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Marianne O'Hare: 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. Carlos Del Rio Executive Associate Dean at Emory University School of Medicine and Foreign Secretary at the National Academy of Medicine. Dr. Del Rio is a renowned infectious disease thought leader with a long bench of research around HIV AIDS and now COVID, Dr. Del Rio is concerned the next phase of vaccinations, planning of supply, more reluctance to get the vaccine will pose challenges for full containment of COVID-19.

Lori Robertson checks in, the Managing Editor of FactCheck.org, she 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. Now stay tuned for our interview with Dr. Carlos Del Rio here on Conversations on Health Care.

Mark Masselli: We're speaking today with Dr. Carlos Del Rio, Executive Associate Dean of the Emory University School of Medicine, Distinguished Professor at the Division of Infectious Disease and Professor of Global Health at the Rollins School of Public Health.

Margaret Flinter: Dr. Del Rio is Co-Director of the Emory Center for AIDS Research, Co Principal Investigator of the Emory CDC Clinical Trials Unit, and he's also the Foreign Secretary of the National Academy of Medicine. Dr. Del Rio, we welcome you to Conversations on Health Care today.

Dr. Carlos Del Rio: Happy to be with you.

Mark Masselli: Well, that's great. And I think we all know that the U.S. vaccinations are accelerating, but there are some headwinds. We recently learned that the FDA is still analyzing the risk factors with the J&J vaccine. And many are concerned that this might lead to or might add to some vaccine hesitancy. And we've seen in our own health system, a slow number of people were starting to cancel out, as a result, we really welcome your views on the J&J delay and what recommendations you expect to see from the FDA panel moving forward?

Dr. Carlos Del Rio: Well, I think I think there are a couple of issues. Number one, the vaccine induced thrombocytopenia and thrombosis that we're seeing, both first with the AstraZeneca vaccine and now with the J&J vaccine

is interesting, because it's occurring with two adenovirus vector vaccines. And therefore it makes us think that something is related to that vector. It also is very, we're not seeing the similar thing with the mRNA vaccines. The other thing is that it seems to be a side effect that is more common in women and particularly in younger individuals under the age of 50. So what could happen here in the U.S. with J&J is a little bit what happened in Europe with the, you know, the regulatory agency, the European Medicines Agency, which is the FDA equivalent, is they have said, look, this is still a very useful vaccine, the side effect is very uncommon, but in certain groups its more common than others. So don't use this vaccine on people under the age of 50. And, and may be that the Johnson and Johnson decision here in the U.S. is very similar. Will they also say, this is not a vaccine for young women? Maybe it can be okay for men, but not for women. I think we need to see what a little further analysis of the data shows. But I want to emphasize that, you know, for the U.S., we can, you know, it'd be nice to have this vaccine especially J&J because it's a one dose vaccine. But we have plenty of the other vaccines.

I'm more concerned about, about the impact this has globally, because AstraZeneca, in particular, was a very important vaccine globally. And I want to emphasize that this is still a very useful vaccine, it’s still an effective vaccine, we shouldn't discard it, and the side effect is there. But what is very rare, and when you have a pandemic that has killed globally 3 million people. We have to take that into perspective. And we have to say, well, you know, at some point in time, the vaccine benefit outweighs the risk, and that is the case.

Margaret Flinter: Well, Dr. Del Rio, it's almost hard to imagine thinking back over these last few months, that very soon we're going to be in a place where the supply of vaccines probably exceeds the demand for vaccine here in the United States, which is a huge accomplishment, but it would be a better accomplishment if it wasn't in fact, in part due to the fact there's still so much vaccine hesitancy and vaccine resistance here in the United States, and I wonder if you could comment on the degree to which this what seems to be quite entrenched vaccine resistance among a significant portion of the population is going to impact our ability to really bring this pandemic under control in the United States? And are you working on any creative strategies or new strategies that you think might help overcome those pretty substantial pockets of resistance and hesitancy?

Dr. Carlos Del Rio: Well, you know, the problem is that the so called, you know, that what you're mentioning is pockets of resistance are all very different, right? It's almost like, you know, ice creams of different flavors are not one thing in common. And, you know, in African-Americans, for example, there's concerns about the speed of the development of

vaccines. There's also concerns about, you know, mistrust in the healthcare system, and issues of racism and other things that we've seen. Among Hispanics, we're seeing, for example, a lot of people are very concerned that, you know, they're going to get deported if they're undocumented, that this is going to lead to them having to, you know, to reveal that they don't have a social security number, they don't even know if you look at most places, this doesn't even tell you that the vaccine is free in many places, when you sign up. It tells you that, you know, you have to enter your social security number and your insurance number. And that may make some people who aren't insured unlikely to sign up for the vaccine without knowing that it's free. And you don't need to have that.

