Kirsten Bibbins-Domingo

[Music]

Margaret Flinter: Welcome to Conversations on Health Care with Mark Masselli and Margaret Flinter, a show where we speak to the top thought leaders in health innovation, health policy, care delivery and the great minds who are shaping the health care of the future.

This week Mark and Margaret speak with Dr. Kirsten Bibbins-Domingo, Professor of Medicine and Chair of the Department of Epidemiology and Biostatistics at the University of California at San Francisco.

Dr. Bibbins-Domingo is a member of the National Academy of Medicine, where she recently chaired a panel on social determinants of health and issued a comprehensive report on how to address social determinants in health care.

Lori Robertson also checks in, the Managing Editor of FactCheck.org, looks at misstatements spoken about health policy in the public domain, separating the fake from the facts and we end with a bright idea that's improving health and well-being in everyday lives.

If you have comments please e-mail us at chcradio@chcone.com or find us on Facebook, Twitter, or wherever you listen to Podcast and you can also hear us by asking Alexa to play the program Conversations on Health Care.

Now stay tuned for our interview with Dr. Kirsten Bibbins-Domingo from UCSF here on Conversations on Health Care.

Mark Masselli: We're speaking today with Dr. Kirsten Bibbins-Domingo, Professor of Medicine and Chair of the Department of Epidemiology and Biostatistics at the University of California at San Francisco.

She is also inaugural Vice Dean of Population Health and Health Equity and is the co-Founder of the UCSF Center for Vulnerable Populations at Zuckerberg San Francisco General Hospital.

Dr. Bibbins-Domingo is also a member of the National Academy of Medicine, where she recently chaired a panel on social determinants of health. She earned her BS in biochemistry at Princeton, completed her PhD in biochemistry, her medical degree and residency at the University of California, San Francisco. Dr. Bibbins-Domingo, welcome to Conversations on Health Care.

Dr. Kirsten: Thank you very much for having me.

Mark Masselli: Well, Kirsten, we really just admire all of the work that you have done. You recently chaired a panel at the National Academy of Medicine and how best to address the social determinants of health.

I think most of our listeners know the importance that social determinants play in terms of housing and food and transportation and its impact on their health outcomes and your committee drafted a report integrating social care into the delivery of health care moving upstream to improve the nation's health. This is a really wonderful report. I wonder if you could talk a little bit about the impact of a social determinants and how this report offers a roadmap for addressing them.

Dr. Kirsten: As you said, we know that social factors are important for health, where we live, where we work, what we eat; it all determines our behaviors that relate to our health. The report lays out the way in which the health care organizations can think about integrating social care into the delivery of health care, as well as the components that need to be in place in order to do that most effectively.

We described two types of activities that really relate to how social needs can be addressed for individual patients; a health care delivery system might provide assistance, so if they have problems getting to an appointment, to provide vouchers for transportation, maybe using telehealth to avoid transportation needs.

Some of these things are not just doing things one patient at a time, but rather also aligning with community organizations in both alignment and advocacy activities to really change policies and other structures within the communities that might systematically address needs within a community.

Margaret Flinter: I think it's clear that in the community health center world, perhaps the VA world, there are a number of systems, there's always been a keen awareness of the social determinants, right? Then we move from and we ought to do something about them in health care too. We really need to do them, and then of course, the spectrum, and how do we pay for doing this, because in fact, it calls upon the skill sets of often other members of the team than the ones who we are used to paying for.

In this domain, we've really seen quite a bit of change in progress in a relatively short period of time and maybe you could talk a little bit about what you're seeing as the trend, not just in the safety net settings of community health centers in the VA and all throughout the health care system and health plans are beginning to look at how they might incentivize or pay for this. Tell us a little bit about what you're seeing is major trends there?

Dr. Kirsten: Yeah, I think this is really important. A key for this report was starting out with the fact that, we're spending a lot of money for health care, and we're not quite achieving the outcomes we'd like to achieve. Many of the trends in health care are shifting from volume to value,

right?

