, it includes the residents of the communities that we are working in. And they are the leadership in our approach to what we're trying to work with them to change in their community. And I say that and put some emphasis on that because the unique thing about the Collaborative, our decision-making is based off of what their strategy has been to create changes regarding policy, systems, and environmental, particularly with housing. So this picture is just -- the background that you can see is just a map of Cottage Grove. And I did that just to -- not to fully illustrate -- I have a ton of maps, but I think we've all seen enough maps. I think we can all know the hot spots in certain areas. And to be very honest, a lot of those hot spots are in low-income, African-American communities. Right? So I didn't want to illustrate the map. Everybody has seen the map. I want to talk about the fact that this multi-sector partnership of about nine or plus organizations is resident-led. So the thing -- the uniqueness about it, there are five teams that are focused on a social driver, social determinant of health. And Mr. Steven Smoot, actually who I brought with me -- and I do that often. I like to try to model what we preach. And so I have said from the beginning, if we are directly engaging the residents, then they should be involved in all things, decision-making, planning. If I go to a conference and I have the ability to bring somebody with me, I'm bringing them. So he is the Chair of the housing, Healthy Housing Team, and the Co-Chair is the Executive Director of our

organization. And that is done in a way that is not to overshadow his voice, but only to guide expertise. Because he's living in the community that we're trying to make an impact in and he can tell us something quicker than I can go get data for. And so that gives us some leverage. Right? So we can begin to hear the reality of what's going on, get that data that's qualitative; and then we can work with our partners to get the numbers, basically.

Again, this fancy thing. I'm trying to move forward. I hit the little button? Okay. And so what I wanted to just mention also within the context of that work as far as how we engage. We engage residents in such a way that when we bring them to the table, they have already set the table. So in many cases, the meetings that I help co-facilitate, I co-facilitate with them. In order for them to do that, we had to use funding that we received through Blue Cross/Blue Shield Foundation of North Carolina for some capacity building. Capacity building doesn't just mean we need that in our organization, but we have to do that in the communities that we're working with as well. So, in the same way I get great opportunities like this, great opportunities to go to leadership development. I was mentioning to Katie Eyes at Blue Cross, and I told her I was becoming very uncomfortable with going out speaking and going to these things because, I was like, is that really equitable. So we're asking people to engage with us on a level that many of them have never done before. I get all this great leadership training and things, and a lot of my skill set has come from Blue Cross investing in capacity building into the leaders that's doing the work. So my thing was, can we not find a way to invest directly into those residents who we are asking to engage with us on levels to create changes with policy and systems they had never done before. How do we do that in a way that is feasible, cost-effective? How do we evaluate and show that it is a benefit and rewarding to do so? And what does that look like in the end? So we were shifting norms. That came into -- that cultural change within our organization led to some other changes within other organizations. And that led to, of course, a bunch of challenges. Cultural changes are also very challenging because many of the organizations we work with, of course, are top-down. This is a very grassroots, bottom-up approach. When you're having a meeting in a board room with city officials and health organizations and things like that, and then they're having to listen to residents, and the residents are making decisions with them, that is a big challenge to navigate through. But the rewards that I found from doing work that way, it is very interesting to see. All of the organizations that we work with get it. And so now, it's like, oh, call Josie because she can get a meeting going on if there is some alignment that's needed. I try to align agendas and visions and goals. There has to be a common theme in all of that. But the alignment comes from, honestly, we checked in with the community first. And so if they're already guiding what they want to change, the alignment is just easy to implement within Cone's agenda, or within the Housing Coalition's agenda, or within Guilford County Health Department's agenda. So that's kind of the context and the work of how we engage.

>> ZELEK: Well, you both are a tough act to follow. So I don't know what else I can add, but maybe I'll try my hand at this clicker thing and see. You all might have to teach me on this. And these are great. These are Josie's slides, so maybe I'll just take them, because they look beautiful.

[Laughter]

>> ZELEK: Can I steal your slides? Can I steal your slides? These are prettier than mine. So.

[Laughter]

>> ZELEK: Learn from them, folks. I really enjoyed Dr. DeSalvo's talk too, this morning. She voiced a strong support for local public health and I really appreciate that as a local public health person. I think when we talk about community engagement, it starts with looking internally, and so we've been doing strategic planning as an organization and looking at our mission and vision to really think about how we structure ourselves as a department and to really facilitate strong community engagement. And so we revamped that a little bit. We have an equity committee on staff who were talked with looking at the mission and vision as well to see kind of what stood out, how they could make it stronger. And so we went from a mission that was, I would say, governmental sounding, to protect and promote the health and safety of Chatham residents. It's probably pretty standard language around there, to something that's much more engaging. So, building a healthy Chatham County through community partnerships and a commitment to equity. So, I think that that's where we begin. And that helps design our strategic plans. That informs our strategic plans, which informs our work force, which informs our priorities, which informs how we go about, I guess, doing business. So, that kind of subtle shift, I think, really showed where we've come as a health department and this is brand new stuff and I think those partnerships, our community partners, our stakeholders and community members are key. And I always look at equity and community engagement as almost one in the same. You can't have equity work without community engagement work because it really, equity work is really about getting a voice and making sure that voices are welcomed in all spaces. And so, that's where community engagement comes into play. In terms of the community partnerships, the middle bullet here, the Chatham Health Alliance, we've been kind of the backbone of forming a coalition and then we have members of the Chatham Health Alliance in the room. Really looking at the how we can bring together a group of stakeholders, residents, people from across different sectors to come together around big health issues. And so, we have diverse stakeholders. We have a diverse membership, and we're always looking to grow in that regard and come up with new ways to engage the community. It's among our top priorities with the Chatham Health Alliance. That's been an exciting partnership to see grow

over the last five years or so. And then the last thing I'll talk a little bit about is our community assessment process. Does anybody her know about the Community Health Assessment that, you want to raise your hands? I guess. Okay, good. Because they asked me to raise my hand yesterday about these, like, heavy data stuff. And I didn't know what they were talking about. So.

[Laughter]

>> ZELEK: It's good to return the favor. Where are the data folks in the room? Alright.

[Laughter]

>> ZELEK: A lot of acronyms, there. Alright, so. So, we've taken more of an ongoing approach. And so, this one and done once every three or four years, how can we evolve this process, which I see as not just about assessment and data, but really at its core about community engagement. That's why this approach to data primary data is critical, because when you go out and you have conversations with folks, that informs your work. But it also builds a relationship. And if you do it once and then you do it for years, it's okay but it's not great. But if we can do it on an on-going basis, we can cultivate those relationships that not only inform our priorities but inform our strategies for addressing those priorities. And so, we took a little different approach in 2018 and we actually dropped the word, this is probably like blasphemy here, so I apologize. But we dropped the word health from the Community Health Assessment process because we recognize, you know, we talked a lot about social determinants or drivers of health and that's our language, right? But we recognize in Chatham County, there's nobody who does a community assessment process as robustly as the Health Department through the Chatham Health Alliance. And so, we knew we needed these broad stakeholders. We knew we needed the community. And we wanted to maximize the impact of the Community Assessment Process. And so, that subtle tweak is, I kind of laughed every time I said it because it sounded kind of funny. And we look a word out of it. But I think it really engaged new partners in this work. We had nearly 100 people come to our results display meeting and our prioritization meeting where we revealed the results. We had broader partnerships. We had financial commitments from local organizations beyond just the traditional health sector. We had endorsements from two dozen organizations. So, I think the results, it was a subtle change but it worked for us and then an issue like poverty being prioritized, which previously we had more health-focused ones and so I think that kind of shift to say, no, these issues matter for health, now we have an issue, now we have engaged a new set of stakeholders in this work. So, that's been a subtle tweak but I think for us, we've seen it grow. And they're actually using the community assessment to inform funding of nonprofits through the county funding process. So,

really adding utility there. And then, in terms of that ongoing nature of this, we do a robust data collection, primary data collection process as a county. We put a lot of effort into getting the community's voice, getting a representative view of the county through a survey. And we actually asked if we could follow up with people over time, see how things are going. So, we're not only getting information through that for the priorities, but then when we go to strategize a broad issue like poverty, we can ask them, okay, so what are your greatest financial stressors? And then we can hone in on that issue a little bit. Things like that. And we can build that relationship. And we've this was a new model for community health assessments, and we have done two waves of surveys and we've gotten a really good view of how this process can work and how important it is to make this process available in different ways, not just online and not just by phone or whatever, but going door to door really counted. And we had people who, when we went back the second time, we said, how do you want us to reach out to you in the future? We had a lot of folks say, we want you to come to our door. We also had a few folks that didn't want us to come to their door.

[Laughter]

>> ZELEK: But people respond in different ways and different types of people respond different ways. So, when you talk about this, you talk about equity, it's about getting that voice. And if you don't put that effort in, you're not going to get it. I mean, that's just the reality. I would love it if we didn't have to go knocking on doors, even though you learn something. But, it's a lot of time. But it does bear fruit. And I worked with somebody who told a story the second round who said he had gone to an older woman's house who had gotten the packet to say, hey, could you, it's time to fill out the survey if you'd like to. And she said, you know, I got this, I knew what it was because I'd done it the first round, you'd come to my door. But I'm legally blind and I couldn't go through this. And I'm so glad that you all came here, because you gave me the chance to participate. And so, that's, to me, powerful stuff. So. I guess I'd leave it with that. We also have these community conversations as part of that. So, that's the quantitative approach. There's also robust qualitative and that's taking the focus groups to an ongoing conversation. So, we ask big questions like what's the story of your community. It's not just going at the problems, but going at the strengths, the assets, of the community. And then trying to have an ongoing dialogue. So, that's where we've shifted with this approach and that's one of the things we're doing around community engagement, so I thought I'd start there.

>> MONEY: Thank you so much. One of the things that we heard about yesterday was just taking the time to listen to the community's history. And to understand where they're coming from. And then identify the barriers that have existed as well as the assets that the community has to be able to move forward. In your work, what are some of the lessons that you've learned

about barriers, assets that are in communities, and what are some of the strategies that you've undertaken to address those? Anybody can take that one on.

>> WILLIAMS: I guess the biggest barrier for the community that I work with more closely than others is Cottage Grove in east Greensboro. East Greensboro historically is the section of the city that has the least economic investment, I guess you can say. And so that, and it is a historically redlined community. And so, that, it's still the residue of those systematic exclusionary practices from years ago that's still resting in the area today. And so, and then other barriers regarding people having, people who have embarked upon this work previously a lot of broken promises, which led to a lot of distrust. And someone mentioned earlier yesterday I believe, you have a grant and then the funding leaves and then they exit and so when I came along doing the work, the first person I spoke to was like, someone just came over here a while ago and they didn't do nothing. We don't even know what happened to the so-called research that they picked up. And so, it was very challenging to get people to speak up about even the living conditions that they were dealing with. And I guess the strategy to do that is like Michael mentioned, door to door was the best strategy for this work in the beginning. Now it has evolved and it's mixed with, of course door to door and canvassing but it's so evolved now that residents have so much buy-in, residents will go pick up people and bring to the meetings. And I don't have to ask them to do that. And that is just not in Cottage Grove. Currently, right now, a result of that is we are developing a community of advisory councils, not just a Cottage Grove focus in the neighborhood, but we are looking at representation across the city in each district. And right now, we're on the third meeting. And that meeting in just three meetings has grown from five to twenty and there's representation from six different neighborhoods in three districts. We're working on district, the last two. I think that strategies where residents feel included and it's not just a feeling, they know they have a sense of ownership in what's happening, that's what will get them to engage. I have residents on my cellphone. They have my cellphone. Some people don't like to do that. And I say to that, then, hire someone that's going to focus directly in your community. And so I know there's always a cost issue, and I can understand that. And so, it goes back to what someone earlier, even we're going to invest in what's necessary, or we're not. And so, with that being said, it is labor intensive to go door to door. It is labor intensive to do that. But if we don't find creative ways other than a normal traditional focus group, if we don't find ways to actually authentically involve the residents in what is happening, then they're not going to show up. And so, it's interesting. Something just happened this week. I could not have been more proud to see, I was in Chicago and residents were organizing and mobilizing and they did that in 24 hours and stopped the rezoning that was about to happen in their neighborhood. And this just happened this past week. And so, I'm in Chicago and I started getting phone calls from different residents and they were saying, asking me could I come help. And I was like, I'm not there. And I asked what was going on. Well, there