We're also seeing a significant a hesitancy among rural white evangelical people. And again, you need a different approach. So I think in each community, you really have to get down to the community, you have to trust, you have to work with trusted messengers within that community. So I think there's not one universal approach. I think the other thing we need to do is we also have to do listen to people, and I think this is going to be a labor of love. This is not you know, the people that are rushed to get vaccinated, are vaccinated, they want to get vaccinated. It's the people that, you know, you can take the horse to the water, right, but you can't make it drink it, you have to just take your time, you have to answer people's questions. And what I've learned from doing several forums and meeting with community and meeting with people in healthcare and other places, is people have questions that they want to answer directly. And I would say they have personal questions. Many times, young people or you know, young women in particular are worried about fertility, because they read misinformation that this vaccine impedes your fertility. People talk about, you know, is this going to impact my DNA? What are the long term side effects? So I think you need to answer each one of those questions.

The other issue, is that a big group of the population unvaccinated are those young, you know, between the ages of 20 and 40. And for many of those individuals, they're like, you know, this disease is a nuisance, but it's unlikely to kill me. So why should I get a vaccine, and we need to explain to them that there's still reasons to get vaccinated. Among those reasons is not to transmit to others not to get infected and transmit to others. But also to remind people that, although rare, are dying from COVID, even when you're young, is still a possibility.

Mark Masselli: Well that's really good advice. And, and while we have sort of a local strategy that we have to implement, it's a global pandemic, you know, the U.S. is as lucky as you said, we're, we're vaccine rich, we have ample amounts of Moderna and Pfizer, but other countries are not so fortunate. There's a shortage, a global shortage of vaccines. And this

is against the surge that's happening in India, in Brazil. What if you could just talk about the global supply chain issues and really connect the dots because we can solve the problem here. But if we don't solve it everywhere, this pandemic and its various mutations in the like, will wash up against our shore again.

Dr. Carlos Del Rio: Well, they'll be here, right, because we're all interconnected, and we still – I think it's really important for Americans to understand that the pandemic will not be over until it's over globally, and I think the U.S. has a very important leadership role to play in getting vaccines to the rest of the world. Over the last several years, during the last administration, we really gave up our leadership role in global health, and we have to retake it. Right now, that board is being filled by China, by Russia, which are giving their vaccines and many places in Latin America are actually actively using the vaccines from China and from Russia, and some of those vaccines, particularly I'm concerned about some of the Chinese vaccines may not be as efficacious as some of the other vaccines. In fact, I would rather take the AstraZeneca vaccine, which I think has much higher efficacy or the Johnson and Johnson. But we haven't been there doing that and I think we need to get our vaccines supply to the world and again it's, this is not about charity. This is really about solidarity. But this is really in our best self-interest as Americans because as you say, if we don't control the pandemic in other places around the world, we're not going to be controlling the pandemic here.

Margaret Flinter: Well, again, back here in the United States while we see certainly a lot of variation in terms of control, we are seeing some states that are beginning to feel like they've made the progress, they need to really relax some of their restrictions right here in our own State of Connecticut, that will be happening in the month of May. I'm wondering what your thoughts are on that. I know, there's got to be some apprehensions about relaxing anything, when we're still in the middle of the pandemic. But if a state is doing well, if the majority of their high risk populations are vaccinated, is this the time to allow the restaurants to open and go back to kind of business as usual? And maybe I'll just add on to that, of course, because every day, there's something new, the question has come out about do you need masks when you're outside at all at this point, and maybe you could tackle that for us?

Dr. Carlos Del Rio: You know, they're all really tough questions, and I think like everything in this pandemic, we're entering uncharted territory in which we have about 50% of the population vaccinated, especially the high risk population, and the question is, do you just let the virus run loose? I mean, I worry about what is happening in Michigan, right, where a lot of young people are infected, we had a rapid spread of the B117 variant, which is highly transmissible, and we're seeing ICUs,

hospitals overwhelmed with young people. So I don't want some of us to be, the rest of the country, to be Michigan.