Margaret Flinter: Right.

Dr. Kirsten: I'm a general internist. I always want to provide the best care for my patients, but I get paid every time they come in to see me, I get paid every time they're in the hospital, shifting to value is, could I be incentivized to make sure that I have my diabetics as best controlled as they can possibly be and actually avoid a hospitalization?

I think that shift from volume to value forces health care delivery systems to think a little bit outside the box. In my example, for diabetics, if we're not achieving the outcomes, do I need to understand whether a patient can pick up their medications? Do they have a pharmacist that's close by? Can they store their insulin in a refrigerator? Or are they homeless? Do they actually have access to healthy foods, if I understand that context, which is important for achieving good outcomes in diabetes that then aligns incentives to thinking about all of those factors that might be important for helping my diabetic patients to have the best control possible.

Mark Masselli: I want to sort of pull the thread, I want to talk a little bit about the leadership within health care organizations that are required. Certainly, we've organized ourselves around team based care, we have the pods, and in the pods will -- might have a community health worker, an MA, certainly a nurse, a nurse practitioner, whole range of people who are coming there.

It really requires re-conceptualization, if you could talk a little bit about that role of leadership and maybe give some guidance and some helpful hints for those who are listening about how you take on this role?

Dr. Kirsten: While we emphasize over and over again, in this report, how important it is for all members of a health care team to be aware of how social factors influence health, there are members or workers who are really expert in addressing social needs. Like social workers, historically have really been at the forefront of this, but also community health workers, gerontologist, other people who might -- whose expertise is really in addressing those social factors, really thinking about our inner-professional teams.

You describing community health centers and the VA that this has really been woven into the fabric of the way health care is delivered there, but it really has to happen in other settings as well. While we're moving from volume to value, it does mean that a recognition that this workforce also needs to be considered essential for health care delivery and be eligible for reimbursement, in many cases for the systems that still exist.

There needs to be sort of the leadership to think about us as teams, as we train as teams and as we think about the teams together. I think that we're in a shifting landscape for how we pay for this all, but I think leaders in health care delivery really need to be articulating, this is the vision of where we're going and then putting these other things in place so that we can get there effectively.

Margaret Flinter: Well, Kirsten, back in 2007, I understand you founded the Center for Vulnerable Populations at Zuckerberg San Francisco General Hospital, where you focused on the special among the special people with complex, co-morbidities and where the line between social, biological behavioral -- because these patients require much more focused care coordination or as our leaders in that program like to say, the kind of really great health care anybody would like to get, because you're thinking about all the services, but in having that center to address the needs of these patients, what have you learned about health outcomes and the difference that all this makes?

Dr. Kirsten: The term vulnerable populations is a little bit heavy controversial. It doesn't capture fully that individuals also have extraordinary resiliencies to deal with adversity, thinking about how multiple vulnerabilities together create the types of challenges that need to be addressed. Not just what happens in the context of health care, but also how they are in the community?

Our center is a research center. It's currently directed by Margot Kushel. I think many of the faculty in the Center for Vulnerable Populations focus on specific high needs populations. Dr. Kushel herself focuses on homeless populations and really understanding as our homeless populations in the Bay Area are aging, their health care needs and particularly magnified by lack of housing.

We have faculty who focus on food and addressing food and security. Then we're very interested in technology. We think that just because we are working in the safety net setting, a lot of times our high-tech solutions actually can allow us to reach more people if they are done with a partnership with the communities we aim to serve. We're mostly focused on research and trying to be at the leading-edge for implementing strategies in clinical settings, in community-based settings, as well as in the policy arena that can allow us to improve the health of our most vulnerable in our area [inaudible 00:09:45].

Mark Masselli: We're speaking today with Dr. Kirsten Bibbins-Domingo, Professor of Medicine and Chair of the Department of Epidemiology and Biostatistics at the University of San Francisco and is co-Founder of the UCSF Center for Vulnerable Populations at San Francisco General Hospital.