was what we thought was a house built in the community. So, there is this house sitting right in the midst of this whole residential, if you can imagine this room, all residential. And this one house was built. There were rumors a year ago that it was going to be an adult daycare center. And no one knew what it was going to be. It was a nice house, it looked like a duplex. Well, I think the developer thought he was going to be able to create a commercial business in the midst of this residential neighborhood. And thought he was going to be able to do that without having to get zoning regulations approved. And so, what happened, I guess he realized, oops, I got to get approval for rezoning. And so, in Greensboro, in order to do that, you have to engage the community. Now, the traditional sense of engagement, I think we've all seen it. Public city meetings or you send out a little card. And as long as you can check that box, you did community engagement. A resident has been living over there for 80 years. She is well-connected. She finds out about it because as soon as one resident heard, they knew that they could start a petition. Residents were out at 9:00 PM at night last week in the cold walking around getting petitions. That's how it started. That spread the word to let everybody know there was a meeting on zoning coming up on Monday night. They get there Monday night and a whole section of the zoning commission's chambers are full of residents from that community. They mobilized in like a 48-hour period. And they had over 30-40 people there. The short version of the story is, the zoning was denied, but it was very interesting. And I warned them when they went, and I was back so I was able to go here. And I spoke a little bit after everybody else spoke. But it was very interesting to hear my concern being validated. I told them when you go there, be aware that the developer and the people who want to do this business, because it's an adult daycare center, they're going to say that you don't want anything good in that community. And so I say that to say this, as far as engagement, residents don't mind community economic development. They don't mind you building. Nobody is against a business making profit and commercial and capitalism. What they were rejecting was the fact that you tried to slide this in on their neighborhood. A neighborhood that is really ripe for gentrification and they're fighting against that. And you did not include them in the conversation of even that being built in their community and the right in the midst of their neighborhood. And so, one of the things that I let partners know, if you don't include them on the front end, good luck with that. You will go back to scratch. You will go back to the drawing board, which costs you more money. I would imagine the money that we've spent on not engaging people in the beginning, because you had to go back and start over. You can invest that in the community and be good. And so, I just, that is the, a primary strategy, and Mr. Smoot will attest to that. If we don't talk to them, how will we know? If we don't have somebody directly going out and having those one on one conversations, then it's kind of fruitless.

>> AMOBI: I also want to add to this discussion about barriers, in addition to all the things you mentioned, when I think about community engagement I just want to make sure that I am just

speaking out that it's not just about just hearing people's thoughts, but doing and then actually helping them to take action or coming alongside them or resourcing what they actually want to do. Because otherwise, if all you do is just talk to people all the time, and they tell you what's wrong and then you just go ahead and say, well, thanks for letting me know, and then nothing happens, then that is where the mistrust breeds. And so, specifically, things I want to bring up regarding the actual action piece of this is funding. And something we found in Rhode Island is that a lot of the big funding sources, right, that come from the CDC, et cetera, they are still in this kind of disease focused paradigm. And so, it's harder than to be able to just get that, let that funding truly flow to the community when there is a lot of, when it already comes with so much expectations as to exactly what you should, the kinds of things you should be doing. So, for example, in the video you see some interesting initiatives around having the youth actually sit down and talk with the police in the organization. There's not necessarily, I mean, maybe there is and we just didn't know about it. But there is not necessarily going to be an RFP for that. But one can imagine that that can have very important lasting effects around stress and mental health and then, a lot of the other things they're talking about, there's not necessarily going to be an RFP that fits that exactly and when you're trying to support the community, we really need more flexible funding. That still holds people accountable to doing that you said you were going to do, and to making positive change. But really if you are truly trying to engage the community, we need to make our finding respect our voices. And then the last thing is funding for just infrastructure. Funding for them to just keep their, to print things and pay their bills. That is not necessarily all programmatic. And so, because we have this amazing model, there's so many people who see our model and then they want to help fund something. But they're not, they're more excited about funding the programmatic work but not funding the staff. And they need healthcare and they need to pay their own bills and they need a place to stay and a place to hold meetings and to be able to have refreshments for community members. So, all that stuff needs to be funded, too. And so, these are very, they're not that hard, they're not that difficult to start finding ways to change how we are making our RFPs out into the community but they end up being big barriers for engagement when we don't think about how we provide funding to the community led initiatives. So, I will stop there.

>> ZELEK: Yeah, That was a great point and I think in terms of funding, I echo that in the local public health system. I mean, we have great models from Dr. DeSalvo on public health 3.0, which is exciting, for those who are familiar with it. And then it's about getting the flexible funding to be able to do things like that. And so, the categorical funding that kind of boxes you in, which I just had a conversation with some public health folks from around the country on Wednesday about the chief health strategist and how to fund that and how we can work with that within our funding structure. I think in terms of community, I think there's a spectrum in terms of community engagement from absolutely no community involvement to getting the

community voice to inform your work all the way to community-led action and these folks are a testament to doing that right. And I think we should all be working toward that upper end of the spectrum where it's not just the information coming in, but an ongoing process that really puts the ownership in the hands of the community and drives what, we help drive what they value in terms of that. It kind of gets to the term community empowerment. And that's kind of a funny term and I think so often what we're really with that is, the community is empowering our work. They're looking at us and they're helping us do our work more effectively. That's really what happens as opposed to us giving them something that they already possess and so that's one way to look at it. And then I think, you know, in terms of addressing barriers, looking at, looking through an equity lens at all strategy and prioritizing, and action planning. And I think that's something that public health is getting more adept at and something that will continue to grow. And that work. And then just to the assets point that Ben brought up in the beginning is a cool model around asset framing, Trabian Shorters, who talks about looking at people through their contributions and aspirations as opposed to just the things that maybe the challenge is, right, and so you value the unique assets that they bring to the table as opposed to just a negative thing. And he had us, I was in a talk that he gave and he had us look at our neighbor and say, okay, look at your neighbor and now tell them everything that's wrong with them. And it was very awkward. And obviously we did not do that. But I mean sometimes that's how we approach our work, and how does that. I think when we talk about health equity we talk about community engagement, we got to talk about stigma too and we got to talk about recognizing the assets that communities have and just be honest about the systemic issues that are causing problems, right, but also talk about the unique assets that every community and every community member brings to the table.

>> MONEY: And you know, when we talk about this term empowerment, I think some of us had this conversation about the fact that that's really a loaded term. That assumes that we have power. That we're giving to someone. And that's not the case. In fact, the community has the power but we need to help them unleash it. And I heard several of you talk about engagement with the community through advisory committees, through investing in them, through training and opportunities. So, if you wouldn't mind, just go a little bit deeper about your, the role of individuals with a lived experience in the design and execution of your programs. Especially the utilization of the resources available. How much actual governance do they have? And governance assumes that you've got the power to determine where those dollars and where those resources go, if you wouldn’t mind.

>> AMOBI: I can start. So, the Health Equity Zone model is really designed at every step of the way to put people with lived experience at the center of what's happening. So, when we, first for more context, this is now going into its fifth year. And when we first, we put out an RFP

specifically to community based organizations who already have a lot of experience in the community and as we were looking at the applications, one of the things we really wanted to see is people having some sort of evidence of actually having spent a lot of time in doing a lot of work and building relationships and knowing people in the community. And so, from the beginning, the people that we, the collaboratives that we funded were designed to have community based organizations at the heart of them. And then in terms of the governance piece, we have ten health equity zones throughout Rhode Island. I just want to remind everyone, Rhode Island is a very small state, we're about a million people. So, we also don't have local health departments. It's just the State Health Department. And so, the governance of the Health Equity Zones really sits amongst that collaborative. There is what is called a back bone organization and that was specifically because how we funded this was using branding from different federal funds and then also some state funds. But we needed some kind of fiduciary agent. You can't it just gets way too complicated if you're trying to do something with let's say 20, 30 CBOs so we needed kind of like a captain of the team. So, there is like that captain position but that is, again, also still coming from the community and they are the ones that hold the meetings, they are the ones that hire people, they are the ones that help set the priorities. They have their own evaluation staff and so all of that goes through them. We're always there for, we meaning the Rhode Island Department of Health. And there's a whole team of people working on this. But we're there for support if they need it and we also create opportunities for different houses to meet and talk, but we are not in any way leading the agenda. So, I found that, so, just to, I guess I would summarize by saying that there is a way to build things so that just inherent in its structure, you are putting people with lived experience at the center of what's happening.

[Laughter]

>> WILLIAMS: I guess for governance, ours is a little different because the collaborative, Greensboro Housing Coalition is 501C Nonprofit. So, the collaborative Cottage Grove is a collaboration of different organizations. That collaborative is led by the decision-making from the residents. Greensboro Housing Coalition's role in that is the fiscal agent of the grants that we received. So, when we are speaking about the flexibility we have a lot of flexibility because the collaborative was formed initially because we received a grant, Community Center Health Grant from the Blue Cross Blue Shield foundation of North Carolina, which began in 2015, because I came along in 2016. And that grant had some stipulations. So, it was, it is a clinical community integration where they were looking for us to engage residents in the way that we were discussing, which was very unique at the time. So, to be honest, and I have permission to tell this story, how I have asked my boss and I use this all the time, but when I started there, there was no community engagement. They had this grant and I got hired. And I read the

position description and I thought, I was gung ho and I was like, I'm going to get to work with communities and I grew up in the area and I was like, this is going to be so cool. And there was nobody to engage with that they were working with. And so I asked them, where are all the people that you wanted me to work with and he was like, come in my office and shut the door. And we go in the office like, what is going on, and he was like, go, you're going to have to do find them. This is all new. You're going to create the structure. And I was like, what did I just sign up for?

[Laughter]

>> WILLIAMS: And so, when it comes, and so, I looked at what honestly that guidance from the RFP and the what they, what the stipulations of the deliveries were and I started to implement. And my implementation came from the fact that I did not grow up in this community, I grew up close to it. It was walking distance. This is where things were segregated into this community. And so, this is where I would go when I was little to get my hair done. And this is where I would go shopping. And so, I was very familiar with the community and I just remember looking at that Blue Cross Blue Shield grant and I was like, wow. If I had this, or people were working like this, when I was coming up, what would I want to see happen? And I just remember thinking, I wanted somebody to ask me what I wanted. And so, that's where the door to door canvassing came from. And then having the partner meetings with everyone, all the partners, I went back to share with them to remind them this is what you signed up for. Here are some things that you promised that you would do. And they're great. And so, here is my suggestions for doing that. And that's where the resident leadership came from. That's where the decision-making came from. And so, as far as governance, as far as the monetary transactions that go on because of the grant, and because of that resident leadership, those committees that I mentioned, we are just the fiscal agent and it put GHC in a very different position that they had never been in. They're not only a partner agency in the group, but they are now the fiscal agent, right? And so, that was very new to them. even culture had the change in their mindset on how they viewed that we were going to work, because I wanted them to understand if you want to be more successful, let the residents decide on how to spend that money. As long as it aligns with the deliverable. So my biggest role is to facilitate the alignment of all of that across the different partners and what the residents were saying they want and find those pieces that will fit together. And then when the healthy homes committee has a community change project, it is actually approved by the neighborhood association and then it goes to GHC for final approval. And they're not approving saying, yes, you can do this. They are approving saying, okay, yes, this was created well. Yes, you defined your process well. Yes, that's what we're doing. And then we're going to send them a check. And then my role is to make sure that what they asked to do gets done and that's how that alignment happens. So, it is a lot of

flexibility and then on top of that flexibility, we were awarded a little less than two years ago, the Bill of Health Challenge Award and now we were just awarded the 3.0 Award and that just was announced this week. And the cool thing about that award is, it aligns from the initial grant that we got with Blue Cross Blue Shield and it works within policy systems and environmental change. It works with the data piece that we have to do. It works with making sure we go upstream. It works with making sure we are local, meaning there are resident involvement. And so, all this alignment just fits with the values and the goals that have already been created and that process of the Community Change Projects aligning with what we said we were going to do aligning with what the residents say they want, aligning with the agendas and the visions of the partners that we work with. That's a lot of alignment. So, there's challenges in that. But we have been very successful in implementation because they have been involved in the planning and the decision-making from the very beginning.