Now, why has Michigan done that way and Florida or other places have not? I frankly don't know. I think it's very hard to understand, and we can make a lot of hypotheses. Some people say, well, in Florida, you're mostly outside versus in Michigan, that is still cold, most people are inside. I don't know. I think there's interesting hypotheses. But the couple of things that I would say is we've learned in this pandemic that super spreader events can happen, and once you have a super spreader event, you have rapidly dissemination. So I think that while you're opening up, I would love to see those likely super spreader events to not happen, or they happen to continue to happen in a masked way. For example, if I was going to go to a concert where 5,000 people are going to attend, I would wear a mask. If I'm going to be out in the park walking with my dog, I don't think I need to wear a mask. I mean, it's – so it's – and that makes it really hard job because it really requires people to sort of assess and evaluate risk in ways that quite frankly, we're not used to doing. I mean, we're not, we normally don't do that. We cross the street. I mean, this morning, I woke up, I got in my car, and every single thing we do, we're not there sitting saying, Well, you know, should I take the freeway, should I take the street because the chances of me dying on the freeway when I'm 70 miles an hour are a lot higher, if I have an accident with the chance of dying when I'm in the street at 35 miles an hour.

I don't make those decisions, risk-benefit decisions, on a regular basis, yet [inaudible 00:13:19] making decisions, and I worry that that people will make the wrong decisions, right and there will be a big event that will become a super spreader event. I think that we need to monitor community transmission, and the key is when you start getting community transmission below 10 cases per 100,000 population. I think I'm a lot more comfortable saying it's time to relax more things than when we say they're still 50 cases per 100,000 population, in which case, I worry about opening things up. So you really need to look at what is your local transmission, and what is your local vaccine coverage, and I think if you take those two things into consideration, you can make better decisions.

Mark Masselli: That's great advice. We're speaking today with Dr. Carlos Del Rio Executive Associate Dean of the Emory School of Medicine. Dr. Del Rio, your research has been focused in on HIV and AIDS. You're collaborating with one of our colleagues here at the Community Health Center, Dr. Marwan Haddad in AIDS research. But according to a report from the Kaiser Family Foundation, we've lost some ground in the fight on AIDS. Talk about the impact the pandemic has had on this and other infectious disease and the challenges and concerns that

you have.

Dr. Carlos Del Rio: Well, I mean, other concerns are not only an infectious disease but are really in everything, right? I mean, we have essentially we went into a stop of care, and many, many places has shifted into what they do. So many places that do non-essential service, and I would say, people see community HIV testing as a non-essential service or community STD testing as a non-essential services, those services have stopped. As a result of that, I think we're doing okay, giving continuous care, and viral -- antiretroviral therapy to people already diagnosed, but we're missing new diagnosis. I think we're not going to see until several years from now the true impact of what the pandemic has done. But I'm worried that our plans to end the HIV epidemic and to really control transmission, which relied a lot, very similar to COVID, relied a lot on a lot of testing, Linkage to Care, treatment, treatments, prevention, I think a lot of those things have been impacted. As a result of that, we're going to see a stalling of this effort. We're seeing the same thing with substance abuse, quite frankly. We're seeing an increase in cases of substance abuse as a result of not having access to buprenorphine to methadone substitution and to many other programs.

So I think overall, the impact of the pandemic goes beyond COVID, right? It goes to really into a variety of different areas. As a result of that we're seeing – when we talk about excess mortality caused by the pandemic, we're not just talking about people that died from COVID, we're talking about excess mortality from other diseases that got impacted as a result of COVID.

Margaret Flinter: Well, Dr. Del Rio, in your long and remarkable and impactful career, you've certainly been witness to the ravages of infectious disease on vulnerable communities and one of the things that you've tried to do is to increase diversity in clinical research trials, which has been lacking over the years. The president has certainly looked to the nation's federally qualified health centers as one vehicle, perhaps for addressing the health equity gap in the United States. I wonder if you'd like to comment on how we might leverage the role and the might of our nation's community health centers, which care for 30 million people to address health inequity, both in health outcomes, but also in inclusion and health research? Is there a role for the Community Health Center movement to play in that area?

Dr. Carlos Del Rio: I clearly think it is. I mean, Community Health Centers have been a very important part of providing care to vulnerable populations. I think one thing that I would love to see is access to care, to become not a – to really be something that everybody has. I mean, we continue to be in a country where your ability to access medical care is dependent on whether you have an employer that provides

insurance, and other things that I think the fact that nobody likes government run health insurance until you get to be 65. And then it somehow everybody loves government run health insurance. We need to understand that access to care is really important. I think this pandemic and others have shown us that. We've learned, for example, in HIV Ryan White transformed the way we do HIV care because you provide access to care that payer buys for self. So we need that I think as the number one. Health equity, we'll start by making sure that everybody has access regardless of their ability to pay, or where they work or what they do.