Kirsten, let's talk a little bit about this recalibration of the health

system to do a better job in focusing on prevention. You're a biochemist, researcher and a clinician. You're also a big believer in the promise of precision medicine.

I should note that our health center was chosen by the National Institute of Health to be an early participant in the “all of us” study, making sure we have a population in that study that represents “all of us”.

You've been very focused in on diversifying genetic studies. I'm wondering, if you could tell us about some of the important research in cardiovascular health, for example, and how precision medicine techniques are helping you mine that data?

Dr. Kirsten: That's a great question. We live in a really extraordinary time, where we can know so much more about those biological factors that put us at risk for disease. When we combine that information with things that we know about our individual behaviors over time and the environments that we live in are pulling all these strands of data together with the computational power that allows us now to analyze that data. That can really yield new insights for individual patients, but also for groups and communities of patients.

Sometimes, it's hard to know what terms precision medicine means, but they mean to me more data that we can thread together in a way with other types of data to really understand how the best target both prevention and treatments for an individual.

In cardiovascular disease prevention, one of the things that animates me, in particular, is how we start to do prevention earlier in life, that we're not just waiting when somebody is 50 to say, “oh, yeah, take your blood pressure medicines,” but think what could we be doing at the earliest possible stages?

How do we identify those fewer people amongst our adolescents and young adults, who may be at very high risk and I think there's a lot of promise for the types of -- efforts in the “all of us” initiative, in the precision medicine initiative, to really, in the cardiovascular disease space, help us say we have to prevent at all stages in life, but those people who are at high risk at early ages, we want to really double down and make sure that we are aggressive in treating the types of risk factors as they develop.

I also think there's potential there to reach populations we've not always reached that's why I'm really thrilled that “all of us” has made such a concerted effort to increase the diversity. We know -- if we just talk about genetic factors that determine outcomes, most of our genome-wide association studies and our genomic studies are disturbingly lacking in diverse representation, I think [crosstalk].

Yeah is 4% in our genomic studies, 4% represent the African-American, Asian or Latino populations, which is really just unacceptable.

Margaret Flinter: Yeah.

Dr. Kirsten: It's also, because the insights we get in biology come from understanding the heterogeneity that exists. It's actually important for all of us to have diverse participation in all of these studies.

Right now, we live in an environment where data can be integrated in ways that I actually think we can deliver care better in this way, so we use this term precision population health or precision public health, which basically says, a lot of what we're talking about in integrating social care and health care is like, well, can we use our health care data to understand hotspots in the community for diabetes in poor control and understand what is it in that environment?

In the report, we describe efforts to use [inaudible 00:13:41] that people were using real-time, real data on their use of inhalers to understand environmental factors in a particular area and advocate and so I think there's lots of innovative ways we can use real-time data from individuals to improve individual health in the precision medicine initiative, but also population health.

Margaret Flinter: Well, that's wonderful. I think you would be very moved to see the wide range of people of all kinds of backgrounds, ethnicities that are enrolling in this study. It's very powerful exactly what Francis Collins set out to do, but I want to give you a chance to talk about something that I know you're very passionate about and that is our work to train the next-generation of health care providers; and researchers and health care providers who are researchers, which we think is really a sweet spot.

You're at one of the country's best teaching hospitals, University of California, San Francisco. As you think about this work that you're doing to really reshape the American health care system, how are you looking at training this next-generation in a different way?

Dr. Kirsten: One of the things that I think has been extraordinary at UCSF is really how much what we are talking about here today. Social care and health care has really been front and center with how our medical school curriculum is designed.

The first weeks of medical school, our medical students are not in the classroom, but they're actually out in the community and community organizations to really understand the communities in our area, so it's really woven in.