>> ZELEK: I know we have other questions to get to, so I will just mention, you mentioned coming to the work and talking about how you were from that community and how much that meant. And I think you kind of mentioned it in passing. But it was really important and I just wanted to highlight that. The perspective that you brought in addition to your professional know-how, it seems to really be bearing fruit. So, I think when we talk about community engagement and we can look within a little bit as organizations and recognize the assets that folks from communities we work in in our county or whatever bring to the table, as well.

>> MONEY: Well, I know that we are the ones standing between you and lunch. But we want to make sure that there is an opportunity for the audience to ask our panelists questions. Yes, sir.

>> AUDIENCE MEMBER: My name is Steven Smoot. First, I have three things I want to ask. I'd like to thank Miss Karen because I appreciate her commitment and passion and the direction that she is going to. I'd like to lend you my hand because if you need to find another market, we can get together and build one.

[Laughter]

>> SMOOT: I'm kind of, I live in Cottage Grove. And I was there five years ago when the developer used it as a money exchange, right. And I myself went into that development using it as a stepping stone because I really had no intention to stay there. but over the course of time, with the, with Josie knocking on my door, and asking me the issue that I had in my apartment and me allowing her to come in and document them, and then put them out publically, you know, they wanted to get some things done. The developer changed, and the hurricane happened. I'm not from North Carolina. I'm from New York. I've been here about five years.

And I really was not invested in that area at that time. But because of the tornadoes, and because of the things that Ms. Williams showed me I could accomplish just by becoming part of that community, I became invested. And during the tornado, I watched the resiliency of the people in that area and how they came together to help each other in a time of tragedy, alright. Also, became empowered through the meeting that I went to with the Community Board because the issues I had in my apartment, even with the new developer, weren't taken care of. But because of this empowerment, I was able to get that that done and more. So now, I'm really invested because my thing now is that because of mental, because of medical issues in that venue. We have a lot of young kids that have asthma, that are living with mold, and they don't have anyone to speak for them. And it is vitally important that we understand that this is not about us, this is about them. Because 20 years from now when we are really old, [laughter] they will be the ones to help us get medical care and take care of our bodies.

[Applause]

>> MONEY: Thank you so much, Mr. Smoot.

[Applause]

>> MONEY: And you brought up a really good point about the community and the resilience that occurs in difficult times and how you can take that and propel forward to, and also the example that you all are setting for those young people in the community, investing in them, and giving them the skills so that that power is there right from the very beginning. And they know what they can bring to bring about change. Thank you so much for your engagement and your leadership.

>> WILLIAMS: That's ROI.

>> MONEY: There you go, right.

[Laughter]

>> MONEY: And yes, you can put that on an Excel spreadsheet.

[Laughter]

>> WILLIAMS: Thank you.

>> Thank you so much for joining us today and sharing what's happening at your various organizations and your communities. What I wanted to ask about is I think we're all aware that this is definitely a grassroots movement. It's really going to have to happen from bottom up and we think about addressing health equity and disparities and I applaud the work that is happening at the community level because it's needed and it's amazing. And what I would like to ask from you all is what would be helpful or what would you want to see happen at the state and federal level to bring this piecemeal work that's being done together? A lot of our community work is driven by philanthropies and there is, I'm not saying that there isn't local or state investment but I would like to hear from you all what you think can happen at the state or the federal level to ensure that we have a well-rounded and well-supported system.

>> ZELEK: I can start as a local rep. I will speak to Ben. No, I'm just kidding.

[Laughter]

>> ZELEK: You know, I think that funding has been brought up several times, and funding always is helpful and really important. It's not the only thing, right, but it's a start. And so on some of our equity work, for example, we got some funds from the Office of Minority Health and Health Disparities from the state to work on culturally and linguistically appropriate services. Class standards. And we coupled that with some other broader equity work that we were doing, but that really was focused within and I think as I mentioned early on, it starts within as an organization. And we've had that just since the beginning of 2019 but I can say the conversations, the work that's been going on through that, has been really powerful for us. It's helped us structure our strategic planning. It's helped us structure our mission, our core values, our performance evaluations, how we review recruitment, how we view interviewing staff coming on board. It's infused through all of that, so it's a culture and not just a one and done thing. And so, I have been really, I have told the staff member, Michelle, who leads this work how powerful it's been to participate in these meetings because often we think really big picture systems level, that's where I like to work usually. But this has been kind of nitty gritty. But that funding has driven us to start this initiative and at the end of the day it's not just the money, but that direction, that guidance, that expertise coming from the state because there are really brilliant people there who are leading the charge has been really powerful and so, we get at from the state and maybe the federal level, too, it really helps us out.

>> MONEY: Thank you, Mike. I just want to just complement that by saying that within North Carolina Department of Health and Human Services under Secretary Cohen's leadership, we really have been looking at all the investments that we receive in the state and looking at our programming across Human Services as well as Health Services. And really identifying what are

our core objectives. And I think you can see that through some of the initiatives that she described yesterday but really focusing on populations and bringing all the tools and all the resources as well as alignment measures and objectives to the table so that we can support health centers, I mean health departments, local DSS offices, to accomplish their objectives. And I think the more we can consider interdisciplinary teams, braided funding, and again align measures, I think the better we will be at advancing these objectives. And I do believe that engaging the community, particularly valuing the experience, the expertise of individuals with a lived experience is really critical and that is important as we think about developing the workforce of the future. Assuring that our work force is diverse and comes from diverse backgrounds and making sure that our educational system doesn't have lungs missing in the lather so that we are missing out on individuals that could go to medial school or nursing school or other professional schools that are getting caught up in the poor, unstructured educational system. So, for example, with our Early Childhood Action Plan, we're aligning our health initiatives, our social services initiatives and then also working across in the educational sphere under the leadership of Governor Cooper to develop a comprehensive plan for children zero to eight years of age. I think the lessons we learn from that through iterative evaluation process will be very instructive as we go forward to support local health departments as well as communities in North Carolina to advance our objectives.

>> AMOBI: One more thing. I also just want to add that in terms of thinking about what the at the state level we could do better I just want to plug the [inaudible] Association of State and Territorial Health Officials, so my director is the outgoing president. And while she, during her term each president gets to pick a challenge. So her challenge to all of the state and territorial health officials was to really shift the framework, not just to community informed. And you brought this up, this idea of just listening. But to community driven work and if you go on the [inaudible] website, there's actually a lot of very practical frameworks and information to help people short that in their work. And then the funding like we talked about flexible funding as something that can be done at the state and federal level and then lastly the evaluation and this was brought up during Dr. DeSalvo's talk this morning, we always have a need for evaluation but I think that especially some people at the state level, not usually public health people don't really understand that you're not, you may not see a quick turnaround, you know, within someone's term, for example, some things may take longer for you to really see the kinds of effects that you want. And that's kind of public health in general. There are some things that are low-hanging fruit and you'll see things very quickly but we all need to just get comfortable with the fact that some of this work we're doing we're talking five, ten years. And we should still hold ourselves accountable and still have an evaluation plan and still be collecting data both short-term and long-term, but we all need to start shifting our

expectations, you know, from the government side as to what we are expecting to see with regards to outcomes.

>> WILLIAMS: And I would say regarding funding, you can have the funding but if the funding is not allocated properly then you're back at square one. So I guess with regards to funding, just like you had mentioned earlier, the work in the community never turns off. So, I'm funded through the grant that our agency, this group has received through Blue Cross Blue Shield Foundation. Because I am so invested, I mean, before they hired me, I was working for free for a year anyway. So, not everybody is going to do that. And, but –

[Laughter]

>> WILLIAMS: I'm not saying that, but I am just saying it just puts it in perspective what happens to me when that funding goes away. And so the capacity to help guide and align and do the work, it does happen in a community. I am here to create that leadership so people like Mr. Smoot and others can pick that up and keep going. And then making sure funding is allocated to do things like, I mean, help with the meetings. If I am aligning something with Department of Health Strategy, and we are in partnership, and we are working together, I am going to help align residents to help with a common agenda that both of you have but I have to meet with them, I have to go out and instruct and guide with them so we have to have meetings. Those meetings and the materials needed to put that information out there, money, that takes, that takes money, right. And so, not to forget the allocation that. And you know, it was interesting that Patrick yesterday from Blue Cross Blue Shield mentioned something when he was speaking and he said, he talked about Blue Premier. And he talked about having to start from scratch after they realized they needed to ask providers, right. And so I got to thinking, if at that level they had to go back and start from scratch, and then what, you get Blue Premier which I like. What makes us think that we're going to do something different in the community in order for the work to be successful? When he spoke about that, I was like, wow. Okay, so at this level, you're working with providers and insurance companies and it's Blue Cross Blue Shield and you guys had to start from scratch to go back and ask providers what is best, why do we think that we're going to do something different in the community in order to be successful?

>> MONEY: So, Josie and the rest of the panelists, let me just pick up on that statement, and ask you a final question. If you had a reset button that you could hit on any one of these initiatives that you've taken on within your project and start all over again, what was the lesson that you learned? What would you hit the reset button for and how would you do it differently?

>> AMOBI: Only one button?

[Laughter]

>> AMOBI: You go.

>> ZELEK: I didn’t have an answer when I picked this thing up.

[Laughter]

>> MONEY: You should have thought ahead.

>> ZELEK: I think I am proud with where our Chatham Health Alliance has come, the coalition, but I think we've had an ongoing discussion about how to better engage the community, right and have community participation. And maybe if we were starting up with our key partners and everything but maybe if at the beginning if we could have better figured out and strategized around, made it a priority, a top priority right off the bat, let's get the community as the core part of this work I think, you know, we could see some additional progress in that coalition.

>> WILLIAMS: I would agree with that. And the other thing that I would reset is making sure we had the right partners at the table. And not that any partner was wrong, but making sure the alignment if the vision and goals were all in sync with one another. And I think that if I could reset and go back, I would make sure that that is done as a priority. And the other thing that I would say is we see so much great work that has been successful in addressing social determinants of health. We see in our community Avalon Trace was purchased, we got it out of the hands of a landlord that was just unethical and immoral and then we got it in the hands of somebody that is really trying to rehabilitate and do well. And I would say that if we could go back and do a reset I wonder what would have happened if we had been really intentional on documenting every process and step along the way. And how that could be used now. Is that, you know what I mean? And so, I know that our aligning evaluation and measure and data points and all that thing is so important and I understand it now more than I did in 2016. And so it is hard to evaluate the impact on a community that historically has been redlined. This community has about 2000 – 3000 people, and in the whole community there is one major sidewalk going down the middle of it. So, it does not have any safe pathways to the one grocery store that it has. And now because of the work, that community has moved up on the city's priority list and so sidewalks have been implemented as we speak. And so, and then we have a park that is sitting on top of a landfill. So, there is some environmental issues there. There is a creek that runs through that park. That creek runs through the whole neighborhood. And then it goes to another little park that's behind that apartment complex that I just mentioned. And so there are some issues there. But we came together not just in that neighborhood, but in that

whole district. And mobilized that entire district, worked with City of Greensboro through a participatory budgeting process, and we were granted $40,000 and now there is a brand new park in that area. And so, how do you quantify that? Because what I see and what everybody can see it was desolate meaning so there was isolation. I know there was people there but nobody was utilizing. Nobody was out walking. Now we have bike lanes and sidewalks coming and now you see more people. You saw people walking but now you see them using a safe path. How do you quantify that? And then the park, it was desolate. You, I didn't, and then we get the park, there's 20 – 30 kids playing every day. I didn't know that many kids was in the area. And not only are those kids coming to that neighborhood park, City of Greensboro came back and put a fence up alongside the front of the park because other people from the other areas was bringing their kids to that park because that's the only park there. And so, it was just filling up with children and parents that were just sitting out there. So, that tells me isolation decreased. How do you quantify that? You know what I mean? And that's what I wish we had been very intent – we're doing it now. But if we had done that then, I wonder how we could have been utilizing that now.

>> SMOOT: You're right. We needed more than one button.

[Laughter]

>> WILLIAMS: Mr. Smoot, everybody.