The second thing is I think that when you talk about research and equity in research, I really think that the only way to do that effectively is to work with the community and to gain the trust of the community because for people to participate in research, they have to trust you. I've learned over time that that trust doesn't happen from one meeting. It happens over time. It happens really from people knowing who you are, what you do, and how what you're doing is benefiting them. I mean, many times I've had research, when I've talked at meetings to community, the question is, why should I do this, and when you – if you cannot answer the question to a participant of why should I do this, then simply you don't have their trust and you don't have the ability to communicate with them.

So Community Health Centers are places where people trust their providers frequently and where they think that it's a safe place, and if you have a trusted place and a safe place, it's a good place to do research.

Mark Masselli: Well, I think that's a great point. We're part of Dr. Carlos, All Of Us Precision Medicine Initiative at the NIH and really gaining trust of vulnerable communities is the North Star and making sure that there's inclusion. We now want to shift over and talk a little bit about the mRNA technology behind Pfizer and Moderna vaccines, seems to hold a lot of promise for potential interventions in cancer and other infectious disease and possibly HIV. I'm wondering if you could talk about the next wave of scientific discovery and anything you're seeing practically now that crosswalks over from both mRNA CRISPR technology that's been in the forefront of many conversations.

Dr. Carlos Del Rio: You know, there were a lot of people very skeptical and didn't really know if the mRNA technology was going to work. I think the success in COVID as a way to deliver an antigen will really be transformative in the field of vaccinology because I mean, I think, flu and other vaccines will become much more sort of plug and play with mRNA technology than they do with the current technology. I mean, you need eggs, you need long time to develop a flu vaccine, so I do think that we will see different vaccines develop. We got to remember that mRNA

technology initially was developed actually and was being tested for vaccines for cancer, for example, for melanoma, and other diseases.

So I think it's a vehicle to deliver an antigen and present it in such a way that produces a good response. And I think this is going to change drug delivery for many other diseases. I do think also that as a result of COVID, we're learning something that I find interesting is how we're looking at research in repurposing drugs and some of those may not be effective. But I think there's a lot of interest in understanding the way you can repurpose drugs to use to treat other diseases. And I think we will see a lot of that happening going forward in which people are going to design. I think the trials like for example, SOLIDARITY or RECOVERY, or other big studies that have been done either by WHO or by the Brits, again are going to transform the way we evaluate medications in diseases.

Margaret Flinter: Well, that is very exciting. We've been speaking today with Dr. Carlos Del Rio, Executive Associate Dean at the Emory University School of Medicine. You can learn more about his research on infectious disease including COVID-19 and HIV by going to vaccines.emory.edu. or follow him on Twitter @CarlosdelRio7. Dr. Del Rio, we want to thank you for your extraordinary and dedicated leadership in tackling the world's great infectious disease challenges, for your commitment to public health and thank you for joining us today on Conversations on Health Care.

Dr. Carlos Del Rio: Delighted to speak with you.

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Mark Masselli: At Conversations on Health Care we want our audience to be truly in the know when it comes to the facts about healthcare reform and policy. Lori Robertson is an award winning journalist and Managing Editor of FactCheck.org, a nonpartisan, nonprofit 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 Robertson: What are the facts behind the pause in the use of the Johnson and Johnson COVID-19 vaccine? On April 13, the CDC and FDA recommended the pause “out of an abundance of caution”, the agency said after six cases of a very rare blood clot among the 7.2 million people who received the J&J vaccine. The other vaccines authorized in the United States by Pfizer-BioNTech and Moderna aren’t affected. More than 180 million doses of those vaccines have been given with no reports of this syndrome. They use a different type of vaccine technology than the J&J vaccine. The six cases are women ages 18 to 48. One woman died and one is in critical condition. They had severe headache, abdominal pain, leg pain, or shortness of breath 6 to 13 days after receiving the J&J shot. While

the cases are very rare if you got the J&J vaccine within the last two weeks and develop those symptoms, contact your doctor.