We listen to our students, we have a diverse student body. Three

years ago, when they were protesting Black Lives Matter, they started the movement, White Coats for Black Lives, and a lot of the activism amongst our students actually is reflected in the changes in the curriculum, in the way that we weave together social determinants of health structural factors that impede good health as well as health care. My goal, I want all students to be inquirers. That's really key in our curriculum --

Margaret Flinter: Absolutely.

Dr. Kirsten: -- and we want some subset of those students to actually pursue research careers, right? I think we were really fortunate at -- when I was first starting and then in 2006, when we founded this center that there were people on our campus who basically said that we want to be a full service research organization and so training the next-generation to be outstanding clinicians is important, but also that they become the people who are leading the scholarship in this area as well.

Training in this area is going to be important for all of us. It's not just an awareness of social determinants of health, but also skill building, you all talk about these really powerful inner-professional teams. Turns out, it's actually hard to work in inner-professional teams. To the extent, we can train earlier on how to do that effectively, that really allows us to build a workforce that's not just aware, but actually has the skills to do this.

Then we talk a little bit about this extraordinary data-rich environment that we live in. I want those clinicians who are interested in this area, who think about data science to actually think about how can they apply those data science tools to -- ways to think about data integration across the many sectors that we're talking about. That's where the next wave of discovery and innovation that's going to come.

Mark Masselli: I want to bring the P word into our conversation, not politics, but policy. A good health policy with certainly the Affordable Care Act, but I think you come from an interesting perspective as a clinician, physician, leader. I know you've been very focused in on the great disparities of health outcomes that have occurred, because really, we haven't made good policy. It hasn't been informed by data. Talk to us a little bit about some health policy initiatives that make sense to you?

Dr. Kirsten: This is such an important question. I think the voice of physicians, the voice of researchers, to be able to speak and advocate directly with policymakers is critically important. I work mostly with researchers and we always want to have that objective lens as researchers and separate it from advocacy, but I think being able to disseminate our

findings and work closely with policymakers, so that they can develop evidenced-based policy is critical.

We started a new homelessness initiative that has added [inaudible 00:18:05] taking the evidenced-based and working directly with policymakers, so that they can make more informed policy choices that we know impact the health of the patient set we care the most about.

We have a special initiative that we are launching at UCSF, which we call “evidence to impact,” which is basically how can we get researchers, clinicians to be able to speak on evidence directly with policymakers and partner with them for change, in HIV, in tobacco, in food policies.

When you talk about the national landscape and you ask me what's going to be most important for disparities. One is the extraordinary progress that has been made and just achieving more access to care, because people have insurance coverage and I think -- while we talk about the social determinants of health and they are critical, access to high quality health care is also critical.

I think, in the report, we do talk about the financing models that are really necessary to achieve integration of social care into the delivery of health care. Even within our current structures, we could try many more things and that much more innovation is possible.

I think we always want to be in a policy environment that allows those of us on the ground practicing to try the things that we know is going to be best for our patients. There's so many ways in which the policy environment can really help us to develop our own solutions. I think we're really encouraged by that.

Margaret Flinter: Well, we've been speaking today with Dr. Kirsten Bibbins-Domingo, Professor of Medicine and Chair of the Department of Epidemiology and Biostatistics at UCSF and a member of the National Academy of Medicine, where she has just chaired the panel on social determinants of health.

You can access their report at the nationalacademies.org/SocialCare or follow her work by going to ucsf.edu/kirsten.bibbins-domingo. Kirsten, we want to thank you so much for your leadership, your dedication to research and to practice and for joining us on Conversations on Health Care today.

Dr. Kirsten: Thank you very much. It's been a pleasure.

[Music]

Mark Masselli: At Conversations on Health Care we want our audience to be truly to

know when it comes to the facts about Health Care reform and policy, Lori Robertson is an award winning journalist and Managing Editor of FactCheck.org a non-partisan, non-profit consumer advocate for voters that aim to reduce the level of deception in U.S. politics. Lori, what have you got for us this week?