[Laughter]

>> AMOBI: If can just say something very quickly. I've kind of mentioned this already, but I will just say that this comes from a yearly survey we do with all of the HSSs in terms of just trying to ask them how are things going, and what they would like to see change. And that peeve about the infrastructure does come up a lot. And so, you know how I said that there is a way that you can, as you are designing something, design basically what you want to see? And so, I think if we had been able to go back in time, we would have designed a way such that when, so we fund the HSS, the Rhode Island Department of Health funds the HSS but they also apply for their own grants and get other funding, so if there was a way we could have made, institutionalized the fact that, as they're getting funding, all the people that are giving them funding have to have some percent of it go to their actual just basic operating cost, not just the programmatic work, I think that's something that would have been nice if it was done earlier on. Now we're starting to do that. But it would have saved a lot of headache if we did it earlier so, yeah.

>> MONEY: I want to thank our panelists. Just thank you.

[Applause]

>> MONEY: I want to thank them for doing the really difficult work. The work that doesn't have a map, it doesn't have an algorithm, it doesn't have a flow chart in the EMR. It's the tough work. I value all that you're doing and how you shared your work with us today. Just thank them again please with a round of applause.

>> SPEAKER: And let me add on behalf of the National Academy of Medicine and the steering committee, our thanks for a great panel, thanks to Ada, to Josie, to Michael, to Mr. Smoot. Thank you for being here. And of course, to Ben Money for a great job moderating. Really appreciate it. And as we move to lunch, which is going to be 45 minutes, 110 back here, we're going to have the wrap up panel on what we really have to do. What are the next steps? Where do we sign on the bottom line and what for. So, as we go out, another round of applause for our group.

[Applause]

>> MCGINNIS: We will get started and we don't want to delay the start because this is where we get our marching orders. Our wrap up panel is on a call to action for vital directions in health and health care. And we have as part of the panel, or as the panel to help us identify the roadmap to the future and the key elements that we have to pay particular attention to on that journey a terrific panel. Don Bradley, who is the moderator, will introduce them. Don, by the way, is Consulting Professor at the Department of Community Family Medicine at Duke University School of Medicine and Core Faculty at the Duke Margolis Center for Health Policy. We heard earlier this morning from Mark McClellan who is the director of the Center and he has been very helpful to us as has Don throughout the course of the organization. And he will introduce Nicole Dozier, Julie Freischlag, Josh Dobson and Gary Salamido and Lin Hollowell. Thank you very much, Don.

>> BRADLEY: Great, thank you. So, it's right after lunch, so the first thing I'm going to have you do, I would like everybody to stand up.

[Laughter]

>> BRADLEY: And find the person to your left or to your right.

[Laughter and talking]

>> BRADLEY: Go ahead. Find someone. Right here.

[All speaking at once]

>>BRADLEY: Introduce yourself.

[Laughter]

>> BRADLEY: And I would like you, okay, okay. We're done. If you can hear me, clap once.

[Clapping]

>> BRADLEY: If you can hear me, clap twice.

[Clapping]

>> BRADLEY: Great, okay. So, don't sit down.

[Laughter]

>> BRADLEY: What I'd like you to do very quickly is to describe what your key learning from the summit was to date and what are you going to do with it. But you only have one minute, so go. Okay, let's go ahead and sit down and we'll get started.

[Chatting and laughing]

>> BRADLEY: Great, so, at least I know you didn't start asleep. So. So, thank you. We're the final panel of the afternoon and it's after lunch. So, really, one, thank you for being here. Actually it's probably more than I might have anticipated but it's great to see you here. This is an amazing event. And I do want to take the opportunity to thank both the National Academy of Medicine and Dr. Dzau in particular for bringing the attention to North Carolina.

[Applause]

>> BRADLEY: And to Mike McGinnis.

[Applause]

>> BRADLEY: Our panel like others met virtually prior to coming to the conference. And we were greatly facilitated by Jessica Marx, who has been our angel in terms of keeping us facilitated and on point. Each of our panelists will offer a perspective and we are going to go into questions fairly quickly. So, let me first introduce each of our panelists. To my immediate left is Nicole Dozier, who is a 23 year veteran of the North Carolina Justice Center. Which is a state-wide anti-poverty organization and she is the director of their Health Advocacy Project. To her left is Dr. Julie Freischlag who is the CEO of Wake Forest Baptist Medical Center and the Dean of the Medical School there. To her left is Gary Salamido, who is the President and, my order on my paper was a little different to that. President and CEO of the North Carolina Chamber. Immediate to the left is Representative Josh Dobson, who is a four-term state representative for the 85th District. Representative Dobson chairs the Health Housing Standard Committee and serves as Vice Chair of the House Standing Committee on Appropriations Health and Human Services. And finally we have Lin Hollowell, who is the Director of the Health Care Division of the Duke Endowment, so Charlotte-based private foundation supporting philanthropic interests in both North Carolina and South Carolina. So, it's a great panel. I really look forward to hearing from each of you. Now, one of the things I do want to do is to kind of set the theme. And fortunately I don't have to come up with anything original. It's really trying to synthesize what our great speakers throughout the last day and a half have said. And I think there are four of them. The first is that equity matters. Dr. Buerhaus asked us a question yesterday as what do we really want to do? Is it about improving healthcare and so on and so forth? And I guess what I would say there is, if we don't improve equity, we won't improve health. So, equity was one. And the other was that Alisha Cole, Dr. Cole, said something I thought was really important. Are we tired of disparities and are we willing to work on them? And I think that's a theme as we go forward. So, equity. The second is humility. I think, and not just racial, ethnic, cultural humility, which we talk about a fair bit. Particularly in the public health side, but also medical community humility. And academic real world humility. So that engaging others before we engaging our ears before we engage our mouth is to me one of the key issues. And one of the sayings that I've heard in communities that I've worked with over the last four years is from the practical, a project called Practical Playbook is, and it's on the web, so it's no bit news. But nothing about us without us is for us. So, it speaks to the panel before about community engagement and it's not just, again, as the panel said, it's not just about listening. It is about really being a part of the process. And finally, I would like to have our panel and all of us move from kind of the why and what of health to the how. We talk a lot about what's wrong or what's right. And why it's that way. But what we really need to focus on is how to do it. And finally, to kind of move from individual social needs to social risks and on to social drivers. By that I mean, most of us in the health care arena deal with individual patient needs.

And we will identify social risks and try to deal with them. But what I also think we need to keep our eye on is what are the drivers of those needs and is it the zoning policies? Is it the overabundance of fast food? Those are the kinds of things that I would like to focus on.

>> MCGINNIS: So with that, I'm going to turn it over to Nicole Dozier. And really the question I told her I would ask her is from a justice perspective since it's a North Carolina Justice Center. What you see as the key priorities?

>> DOZIER: Thank you. So, I'll start out talking about our mission. It's essentially to work ourselves out of a job so we can do other things with our lives. And so, because we do anti-poverty work, it becomes a part of you and as a person of faith, also, I just feel like it's just one of my assignments. And so, our mission is to attack poverty at its roots. And with that in mind, I think about a couple of points related to something that W.E.B. DeBois talked about was like, the problem of color is like a 20th century problem. And I want to suggest that we remain in the 21st century still having the same problem. And really in all rooms, not wanting to have an honest conversation about it. And oftentimes people of color have more of a burden to talk about it and bring it up. And so, if we don't focus, though, on racial inequities and disparities, and how they disproportionately impact us, but the whole community. Then we're not going to be able to change the outcomes that we're trying to change. The people have the poorest outcomes often are the people who have less financial resources and opportunities. And feel like their voice doesn't matter as much. And they are not voiceless. They do have voices. We just need to listen to them and amplify them. And the second thing I would talk about is this whole world is having a conversation about quality care. But I say that we are still, in our country, it's a great country, it's the greatest country in my opinion. But still, we're having this debate as to whether everyone in this country should have access to quality, affordable, equitable, comprehensive health care. And for me, it's not a question. It's not a debate. So, I'd say that those are the key things for me and we need to start having a conversation about whether we believe it. And we don't really believe it because we haven't done it. So, that's where I would start.

>> FREISCHLAG: I just really appreciate being here as well, too. I've only been in North Carolina now two and a half years. You can tell by my lack of accent, I'm sure. But I'm a vascular surgeon and I trained at UCLA, so I spent 20 years in and out of California. I was a Dean at UC Davis in Sacramento before I came here. And I also was born in small town Illinois, so I came from a small town, Decatur, Illinois. But also I've lived in Milwaukee and Baltimore and San Diego and Los Angeles. So, when I've looked at health care costs, the country and how it's developed, there's a lot of similarities even though the towns are a lot different. When I trained in the '80s, those were the times of discovery of what you could do in health care, so we were just devising

new interventions. That's when you could bypass your heart, bypass your leg. And we didn't know whether it was going to work or not. We just wanted to see what, could you feasibly do it. I remember doing the first liver transplant in 1983 at UCLA. We didn't think about why you needed it. We just tried to figure out, could you have it. So, over the last 30 years now, we figured out we could do lots of stuff and that's what intrigued students and residents. That's why I went into vascular surgery. But now, with data and figuring out who benefits most, how do you prevent those diseases? And as a vascular surgeon, you know, we just thought we were doing a great job. We saw everybody showed up for clinic. We treated them equally. I worked in the VA for 35 years. But we didn't think much about those that didn't show up. We were busy, right. We were doing those things that we did, and it was scary. Devising all these amazing interventions, and we're still doing that. You know, new interventions to take care of people. But at the same time, how do you prevent that? Because now they're so expensive, right? And if we want to give everyone the best quality care, not everyone can have a bone marrow transplant. Not everybody can have a liver transplant. Now, we're going to be able to make a liver out of your own cells. You know, there's going to be all these amazing things. But we've got to get a bunch of people that don't need it. So as a medical student Dean, I take care of 145 medical students in our first year class of which 40% are from North Carolina. But 60% of my class comes from out of state. Trying to get them intrigued and energized, we talked about that yesterday, to do into the rural areas to be that primary care doctor. How do we get them with their informatics and all the things they need to do. I mentioned yesterday that we're going to revitalize pathology because now it's going to be part of artificial intelligence. How can we get these young people to want to go look at these social drivers so that everybody doesn't get sick? Telehealth to me is huge. Being able to reach out to people just like with my son, I text him every day. And if he doesn't answer, I'll do something horrible like call him.

[Laughter]

>> FREISCHLAG: You know, and if you look at all the new generations, when I rounded with my intern today, because my fellow, because I did an operation yesterday at High Point, it wouldn't even, if I called her, she would freak out. So, I texted her. How is Kayla? Kayla is fine. She went home. I mean, they wouldn't even think of that. So, as you go through these generations of the high touch, high peace, these new kids actually think that was a touch, that she actually talked to me as we did that. And using teamwork, we never worked with PAs, MPs and all that when I trained. It was all for one and one for all. I was one of those every other night in hospital. If it didn't kill you, you know you survived, parametal programs. Not microaggressions, macroaggressions, when I went through. You know, you shouldn't be a surgeon. And just yesterday, if you were on social media, I posted a picture of my operation yesterday and it was four women vascular surgeons. Well, you can't find that. And so, here you are. And the last

thing I will talk about is really looking at the humility. Us academics, we're having to work now with many doctors who aren't faculty, not only to deliver care to the community in Winston Salem, but to teach. And how do you treat a non-faculty versus a faculty. You know, who is doing research and who is seeing patients like we heard yesterday all day. That's a big tension going on because you can't deliver health care with those that do research. You really need doctors who see patients and nurses who see patients every day. And that's a big friction where we are. And the last thing I will tell you is, you know, I get to get a Presidential intern each year. And they finish Wake Forest University and they get to spend a year with me as CEO and Dean. They mainly do financial things, but some want to end up being doctors and I will just tell you about the one last year and the one this year. The one last year, Dom, came to us from Norfolk on a full ride to Wake Forest University, African-American, wonderful young man. And the day before he worked with me, his brother was killed in a drug deal up in Norfolk. He didn't even tell me and his sister has two kids and she's not quite 22. And she's on her own. And where does he get his resilience? You know, I thought I taught him a lot during the year. Boy, did he teach me a lot. I took him to every single one of my meetings to hear about what it would be like if you were the medical student and you were that. He got into seven medical schools, but of course, Wake, we didn't even interview him because he didn't have a Step One score high enough. So, I was really embarrassed about that. We're changing that. So, he's at Cayce this year. And he texted me. Of course he didn't call me. He texted me.