Peter Marks, Director of the FDA's Center for Biologics Evaluation and Research said in a press conference that the CDC and FDA acted quickly because the usual treatment for blood clots, a drug called heparin "can actually cause tremendous harm or the outcome can be fatal". So the agencies want health care providers to be aware. A CDC advisory committee is reviewing these six cases further. The rare blood clot is called cerebral venous sinus thrombosis or CVST which occurs annually in 2 to 14 people out of 1 million in the general population. The concern however is that these six cases of CVST, which represent less than one in a million of those vaccinated with the J&J vaccine also had low levels of blood platelets. Dr. Paul Offit, Director of the Vaccine Education Center at the Children's Hospital of Philadelphia and a member of an FDA vaccine advisory committee said recommending the pause is a sign the vaccine monitor systems are working, and that the agencies discovered and took action on a "very, very rare side effect post approval".

And 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 e-mail us at www.chcradio.com, we'll have FactCheck.org's Lori Robertson check it out for you here on Conversations on Health Care.

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Margaret Flinter: Each week Conversations highlights a bright idea about how to make wellness a part of our communities and everyday lives. Baltimore, Maryland has one of the highest emergency medical call volumes in the country, and it results in a significant number of patients being taken to the ER for conditions that could have been treated outside of the ER. The University of Maryland Medical Center and the Baltimore City Fire Department teamed up in the hopes of reducing unnecessary ambulance trips and hospitalizations.

Dr. David Marcozzi: How do we all start to address health issues more comprehensively than simply calling 911, being transported to an emergency department when that is not an optimal care for patients nor benefits the system.

Margaret Flinter: They created a new pilot program which pairs doctors and nurses at the hospital level with paramedics in the field bringing medicine right into the patient's home.

Dr. David Marcozzi: A nurse practitioner or physician is partnered up with a paramedic, and we monitor the 911 system and have completely synchronized with that system so that 911 low acuity calls, we augment the Baltimore City EMS system so that we co-dispatch a paramedic and either nurse practitioner or doctor to the scene of low acuity calls, have them logged in at scene through EPIC, ask the patient whether they would like to be treated at scene. If they consent, we then enroll them into our program, register them there just like a mobile urgent care center. We then treat them at scene, discharge them with the same exact paperwork we discharge them from the hospital from the emergency department with prescriptions as needed and then we follow up with them within 24 hours to make sure they got what they need.

Margaret Flinter: Dr. David Marcozzi of the University of Maryland Medical Center says that this mobile integrated healthcare community paramedicine program has a two pronged goal. One, reducing unnecessary trips to the ER by delivering right care at the scene, two, bringing a coordinated paramedicine team including doctors and nurses into the homes of patients being released from the hospital to ensure that their recovery is supported for better outcomes. The pilot also seeks another goal to keep vulnerable patients being released from the hospital healthier with paramedics doing frequent follow ups over a 30 day period to ensure that patients are compliant with their medicines are getting enough to eat and thus greatly reducing the risk of re-hospitalization.

Dr. David Marcozzi: It’s eye opening to once you understand the challenges when we discharge a patient or when patients are seen for low acuity issues people face just at home to navigate the insurance industry, the multiple providers they're supposed to follow up with, the diagnostic testing that they may have to get an MRI, then the follow up back to their primary care, the challenges that individuals face certainly here in Baltimore, and we're exploring, could we do this for longer or is there a better way once we hopefully empower folks to transition to maybe a lower resource intensive setting so that we can kind of transition them to potentially another health support infrastructure for THS Transitional Health Support for the 30 day follow program. Our data demonstrates that the patients who are followed in our program utilize and are admitted to the hospital significantly less and utilize their health care primary care services significantly more. That translates into lower cost to the system from a physician billings construct, from a hospital construct, and oh by the way from an EMF construct because you know what happens? Those patients typically call 911 to get to the hospital.

Margaret Flinger: Dr. Marcozzi estimates that the two year pilot will save the University of Maryland Medical Center at least $4 million, and the fire

department expects to save just under 2 million. But most importantly, he says the patient outcomes are markedly improved. The mobile integrated healthcare community paramedicine program rethinking how paramedicine is deployed in the field, reducing unnecessary emergency room trips, and by the way, making sure that the emergency responders can respond that much more quickly to the true emergencies. Now, that's a bright idea.

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

Margaret Flinter: And I'm Margaret Flinter.

Mark Masselli: Peace and Health

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Marianne O'Hare: Conversations on Health Care is recorded at WESU at Wesleyan University, streaming live at www.chcradio.com, iTunes, or wherever you listen to podcasts. If you have comments, please e-mail us at www.chcradio@chc1.com or find us on Facebook or Twitter. We love hearing from you. This show is brought to you by the Community Health Center.

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