Lori: Democratic Presidential candidate Beto O'Rourke has faced a backlash from Republicans and some Democrats for his advocacy of a mandatory buyback program for so-called assault weapons; but Senator Chuck Schumer went too far when he said he didn't know of any other Democrats who agree with O'Rourke.

There are at least two democratic senators running for president, who agree with O'Rourke's proposal. All of the leading Democratic presidential candidates support a ban on the sale of certain semi-automatic weapons, but most of the candidates have expressed a preference for either a mandatory or voluntary buyback of such weapons, currently owned by Americans.

Senator Kamala Harris told reporters in New Hampshire that she supports a mandatory buyback program. Senator Cory Booker also supports such a proposal. One other candidate, Julián Castro said, he at least supports a voluntary buyback program, but “I'm willing to hear the arguments on mandatory.”

The NRA says, the AR-15 is “America's most popular rifle.” That rifle was used in several mass shootings, including at schools in Newtown, Connecticut, and Parkland, Florida; estimates on the number of privately-owned assault weapons range from 3.3 million to 16 million.

As for the public an NPR/PBS NewsHour/Marist Poll found 46% said Congress should pass legislation to “create a mandatory buyback program of assault guns.” That's my fact check for this week. I'm Lori Robertson, Managing Editor of FactCheck.org.

Margaret Flinter: FactCheck.org is committed to factual accuracy from the country's major political players and is a project of the Annenberg Public Policy Center at the University of Pennsylvania. If you have a fact that you'd like checked, email us at chcradio.com. We'll have FactCheck.org’s Lori Robertson, check it out for you, here on Conversations on Health Care.

[Music]

Margaret Flinter: Each week Conversation’s highlights a bright idea about how to make wellness a part of our communities and to everyday lives. Louisville, Kentucky has consistently been on a top 20 List of U.S. cities you don't want to live in, if you have a lung disorder, surrounded by the nation's leading rubber manufacturing entities. This is a city that has grappled with pollution. Several years ago, the city's newly hired Chief of

Innovation made a decision to tackle the issue.

Ted Smith: Maybe the risk is concentrated in certain places. If we knew where the risk was concentrated, maybe there will be something we could do about it.

Margaret Flinter: Ted Smith had learned of a tech-enabled smart inhaler that when synced to a person's phone, acted like a GPS for whenever that person needed to use their rescue inhalers.

Ted Smith: To put a GPS transponder on top of your inhaled medication, so that when you took a puff of your medication, it would take a snapshot of what time it was and where you were, and you're capturing it in real time.

Margaret Flinter: Smith dubbed the program AIR Louisville, and tracked 1,100 participants over the course of a year. He said, they were able to chart environmental triggers in any given area, where an asthma attack occurred giving them some great public health epidemiology data.

Ted Smith: One part of the use of the technology is the surveillance, but another part of the technology is the feedback loop to the user, who learns how poorly controlled or not their asthma is. There is an immediate effect people end up getting better control of their respiratory disease.

Margaret Flinter: Reliance on emergency inhalers dropped 78% among participants and the city was now armed with data that could help them devise pollution mitigation strategies.

Ted Smith: With a harder problem, people are exposed to levels of pollution that we are going to have to work hard to figure out how to remove --

Margaret Flinter: A tech enabled smart inhaler that informs public health officials how they might reduce the burden of asthma health costs, while teaching asthma sufferers to better control their disease and stay healthier. Now that's a bright idea.

Mark Masselli: You've been listening to Conversations on Health Care. I'm Mark Masselli.

Margaret Flinter: I'm Margaret Flinter.

Mark Masselli: Peace in health.

Margaret Flinter: Conversations on Health Care is recorded at WESU at Wesleyan University, streaming live at chcradio.com, iTunes or wherever you listen to podcasts. If you have comments, please email us at chcradio@chcone.com or find us on Facebook or Twitter. We love hearing from you. This show is brought to you by the Community Health Center.

Kirsten Bibbins-Domingo