[Laughter]

>> FREISCHLAG: He said there's only three black men in my class. And I said, well, Dom, there's only 402 black men in medical school this year. And so, we've got a real issue with putting, we're doing well with women. Lots of women in medical school, 60%, a little bit of uptick in women of color. But we are failing with men of color. Now my Presidential intern this year is Austin, and she's a white woman from Pennsylvania. But as I've gotten to know her this year, her dad left her mom before she was born. Her dad came back when he got sick when she was about six, and died of cancer. Her mom never got more than a high school education. And then got disabled when she was in high school. So, she is on her own, full ride at Wake Forest. And before I took her into the operating room, she said, well, I can't go to medical school. It's too expensive. And I said, first, I said, do you want to go to med school? So now she has the passion. She wants to go to med school. And going into a post-back program, how do we get Austin through medical school with no resources whatsoever? So, even though she has a great undergrad education. So, part of it is touching these kids really early so you can help them. And then also, understanding their risks in high issues. And so I really want to listen to you, because as you know, we are probably going to start a new med school in Charlotte. Still not quite done

yet, but I think we will. It's what's brand new. So, we can do anything we want. It's going to be a branch of Wake, but we can do anything we want. And I would love everybody's input.

>> SALAMIDO: Good afternoon. It's a real pleasure to be here and see some old friends and make some new ones. A little bit about the Chamber and a little bit about me. And then there's four key areas that we're looking to as we focus on what our role is in transforming health care into a value based system. First of all, I'm a pharmacist. I'm a rarity in the Chamber world. I'm a health professional by education, health professional education, practice in both hospital and community pharmacy for a little bit as I worked my way through graduate school and then got into the association side of things and worked at GlaxoSmithKline for 19 years before joining the Chamber. So I went from the most trusted profession arguably to the least trusted profession, lobbyist. One rung below a used car salesman, I think sometimes, if you listen to the media. So, I have a unique perspective. Just the way you look at the world and the way you attack problems is different because of my health care training. You know, first, do no harm. Use data, diagnose, treat, assess and do it all over again. And that same approach is what I have taken through my career as someone who is in public policy, someone who worked for associations, worked for a major pharmaceutical company and now is working for business, a broad-based business group. So, who's the Chamber? We have a very diverse membership, size, industry, focus, beliefs and everything that you can imagine is in our boardroom of 61 folks. We have some former board members here. Victor, who was on the board I think when I joined or very near then when I joined in 2011. So, whether it's the size of the company, whether it's where they are geographically, they have them in every corner of the state we have a member. We have local Chambers, so we have single proprietary, excuse me, single proprietors and we have Martin Marietta and we have Glaxo and we have Banks. So, we have a very diverse membership on which to draw upon about what is best for North Carolina and what are the key challenges and issues facing our state. That also, while very rich, is also a really delicate balance of a lot of stuff, and so we have to continually engage and we hear a lot from our folks with it. So, how does that fit into health care, and how does that fit into what we think our role and what we feel our role, and for me as the chief executive, what I am told my role is by my members because I work for a membership organization. We got three broach buckets, two of them are intrinsically linked and arguably the third one. The first is education and talent supply, how are we doing to make sure that our young people and our citizens of all ages have the training, the skills, the education, not only to get the jobs of today, but that there is a reliable pipeline for the future with it. We have a business climate, competitive business climate bucket where health care sits. And you can get everything right on your business climate. Taxes, all those things. But if you don't have talent and you don't have an affordable, predictable, value-based health care system, you're at a competitive disadvantage. And if your state is at a competitive disadvantage, that means people are at a competitive disadvantage to

grow jobs and retain jobs and attract jobs. If you have a job, you have healthy communities. If you don't, you don't. So, our looks is holistic there, and we have to do a lot with health care. Health care and education and talent are really very similar. So, one the key roles that we play is becoming a translator for non-health care companies and non-education centered groups and advocacy groups. The education community at large is how do we translate between business entities that are not in that space, not in health care, and those folks that are professionals in that area that re doing really great work. We need a common language, so our role is to try and find that common language to be a translator. And what we found is that strategic supply chain management principles begin to apply and that it's something business understands and it's something health care organizations understand. And the provider community understands. So, we began to talk in those terms, never depersonalizing it, but just trying to find a common language about, we have everyone in the health care supply chain talking, but we're not aligned. We don't have a common goal yet. And to be honest, we were all pointing fingers at each other and saying it's somebody else's fault and we were talking about that briefly when we were standing up. And the time for finger pointing is done. The time for action and leadership is now. And we have a great state and great resources. We have differences geographically, we have differences among patient groups, we have a lot of differences. However, all the skill, all the talent is here. Do we have the will is the fundamental question for us. And so, the Chamber, our role is, A, to be an equal partner in that supply chain. Not only to be in it, but to lead. When you look at the resources that are available to pay for health care, they all come from people that are working or employers, because either through tax dollars, state and federal tax dollars through premiums, through employee contributions, through taxes, it's coming from somebody who's working or an organization that's paying taxes. So, we have to be an equal partner at the table. And arguably have a responsibility to reengage and catalyze change. And to a value based system that helps us have better outcomes at a more predictable price. And I'm not only saying lower. It needs to be lower in some cases. The most important part for business of all sizes of predictability at the end of the day. And if it's more, but someone is getting better but they're not going to engage in the system, that's okay. If it's wasteful, that's not okay. So, we have to have those conversations. And so, our role here is to be an active partner, to lead, to arguably take back our rightful spot that we, as a business community, actually forfeited and ourselves said we don't want to be apart anymore. We're going to hire somebody to do that for us. And even though we're paying the bill, we're going to pay somebody else to manage that piece of our business for us. And when that happened, we forgot that we have a responsibility to drive value, to drive better outcomes and to get predictable costs. So, I am encouraged by the dialogue that's happening in a lot of places. We have a number of folks that are here that are on my board, do I hope I'm doing okay today. I'm a new CEO of about seven weeks with it. We look forward to it. We look forward to those hard discussions, because people of good will can have hard discussions when the goal is clearly

defined and the best interests of the people in the state are there. So, I look forward to the panel today and to being an active part.

>> DOBSON: Thank you so much for allowing me to be here. I currently serve Avery, Mitchell and MacDowell Counties in the western part of the state, a very rural area of the state. And based on my accent, I have been here for 38 years.

[Laughter]

>> DOBSON: Three things really that I see that are critical for North Carolina and what my top priorities are and what I wanted to do in health care in North Carolina, particularly in the General Assembly. One is access to care in underserved areas. As I said, Mitchell County where I represent has 13,000 people and that population is declining every week, every month, every year and if we don't have providers that are willing to go into those underserved areas and those that can make it financially sustainable, we are going to continue to have problems in rural areas of our state. So, access to care is a critical issue, not so much here where we are at today, but a lot of rural areas in our state, we have real problems there. The second is broadband, and in Avery County, which I also represent, has 17,000 people. The high school that I went to, Avery High School, one out of every two students at that high school does not have access to high speed internet in their home. That's unacceptable for North Carolina. We've talked a lot about online high school classes, online course for high school and even junior high students, and I'm like great, sign us up. But let's get high speed internet across North Carolina first. And that leads right directly into the health care piece with telehealth, telemedicine, telepsychiatry, the things that we have to do there. But unless we can have access to high speed internet across the state, we're going to have those challenges in health care. So, that's a second priority that we've got to get to. And I am sure you all, I am sure you've talked a lot about it already but I give you my perspective on it. And that's closing the coverage gap. I want to talk just a second about that. Carolina Cares to me makes sense. Whatever group I am talking to, policy centered or politically centered, I talk a lot about that. Chairman Lambeth, who used to be the CEO of Baptist years ago, has put forth a plan that makes sense to me. And if we can set the ideology aside on both sides, then I think we can get to a better a place. But that continues to be a challenge and part of that challenge or one of my priorities with that is just educating people on what we're trying to do with Carolina Cares outside of our world that everybody knows and everybody talks about every day. When you sit down and explain to people that Medicaid is a 65-35 split in North Carolina, but with this new program with Carolina Cares, it's a 90-10 split. But the 10% does not come from the state government. It comes from an assessment on providers that the providers want because that's less charity care that they have to provide. We all know that, but the outside public doesn't know that. So, that's a

challenge to try to educate people on what we're trying to do there. And then once you do that, people are like, okay, that makes sense. So, I guess that's what I'm trying to get to is educate people and then try to find a way for both people on both sides to set aside your ideology to get to a better place on closing the coverage gap. On the right, just the whole idea of covering more people has to be part of the discussion and on the left there has to be a transaction. It can't be a free handout. It has to be work requirements and it has to be a premium. The political environment that we're working in, outside of that it's not going to work. So, that's a challenge that I have had. And that's something that I have been working on. And that's some of my top three priorities. So, access to care, high speed internet for telehealth, telepsychiatry, telemedicine. And then finding a way to close the coverage gap that makes sense for North Carolina.

>> HOLLOWELL: Well, good afternoon. It's been great to listen to and be a part of the conversation over the last couple of days. I think it's really for me kind of energizing to see how much consensus in the room in terms of kind of where we are now, the shift that we need to make, and where we need to go. So, I think the point of this panel is for us all to think about what's it going to take, what's our role and the role that we each can play in kind of getting to making that turn and getting to where we all what to go. So, in private philanthropy, we think about that all the time. Again, just to kind of put the Duke Endowment in context, we are a private foundation in Charlotte, North Carolina. We funded a number of different areas we fund in North and South Carolina and specifically in Health Care, our broadly stated objective is to improve the health of the people in North and South Carolina. And as we do that, also having an eye on health disparities. So, thinking about how we can improve health and improve health for all. So, when we were originally established in 1924, our founder, James B. Duke, gave us some broad direction as to where we would begin in achieving that objective and for him, it was all about giving us a directive of focusing on access to care. Specifically access to care for vulnerable populations. So, that would include the poor, the uninsured folks that have systemic barriers, racial minorities, people who live in rural communities. So, that's really the heart and soul of the Duke Endowment. It always has been, and I think it always will be an important part of our work. But over the years, Mr. Duke also gave us the latitude to really shift our focus and our strategies as the environment shifted and he was wise enough to understand that it would certainly do that. So, as that is taking place, we have begun to focus more of our resource proportionally into the area that we refer to as promoting health lifestyles. So, really, these are all the non-medical components and things like how can we create good healthy behaviors, physical activity and nutrition. How can we also think more and more about the social drivers as we have been having the conversations today? But really, as we step back and we continue to ask ourselves, how can we really, as a private foundation, have the most impact? We have this fundamental theory of change in terms of, you know, it's not really groundbreaking. But access

to medical care when you need it coupled with the opportunity to lead a healthy lifestyle. Those two things happening simultaneously is going to give you your best chance at being healthy. But when we talk about humility, I think that's something that we have realized at the Duke Endowment. There are certainly limits to what private philanthropy can do. We're considered to be one of the larger private foundations in the Carolinas. The grant-making budget that I have annually in health care is 45 million dollars to invest in the two Carolinas each year. And that seems like a lot of money, and it's a significant amount of money. But when you think about 45 million dollars relative to the health care spending in North and South Carolina, it's north of 165 billion, you realize that really cannot scale or sustain anything. And so, we've got to really rethink our role, but we also don't want to have happen is that we fund some really good programs that achieve some great things and then the grant money runs out and then they go away and maybe we leave things a little bit worse than if we hadn't ventured in that place at all. So, really, our third strategy where we are increasingly focusing more of our energy is around saying, how can we at the Duke Endowment really advance system reform? Because all of the things that we've been talking about over the last couple of days, I think we all realize we've got to make changes to our health care system in order to be able to accomplish all those things. So, for us, that looks like how can we invest in innovation, how can we think about some of the things that we haven't always traditionally thought about as being an important piece of the health care equation? How can we take risks really that others don't have the latitude to take? And it's really a great environment to be in and that our board continuously encourages us to take risks. I have had board members say to me that, Lin, if all the grants that we're making in health care are working out, then something's wrong. Because we're not talking enough risks, so with that unique position, we do need to invest and sort of act as that venture capitalists that may be able to find some promising programs, but we understand that as we do that, we also have to invest and align that with rigorous evaluation. I think Karen DeSalvo talked about kind of the squishy evidence that might exist presently for some good funded programs. And I think she is right. I think what we've begun to think about is that if a lot of the objective in our grant making around advancing system reform is to promote learning. It's to create that sort of real world evidence that's then going to inform the policy conversation and inform everyone thinking about how can we change our payment schedules and our payment methodology. Then we need to invest in establishing the type of evidence that's really going to be able to stand up to that rigorous criticism and appropriate criticism. So, we need more rigorous evaluation but as we think about that also, we also understand that there's a huge sense of urgency. We may not have the time to do randomized clinical trials and repeat that as often and as frequently as we'd like to because those things can take time. So, how can we create real world evidence and do that with a sense of urgency? Because at the end of the day, private foundation funding is not going to really be a sustainable model.

>> BRADLEY: Great, thank you, each of you. So, you talked about system change. I guess I'd like a comment from each of you as what, how would you change the system if you could. And I am going to kind of go down the line again.

>> DOZIER: Okay, thank you for that question. I think I'd still go back to what I start with, is that the systems that are created in this country were created to have some people who have and some who will not. None of us in living today created those systems but we certainly are beneficiaries of them. And so I think doing things like we are doing today and having real conversations and always keeping people at the center and being closely tied to people. So, in this work I have met, I met a woman who is from Western North Carolina. Now, mind you, it's getting to be cold outside now. It's going to be winter. She has pancreatic cancer. She is a young woman. She is younger than me. And she lives in a tent. And she came to meet us because we really work to have authentic relationships with people. And I felt so bad. She came in pain to Raleigh to meet with her lawmakers to show them what someone in the coverage gap who could lose her life because she is unemployed, uninsured and no home. A tent in Western North Carolina. So, I think of those stories and so which is why I hired someone who is a filmmaker to take over what I was trying to do to tell the stories. We met an individual who used duct tape to keep themselves together because they had a break in one of their limbs and was afraid to go to the emergency room. So, there's a breakdown in the system and so, and the final story I will tell you is, you have a mom who is at a very low income because you know if you are on Medicaid as a parent, you are extremely low income. And so but if she gets a better job, which she is qualified for, then there goes her insurance for her children and for herself and then her child. So, if she ages, if she gets too much money, too much income, which is ridiculous, then they are not going to be able to get to keep their Medicaid and she has one that will age out and has diabetes. So, tell me how it makes sense that in the system that we have that we have children worrying about their parents. So, I have met children who have lost their young parents and I have met young adults who have lost their older adult parents because of just the worry. The way the old system was, the bad old days of rescission and preexisting conditions and if you are born with a certain condition as a child, you have a lifetime of worry and anxiety if you are not able to be covered. And this is something the Affordable Care Act did help to fix. It's not perfect. It needs help. We need to expand it and we need to improve upon it and we need to fully implement it through expanding Medicaid but those are the things we should start with is talking to the folks. If you can't tell me a few people that you have talked to or people like I have talked to and I am in Raleigh, then that means, you know, connecting with people and really listening to the stories. We put them on cars, we put them on video and do film showings. So, you can figure out how we connect with them to break down these barriers in access and care. I don’t think it's that hard. I think start with the people.

>> BRADLEY: Great. Thanks.

>> FREISCHLAG: I was in Sacramento when we did expand MediCal in that state. And five and a half million people got insurance that we did know ant UC Davis is a Safety Net Hospital. So we thought we knew the people that were going to get insurance. And so, we were just ready for them to flip over. But we met all these other people because Northern California is about the size of Pennsylvania. It is very rural, also. A lot of migrant farm workers. And we met a lot of people but a lot of them were 60 year old white men who were farmers and ranchers who never went to see a doctor because they were embarrassed about health care and we admitted 40% of them. So for 18 months we went crazy. Hypertension, diabetes along with some urban in Sacramento but mainly rural and then many of the other workers didn't come because they were not citizens. So, we still had disparity because they didn't feel comfortable coming in either because of all the activities about not being legally in the country. It was great because after about a year and a half, we got them into systems, outpatient MediCal is not real good in California, the pay is very low so it is hard to find providers. But using federally qualified health connects, we were. But inpatient, it really helped so we had a good margin in the hospital. So, we could take care of those who had none, but it really had a good impact. So, as I came to this state, there is a great benefit for that. Because we are paying those federal dollars and they are going to California. And because in other states where they are so I totally agree with that that we need that expansion. The other system I will tell you about is Cuba. So, I got to go to Cuba two years ago as part of the American College of Surgeons. And they are smaller, but about the size of our state, 11 million people in Cuba. And they don't have good tertiary and quaternary care. They are not allowed to use anything made in the United States so they don't really have CT scanners and operating rooms. You wouldn't want to be there. They don't have a triage system. So, if you get hit by a car, there is no ambulance from here to Africa. But they have the lowest, lowest infant and maternal mortality rates. And so, if you look at them, they divided Cuba into 11 sections and there is a doctor and nurse in each section. And if you are pregnant, you have to go see them every week. And you just go there, they take your blood pressure, they make sure you are eating. And if you don't go, grandma yells at you. That's the real system is that grandma yells at you. And grandma makes you go there. And so, they're able to have their kids. And they have great primary care. Now, many of their physicians leave the country to practice to Africa to make money. It's, there's a lot, a lot of stuff that isn't good about Cuba and when we got back, you can't go there anymore. But, there is a piece to that. You look at our state, could we do community intervention access like Faith Health. We have a big Faith Health Community through churches where people go. Similar, not so similar about the woman with pain, but those with mental illness. They will go to their church. They trust them and they get into our system through Faith Health or through our free clinic run by our students. And there is one at High Point too, or through your churches. Or, and we're trying. We have a mobile can

now in Winston that's driving around the town to take care of the homeless. In the morning, they are at schools giving vaccinations and treating asthma. And in the afternoon we are seeing people and actually giving them food because as you know during the week, kids have food, but on the weekend not so much. So, I think the community piece is one piece for that initial intervention and then in my big hat as the CEO, the system we need to do is that you get your health care close to home if you are in these small communities in Western North Carolina. Can you get into App Regional? Can we make sure you can be seen there? And if you are too sick, I get you right to Wilkes, or if you are at U Chatham, they connect to us by Telehealth and we will do a consult on what antibiotic you need and do you have pneumonia and we keep you at U Chatham until you think you are too sick to move. And then you come to Winston because my household is full all the time, anyway. So, there is no way you can get in unless you do need heart surgery. And so, can I set up a system that you can stay close to home until you need to go. And that's what you will be seeing us do with our system and even our bigger system and the other systems are doing that, too. So, I think if the system, once you need something to be better, but certainly having places for people to go that grandma will yell at you, whatever that grandma is. And everybody needs a grandma. And if you don't have one, we need to find one that yells at you to go get what you need done.

>> SALAMIDO: Three things that we hear from across the board is, data is the great leveler. And it should be treated as a common good not as a commodity. So, whether that's large business or small business, particularly acute for small business, data is the leveler. Data is what it is, and then you can build solutions and collaborations when you can have good, reliable. It's not perfect but people can agree on what is happening with the data. Small business has a unique challenge in that because of appropriate privacy laws, small businesses don't have access to their health care data. So, we are an employer of 23 people. Our premiums go up double digits, 21, 22, 25% a year for our employees. We pay at the Chamber. But I don't know what's going on. and so, we can't aggregate lives in order to look at a broader group of data so that we don't infringe on anybody's privacy about what is happening, but we, small businesses don't have access to the same tools because they don't have access to data because we can't aggregate lives in this state. Now, we did have an association health plan that is a step but it's in the courts. So, data is the great leveler for us. Think big, but act small. Every community is different, every region is different. We need to have some principles that are data-driven demand-driven approaches. People need to collaborate but act small. One community at a time. That is going to be the key, I think, for substantive, sustainable true transformation into the systems. Principles are going to be equal. But circumstances, comorbidities, things are going to be different in every community, east, west and in the middle. And the last thing that we are asking our members when they look into their communities is, get caught doing something good.

[Laughter]

>> SALAMIDO: When I first joined Glaxo, our CEO was walking around. He used to walk around and talk to folks, and he would say, Gary. I said, well, what can I do to contribute? And he goes, catch someone doing something good. And then tell people about it. So, there is good going on in the state. There are good systems. There is the systems we are looking for, the value-based systems are there. There are examples, there are pilots, let's talk about what is working so that other parts of our communities and our state can say, I want that. And that the people that can drive substantive change can begin to say, okay, now I know what it is and I can talk to somebody. So, get caught doing something good.

>> DOBSON: I want to bring a legislator's position on this or maybe a different approach. And talk about changing the system. I want to talk about changing the political system, because that's where I am at and I've got about 14 months left in the General Assembly. I am running state-wide so my time is coming to an end in the General Assembly. But the brokenness of our politics is something that scares me and worries me going forward. So, I am going to talk about changing the political system for a moment. Defense Secretary Gates, when he was Secretary of Defense, testified that the biggest threat to National Security was not the Taliban, it was not Al Qaida, it was the debt and the gridlock on Capitol Hill. I would argue here in North Carolina, one of the biggest threats to us moving and continuing to move forward in health care is the gridlock at the Capital on West Jones Street at the Governor's Mansion. The most basic function, and I always try to be on the level, good, bad and ugly. The most basic function of government is to pass a budget and have one signed by the governor. We have not done that in North Carolina. This is a policy discussion so I am not going to cast blame other than to say there is plenty of blame to go around for everybody for where we are at in North Carolina. But the brokenness of our politics in North Carolina is something that we have to change and something that we have to fix so that we can continue to make the investments in North Carolina that have to be made. And as a side note, we get to a place where sometimes ideology and partisanship is rewarded but I think in the end most people are hungry for a kind of politics that sets that aside and tries to find a way to come together and tries to find a way for common ground. And that is what I want to try to do with the time that I have left. My friend, Representative Craig Horne, as I was thinking about this, from Union County, Tweeted this out. And this has kind of been the mantra that I have tried to have and something that I want to try to do to get to your question to change the political system. He said, we no longer reach consensus because we no longer debate. We launch personal attacks, we scorch our opponents, and preclude compromise, we brush aside possibility that a person with whom we disagree might be right. We focus on what divides us, seldom acknowledge what unites us. So, that's what I want to try to do with the time that I have left is find a way to bring us together,

unite us so we can move North Carolina forward when it comes to health care. So, that's the kind of political change that I am trying to make.

[Applause]

>> BRADLEY: Great.

>> HOLLOWELL: That truly is an important part of the equation. When I think about systems change, and what's it going to take, unfortunately, I don't think there is any one, like, silver bullet solution. I think we all kind of recognize that. Fundamentally, I think if you want to change health care system or really any system, you change what you pay for and how you pay for it. And then the system will evolve. So, we already have talked in a lot of ways about the waiver program and the Blue Cross Program and other ways that as value based payment comes in, I think we are going to, that creates a driver for a lot of the change that is going to happen, but also thinking more specifically about something that I think will in particular make a difference and something I want to lift up is thinking about the health care work force. A lot of the social drivers and the other things that we have talked about they really have a profound impact on health are areas that may be a bit neglected in terms of the work force supply and the education that we give to that work force. So, thinking about kind of these, what might be quasi clinical positons of a community health worker, of family caregivers that really are the frontlines in the home and they need, we need more of them and we need to think about how we can best equip them. And we have funded a number of community health worker programs, community paramedicine programs. One of the things that they see when they go into the home and they do a lot of this, is hot spotting, where they will look at data and they will figure out who are the patients that really are fragile? We are seeing a lot of recidivism in the hospital system. And they are who, demographically, you might think they would be. They may be elderly folks living in rural communities and when they go into the home, they see a lot of what can't be seen by just looking at the electronic health record. They see what is creating the poor health conditions so they may recognize that, yes, we need a wheelchair ramp. They don't have access to good food. But a really in addition to and maybe above all of those social drivers, one of the things that they, the community health worker or paramedic may come back and speak about that is fundamentally just screaming at them is that oftentimes, it is social isolation. There are people that are sitting home alone all day and they don't have a lot of things, but one of the fundamental things they don't have is just someone to engage with and talk to. And so, that can create kind of a sense of depression. That can create a lot of things that create this downward pull on someone's overall health and some research has just come out lately that said that loneliness really has the health impact equivalent to smoking 15 cigarettes a day. When you compare it to other risk factors. And it is even greater a risk factor than that of

obesity. So, I think as we continue to expand our thinking about what really creates health, we have got to think about the health care work force that may also involve church volunteers, it may involve neighbors, it may be assessing for need on a variety of different fronts that we haven't thought about. And then thinking, how can we engage and think more broadly around what a health care work force looks like and how we can best support them.

>> BRADLEY: Great. So, let me just make a comment of trying to pull a couple of these things together. Gary, one thing you said was talking about how particularly small business is a part of the community. And yet, I am not sure that's who we particularly in health care or even a lot of the health related work that gets done, looks to businesses and particularly small businesses. And so, I think there is an opportunity for us to broaden the definition of community that, and it's not just the public health department and the health system and community based organizations. But it's also business, it's the faith community, and so on. So, to me, trying to think more broadly and then working to collaborate in a multi-stakeholder collaboration is something that we really need to, is to really broaden our theme because health is really not just about any one segment. Julie, I saw you. Yeah.

>> SALAMIDO: Yeah, couldn't agree more. I mean, it is, it affects everybody wherever you work, in every family, and small businesses, when you look at the jobs that are available, every industry segment has a multiplier effect that is an indirect job that is dependent on a larger business. So, it's a symbiotic relationship. If in the healthcare space, which I am most familiar with, but even in others, it was a five to one multiplier effect. So, a direct health care job in the life science area in particular in health care, produced five other jobs that are in various industries, various places. And most of those are small business jobs. That's less than 50 employees, a whole lot more less than 10 with it. And the more rural community the more the community is outside the collar counties of a major metro area, the smaller the businesses tend to be with the exception of one or two perhaps large advanced manufacturing facilities, a health care system, or an agriculture based system, an agribusiness with it. So, a lot of the jobs are in larger businesses. However, a lot of the new jobs, a lot of the jobs that are the most fragile are in small businesses.

>> FREISCHLAG: I was just going to comment, we have innovation quartering in Winston Salem which is trying to stir up more small businesses for our town. Because as you know, the banks just merged and we're going to lose some bank people again. And so, and actually us looking at a new medical school in Charlotte has made everybody anxious that we're leaving Winston Salem. So, we just partnered with the Chamber, which you probably know, with Mark, to offer a product that we've done with the legacy which is called WellQ, which is a way to get access, sort of to an urgent care and also for your chronic conditions for a couple hundred dollars a

year that you can go in, it's right downtown. You make all your appointments online. And you are able to get your care and then also you get to figure out if you don't take care of your diabetes what it will cost you financially. That's where legacy comes in if you don't do it. How many hospitalizations will you have, when will you lose your leg, and actually just like with your kids, if you actually make it about money sometimes they will actually do what you say, even though, because I have tried to look for the app to make patients do what they are supposed to do. And you can't find it, right? And this has actually been good to sort of show the future if you don't care for yourself. So, we have been working. We just announced that this week because the small businesses for all the reasons you said, they can't get the health care and they are scared to get the health care. But the other piece I will tell you in our little towns, too, the health care industry has saved Lexington and Wilkes. If the hospitals went down nobody would have jobs because the manufacturing has gone. So keeping those 70, 80 bed hospital beds full with ancillaries and then adding a few small businesses have been really essential. And the last thing I will say is that the loneliness thing, I really was shaking my head because the other persons that are lonely are the 20 to 35 year olds on their devices. They are the loneliest generation we see. And suicide rates have really escalated in that population as well, too. For all the reasons I was teasing about my son. They don't talk to people. And they don't go out and they stay on those devices and get addicted. And so, that's a loneliness group that we are actually bringing up that feel very comfortable being by themselves and as they get older. So, I think that's another piece is trying to engage that group that really thinks that the device is their friend.

>> BRADLEY: Great. Representative Dobson, I know you talked earlier on our phone conversation about integrated care.

>> DOBSON: Yeah, I will be glad to touch on that. That's a personal one, so I will tell a little bit of a story. So, when we passed managed care in North Carolina in 2015, we basically punted on integrated care. We had physical care but left behavioral health to be operated by the LMEs. That's what we did in North Carolina. Secretary Cohen comes in in '16, and I was in a weird place because the House felt like we were comfortable just focusing on physical health for the first round of managed care and punting on behavioral health for four years. Secretary Cohen come in saying that we needed to have integrated care before we could go live with managed care. And ironically, the Senate, the state Senate, which is seen as the more conservative chamber in North Carolina was also saying we need to integrate care. So, we had the number two at CMS under the Obama administration and the conservative state Senate both saying we needed to have integrated care. And me and those in health care in the House were kind of stuck in between. It didn't make a lot of news stories because it's not a real sexy topic to talk about, but when we integrated care in North Carolina, if we can ever get to Managed Care, we

did pass a bill, House Bill 403, I would encourage you to look at it, that set up a standard plan for most of the Medicaid population that would fall into that standard plan and the managed care companies would focus on both physical and behavioral health for that population. But then for the most vulnerable individuals in North Carolina there would be what's called a tailored plan which would be managed by the local management entities or our behavioral health entities that we have already set up in North Carolina. So I know that's a little bit in the weeds, but one of our most proud moments that we had where we actually do work together was to get to a consensus on integrated care for the Medicaid population. Now, I will throw a caveat in there, as most of you probably know, we don't have a budget in North Carolina, so we can't go forward with managed care. It has been permanently or at least indefinitely delayed so we will continue on fee for service for a good bit of time until we can find some type of consensus on a budget. So, that's a lot. I will just say that I am proud of where we're at on integrated care for the Medicaid population and if we can ever get a budget done, I think that will be to the benefit of providers and to the Medicaid population.

>> BRADLEY: Thanks. So, let's go ahead and see if there are questions from the audience. Or comments.

>> AUDIENCE MEMBER: thank you all for excellent panel. I was struck by the comment made by an earlier speaker about if it's important you need to meet at least once a week. If you were going to start an initiative that was going to meet once a week, what would that thing do to move us in the right direction? Because I think we all agree what needs to be done, we all agree why. And we talked about how we would get to how but it's still a little mushy and I would love to know concretely what we all are going to walk out of here doing differently?

>> SALAMIDO: I'll just jump in. We need to get people together and agree on a common data set so you know what's going on in your community. If you.

>> AUDIENCE MEMBER: Yes.

[Laughter]

>> SALAMIDO: That was a plan.

[Laughter]

>> SALAMIDO: That's step one. Level it. It tends to take the biases out whether they be personal, whether they be disease related, whether they be political. The data says what the

data says. And then people can come together and say how are we going to attack these problems in our community? So, that's, there are people doing that. And so the second thing is, you get that, now what do I do? Well, these three communities over here that had similar problems and here is what they did. So, you go out to someone. You say, I need you to be part of this, and engage. We cannot let perfect be the enemy of good. So, get agreement on data and then just call people up and come together and say what are we going to do about this? Let's not get caught trying to fix everything, let's fix the one thing that the data says is most hurting our community.

>> DOBSON: So, I would take a different approach if I can real quick on that and say what would we agree does not need to be part of this group? And that would be the first thing that I would talk about. And one would be if you are here with simplistic solutions to the complex health problems that we have then you are wasting all of our time. Because there are no simplistic solutions to these complex problems. The second thing I would talk about is saying there is no silver bullet. And it frustrates me in politics to say, if you just do this one thing, then everything will be solved. Or if you just reform CON or if you just do this or if you just do that, then everything is solved in North Carolina. There is no silver bullet and we would have to some to a consensus on that. And finally, when it comes to health care, I think you have to set ideology aside because you come in with a rigid view, you can't solve problems.

>> AUDIENCE MEMBER: Can I follow up on that, would you say that Medicaid is meant to be the silver bullet?

>> DOBSON: I do as someone, that's a great question. I actually had it in my note and didn’t get to talk about it. I do see that false narrative out there. As someone who supports closing the coverage gap through something called Carolina Cares, that is a fear that I have that there is a narrative that says if we just expand Medicaid then all our woes in North Carolina will be solved. And I don’t see that as accurate. So I do see that as a flaw.

>> FREISCHLAG: And I think what we saw in California did solve the inpatient hospital problem. So, it actually paid those bills and those patients didn’t have huge bills when they leave and they didn’t get bankrupt because when they had to have their heart bypassed or needed a kidney, they could do it. But we still had day to day access trouble. We still had people not getting preventative care. We still have people with stigma with mental health disease. When I went to Sacramento there wasn’t one inpatient mental health bed because they closed them all in the recession, so I think that's really true and so mine would be one, I want him to go pass the budget. I think that would be a really good thing. And then we could go forward with Medicaid expansion but we need to continue every week to go out there and keep touching

patient one by one by one in our community whether it's the van, Faith Health, our free clinics, now that we are expanding our region to expand our touch. And those would be those people right on the front line. And I go out and actually do town halls all over, so they touch them there and then they come into our hospital system. And then my job is to teach the students I teach to understand that's where they should be and that's where the first point of health care is.

>> DOZIER: And I will just add that we work a lot with coalition partners so there is no way you can be in Raleigh and really work across the state without having to be connected with people who are in the communities. Which is better anyway, but an example of something that we did in June was we did 22 simultaneous vigils across the state, because we know that's a tactic that people are aware of what that is. There were town halls, press conferences, but a vigil had a different feel for us. And the focus was to honor the lives of the people who died who were uninsured. So, what we did is we started out saying we will do 12 and then other people came to us saying we want to do it. So we created a tool kit. And included everything you need to know about how to do a vigil. Here are some stores of people that are in the community nearby. You may not know. And we sent, we mailed to all the locations everything they needed to do to hold a vigil. Because we can't be in all those places. So, at the end of that, the New York Times actually covered our vigils and did a video op-ed about that. We earned about a million dollars of earned media and we were picked up by dozens of outlets. So, I think that's a way to get awareness out there. We had data and things. And reports on the cone [inaudible] reports about how many people would get coverage in the area, how many people went on the Affordable Care Act and got subsidies, 90 percent of the people in our state get financial help through subsidies surrounding online marketplace. That's an activity that we did to honor the lives of people and then how does that group in that community continue to go forward? And we have continued to reach back with those same folks as new organizers. And new supporters of extended access to people in North Carolina.

>> BRADLEY: Great. So, I want to throw a couple things out. One is it would be interesting for all funders, be it NIH, CDC, philanthropic, the legislature, to require that people meet once a week.

[Laughter]

>> BRADLEY: You know, I think the, now, and we say, that's a waste of time, that's meetings. We have heard that particularly in my life in the business sector. But I think multi-stakeholder collaborations, one, should be another requirement is that you can't do this on your own. And I think part of the meeting piece of that is, who are the right people to be at the table. I think the other piece of it is who is not at the table that ought to be.

>> HOLLOWELL: I think you are making a great point. When we think about all of the alignment that we have been talking about over the last couple of days, it has to take place and it has to take place locally within communities. What we're not really adequately supporting is the infrastructure, locally dedicated, folks have referred to it as a backbone organization. Whatever it looks like, you can't, you need some intentional investment around what it is going to take to bring people together. Somebody has to see that as their full time job. Because especially if you want to get parity amongst all the in terms of influence amongst all the different organizations that need to be represented at the table, you can't just sort of deem one organization as being king of everything. I think we've got to think about how we can intentionally invest in the infrastructure that's going to allow for, I don't know if it's weekly meetings, but regular meetings where folks can come together and really work together.

>> BRADLEY: Are there other questions? Dr. Dzau.

>> DZAU: Well, this is all music in the sense that the stakeholders in this session and all the others I have heard last two weeks to a large extend alignment in their vision. Right. So, as I think about Representative Dobson, you make this issue of political will. The question is, we live in a democracy. And people are elected to represent them at the state or at the federal level. So, what would it take for this voice of all of yours together to be sure that the people here, the alignment and obviously the right vision is for their health. What would it take to get to the level whereby the people who are going to make decisions on behalf of the citizens, if you will, are going to make the right one together in aligned fashion?

>> DOBSON: Yeah, that's the million dollar question, right? What would it take to bring people together politically to actually do the right thing for the people of North Carolina and the United States?

>> DZAU: Yes, but let me just put a finer point on this. Unless I am missing a large group of people in this space, not attending this meeting, and have very negative feelings about this, I am hearing that you all guys are all singing from the same song sheet, right? But if that is the case, isn't that the great voice that you can all put forward together?

>> DOBSON: Well, I hope so. There are different voices at the General Assembly for sure and with the –

>> DZAU: I'm sorry. I don't mean to interrupt up.

>> DOBSON: Yeah.

>> DZAU: I mean the people who actually are doing the work delivering the care who care for the patients who understand how the community. I am not talking about the politicians in this legislation. They are only elected there to present the people. So the people have to hear what we have to say here. What would it take?

>> DOBSON: Okay, I think I see what you are saying now. I think a couple things we have to stay engaged in the process. We have a consensus here. We are in it every day. We work on these things and we know what things we could do to achieve success in North Carolina. I think that relationships matter. I think that knowing your legislators, knowing your congresswomen and men is critical because you can't wait until something's come up in the General Assembly or something's come up in Congress to say, oh, wait, this is a problem. Or oh, wait, this is a good thing for North Carolina. It's easier if those of us in this room, those of us across the state who have a stake in this, provider groups, advocacy groups, whatever, build those relationships on the front end so when the time comes and the lights come on then we can all try to work together because we already have those relationships. A lot of times in my seven years in the General Assembly, I have seen that a bill was introduced or you see something having traction that you either support or let's say you don't support it, there will be people in my office saying, this is bad, this is why you should vote against it. But it's hard for me to have some level of credibility for them to have credibility with me if I didn't already have that relationship. But if someone, either a constituent or a lobbyist or whatever it may be, that we have built a relationship, when they come in my office and they say this is a bad thing for North Carolina, this is a good thing for North Carolina, I think it helps. So, to answer your question, we can't wait until something comes up. We have to build those relationships amongst each other now and also amongst our legislators and our congressmen and women.

>> SALAMIDO: Just to add to that is the best lobbyist is a constituent. People in Raleigh are only there representing an aggregation of voices regardless of who you are representing. The folks back home need the people they go to church with, they see in the grocery store, the people they work with. That's the best lobbyist. So, now that is really difficult because we, as a society, we the people, when you look at, we think a good voter turnout is 33 percent. So in any district regardless of where you fall, 51 percent of 33 percent of the people eligible to determine who goes to the North Carolina General Assembly or any election and it goes down into the teens for local elections as you know. There's a whole lot of people not participating. But expecting a different result. So, the answer to that is one conversation at a time. But if someone says their vote don't matter, they're just wrong. It's not right, it's not the right narrative. And all of us as individual citizens regardless of everything have the obligation to say we the people want this. And 51 percent of 33 percent is not good. So, I don't know how we attack that other than one

conversation at a time. We could start at Thanksgiving next week when we are with family and friends.

[Laughter and talking]

>> SALAMIDO: You know. Or, after the second glass of wine. But that's, that's what we are committed to do.

>> DZAU: Don, may I?

>> BRADLEY: Yeah.

>> DZAU: You know, if you look at all the various surveys and studies on trust in signs and the most recent one is from the Welcome Trust, look at a hundred thousand people over a hundred countries. Health and medicine always come up to very highest. If you look at the funding in NIH despite whatever efforts to cut it, congress supports it. What I am saying to you is you have a collective voice. I mean, I understand you need to one person at a time. But there is a collective voice that need to be heard in my opinion and the collective voice is so strong here the last two days and you trust it. You are the health care providers. You are the people on the front line trying to do the right thing for the people. You are doing research to find cures. All that stuff, tremendous credit, in my opinion. I am just asking the question, whether the public is hearing enough from us. Collectively.

>> FREISCHLAG: I think we need to tell stories. I think we are sort of a humble group. I think the whole state is. We are just so polite unless we try to merge on the freeway and then this state is crazy.

[Laughter]

>> FREISCHLAG: You just merge. But otherwise, really nice to do it. And like, today, there was a baby that was brought into our hospital last night and because we gave them a free car seat when she had the baby, and the baby is one month old. The baby was not injured in a big crash because this car seat was part of a, we just started delivering more babies at our hospital. So, I asked them today to put that story out. All out there, saying this person got a free car seat because they got a free car seat and they had that the baby wasn’t even injured in a major crash. So, I think a story at a time. Same, thank goodness, and then we had the policy that we need the money for these free car seats to make the habit. It may be simple stories. It could be a bone marrow transplant. But this one was a baby that got saved by a program. So. I think lots

of stories to take everywhere. We can post them. We can put them on the internet. Whatever we do. Because the story is what is so valuable. Her stories were just hurt, you know. So, you really want to take whatever your people. We had to ask them permission to put the story out, right, to do it. And there was a piece at HIPPA that sort of hurt us. Because HIPPA was important but I think sometimes it makes us pause in asking can we tell your story. And if we could tell more stories about good and what sadness it is, I think that could be helpful.

>> DOZIER: And I would also add I love doing diverse panels and having different perspectives and because there is alignment like you spoke about. I do think and I will speak because I am also a local elected official. I do totally agree with you about people engaging with you early on about things and so sometimes it is hard for people to know how to find out things. And so, I think communications is what we choose to use but everyone is not on social media. Some people are actually socializing face to face with people. But so in our town we try to put things on the utility bill. You can have that added to it or type it on there. Those are just things. Because everyone is not on the internet all the time. And so, I think in district things are easier for people to get to, to come to town halls or small meetings, whatever it is. I try to do film showings, show that we have a nine minute film of people. We have a farmer who is a veteran who is teaching veterans how to farm because veterans and farmers have high suicide rate. So, telling those stories so people can then share those stories when they are saying I am one of the 13,000 veterans who is the coverage gap. That's what I think we should try to do. Duplicate this but do it in district. In Raleigh it is a little challenging for people to get from Silva but we do have a woman who did come to Raleigh but you've got to support people when they have taken off work to come to Raleigh, too.

>> BRADLEY: I am going to echo that I really enjoy the diversity of the panel and it really, what I always find is when we meet face to face, I come up with new ideas and hopefully other folks are as well, and what gets brought to mind for me is it came from your comment about loneliness. And depression. One of the best ways to mitigate loneliness and depression is to express gratitude. And to find things that we have in common. And I think if we all started with once a day and particularly when we are meeting with someone with whom we don't necessarily agree is, are you grateful about any one thing that his person other than I really like the red top. I mean –

[Laughter]

>> BRADLEY: Substantive. You know. What's the gratitude and what do we have in common? And then once we have something in common, can we work together. Particularly when we

have multiple folks at the table, I think it really moves us forward even more dramatically. So. Any last questions?

>> PHILLIPS: Thanks. Just a quick comment. I am Kaitlin Phillips. I am the managing editor of the North Carolina Medical Journal. I have communicated with several of you. Well, I was going to say, since you brought it up. To Dr. Dzau's comment and question about the collective presence and communication. We are doing an issue of the Journal related to this symposium and most of you will probably have an opportunity to contribute. Everyone who writes also has an opportunity to get several copies, physical copies, and everything goes online. So, the more everyone, you are welcome to share those copies in your communities and ask for extra ones. And share them around. We do a lot of social media outreach so that could be an opportunity. I just wanted to make sure everyone is aware of that and invite everyone to share it when it comes out next year.

>> BRADLEY: Great. So, what do you need from each other? We've got a diverse table. What do you need from each other?

>> DOBSON: I will just say that I don't see myself as a policy expert. I see myself a lot of times as a facilitator of policy from those who are in it every day. So, I welcome input as a legislator. I welcome knowledge. Julie knows far more about the minutiae and nuance of the clinical side and the policy side than I will so I welcome those comments. I welcome those comments from you all because I am in a position to facilitate it, but I don't have all the answers. And the only way I can get and have that discussion is to hear from you all and that helps me to try to be a better legislator.

>> FREISCHLAG: And I would agree, more communication about what we all do and I was a little nervous having a politician on the panel.

[Laughter]

>> FREISCHLAG: But hearing how much you care, just everybody really does care in our positions.

>> DOZIER: And I guess I would like folks to think about some of the points that I raised related to equity and to if you are in a position to be an ally that you can consider how to do that. Reach out to me of there are things that you want to learn or talk about related to that. That's what I would appreciate.

>> BRADLEY: Anyone else? Okay. Well, I think we are right at time. And one, I think we should thank our panel because it's been a great.

[Applause]

>> DZAU: Yeah, I am given the responsibility of closing the meeting in five minutes and I would do that in five minutes. But I would say this last panel is outstanding. And we finished on a very high note, indeed. So, I had a great two days, did you? Yeah.

[Applause]

>> DZAU: It's certainly one of the best in my mind. And you know, when we started this initiative, Mike and myself, Mark and others, we saw the importance of, of course doing something that would be impactful, if you will, for the policymakers and influencers, shall we say, for those who make decisions around health care nationally. Quickly recognizing, of course, about the importance of state and local actions, which is why we are here. And we want to spotlight North Carolina because of everything I know, everything we read, and really the sense of, at the edge of transformation, if you will, of health. And I would say this meeting exceeded all our expectations. We learned about the aspirations, the priorities, the enormous efforts of the people in this room and everyone else. And because there are also lots of lessons learned. And for us, we learned about your successes. We also learned about your failures and challenges. And this is going to be a very helpful to us as we bring back to academy think about how to continue this journey in working with all the other states. And particularly using the lessons learned we have here. How we can inform how other states can move forward. I actually am very optimistic about what I learned on those two days. Despite the setback I think North Carolina has a great future. It's mainly because of the people with shared vision and shared goals. Better health for all. And the whole idea of health beyond health care and whole idea for everyone. You have the ingredients for success. Leadership, and we have been seeing this throughout the entire meeting. The leadership at every single level. Grass top and grass roots. It's about really believing in a better future for our people, present and the future. You have talents, compassion and commitment. That comes across very clear. And now you are developing the tools and the approaches. It's hard work. We heard about the alignment of the payers, the providers who are trying to move in this space and learning the tools and making adjustments. It takes a lot of courage. And it does take political will. And it certainly takes systems change, but as I see it, system is us. And as I said in the last comment, I think that collectively you have much louder voice than you think. So, I agree with Julie and others that narrative counts and certainly in Washington we know narrative always matters. But collectively, you know, you\r voice has to be heard by the citizens. And I think someone talked

about communication at the end. Communication is so important. We learned that at National Academy. We can do a report, make recommendations, and nobody reads it and nobody cares about it. I would argue that with the kind of energy in this room, the people in this room, with all the people, the stakeholders, there ought to be, I guess it was said by Josie or whatever, certainly it was I think the Reverend earlier said you need to meet every other week, well every week. But I think the issue is not meeting. But what are you saying collectively and how do you actually bring it to the public for people really gets it because they trust you. They want your help. In fact, your voice matters. Your collective voice is even greater. The way I look at it is despite the recent setback, I think there is a lot of reason to be optimistic. Just think about this. You are on a journey to look at how to create better health by looking at value-based care and looking at social drivers. Well, you know, you are already on the way there with or without extension of Medicaid. In many ways, you look at your goal of 70% of alternate payment model or value based payment in a period of time, I think it is five years. You will use, you got Blue Cross. I mean, you don't have a lot of lot of commercial payers. So, to a large extent, the payers are aligned and you can continue that journey, in my opinion, and just reaching that goal alone is amazing. It will be the first in the nation, in my opinion. North Carolina is the forefront of health care and health transformation. And as the article in Health Affairs says, no other state is on track to reform payments so much and so fast. I think we need a sense of urgency. I think we say our people need it. If you hear the stories, you know so many people need this change. And people are depending on all of us. Depending on you. We at NAM will be your biggest champion. Who will take these lessons learned, the messages, and bring it back to the rest of the country. We want to work with you and continue to work with you. As we said, we will have a publication at the NC Medicine Journal and cause working with [inaudible] is here still here? Somewhere. And others will be getting back to you. But we look forward to hearing all the things you are doing and whatever we can do to help, please let us know. And thank you for a wonderful two days. Thank you.