Mark Masselli: This is Conversations on Health Care. I am Mark Masselli.

Margaret Flinter: And I am Margaret Flinter.

Mark Masselli: Margaret, the talk continues at the White House to reach a deal on the debt ceiling as the August 2nd deadline looms large. Both Medicaid and Medicare are in the crosshairs but the details remain murky.

Margaret Flinter: And the movement on the debt ceiling issue seems to be very slow and coming but there have been other steps forward in Washington, one, concerning the Affordable Care Act. From a hardware store on Pennsylvania Avenue, Secretary of Health Kathleen Sebelius announced new and longer way to proposed rules about the health care exchanges, the health insurance exchanges to be more exact, that the states have to have up and running by 2014.

Mark Masselli: They certainly do, and the proposed rules offer guidance to states on how to certify health plans for participation in the exchange and ensure premium stability for plans and enrollees. Two states, Utah and Massachusetts, have been running exchanges for about five years now. But in total, only 12 states have passed exchange laws since Health Reform passed a little over a year ago. I am sure other states will look to Utah and Massachusetts as they begin the process of crafting their own exchanges.

Margaret Flinter: Well, Mark, I bet one happy person hearing that is Governor Herbert of Utah who we had on the show just recently, and you remember he was absolutely adamant that states needed to have the flexibility to create exchanges that were unique and worked for that individual state. So getting these exchanges right is really important because that is where consumers are going to be going. People who currently don't have insurance are going to go there to qualify for insurance and to get those federal discounts and support for their premium.

Mark Masselli: Well, from exchanges to space, many people turn their attention to Florida for the final launch of the space shuttle Atlantis this week. It was the last mission of our country's space shuttle program. And Margaret, this final voyage was really an end of an era.

Margaret Flinter: It was. And you know, reflecting on that, there was another era much in the news recently, and well we can't say that there is an end to the era of HIV/AIDS. We did mark a milestone a few weeks ago with the 30th anniversary of the release of the CDC report that really pointed to the beginning of the AIDS epidemic throughout the entire era. One person has been very much in the forefront as a researcher, scientist, clinician, physician and that's Dr. Anthony Fauci.

Mark Masselli: You are right, Margaret. And it turns out that Anthony Fauci is our guest today, and he is also the Director of the National Institute of Allergy and Infectious Disease and NIH. He has been a key leader in the fight against AIDS for 30 years. He has been at the forefront of this battle since its first reporting five cases of a strange pneumonia in otherwise healthy gay man landed on his desk. Since that time, huge strides have been made in treating HIV/AIDS patients, and I don't think it's too big of a dream to imagine a cure for this horrible epidemic.

Margaret Flinter: Or as I have heard Dr. Fauci say "imagine a world without AIDS." We are so happy Dr. Fauci can join us today to talk about how far we have come in fighting HIV/AIDS both in the U.S. and globally, and what lies ahead for the future. And no matter what the story, you can hear all of our shows on our website Chcradio.com. Subscribe to iTunes to get our show regularly downloaded. Or if you like to hang on to our every word and read a transcript of one of our shows, come visit us at Chcradio.com. And don't forget if you are a social media aficionado, become a fan of Conservations on Facebook and follow us on Twitter.

Mark Masselli: And as always, if you have feedback, email us at Chcradio.com, we would love to hear from you. Before we speak with Dr. Fauci, let's check in with our producer Loren Bonner with Headline News.

Loren Bonner: I am Loren Bonner with this week's Headline News. Democrats and Republicans continue to negotiate a deal on the nation's debt ceiling. While neither party can seem to agree on whether to increase taxes as part of a deal to raise the federal debt ceiling, they can at least agree that Congress has to do something to hold down the rising cost of Medicare. The Health Reform Bill that President Obama signed into law sets up a board that will analyze the causes of Medicare spending increases.

The Independent Payment Advisory Board, or IPAB, gets involved when Medicare's growth for beneficiary exceeds the growth in the GDP per capita plus 1%. IPAB is supposed to recommend to Congress ways to reduce this growth, and what they recommend becomes law unless the House and the Senate each adopts a resolution to block them. Mostly, Republicans oppose the board saying it will ration health care and they want to use IPAB as the next health care reform target. Some Democrats have also begun challenging it though, more than half a dozen have signed on as cosponsors of a bill that would repeal the board.

A new report gives insight for the first time on the connection between a poor person's health and well-being and whether they are insured or not. The new study published by the National Bureau of Economic Research shows that when poor people receive Medicaid, they not only visit a provider more but they also feel less depressed and more financially stable. The debate on providing insurance to the poor is especially relevant right now as cash-strapped states cut

back on Medicaid. Health experts anticipate that the study will continue to shape health care debates in the coming years.

Mark Masselli: Margaret and I are speaking with Dr. Anthony Fauci, Director of the National Institute of Allergy and Infectious Disease at the National Institute of Health and one of the leading AIDS researchers in the world. Welcome, Dr. Fauci

Dr. Anthony Fauci: It's good to be here.

Mark Masselli: Tell me what it means today for a person who receives a diagnosis of HIV, what's in a prognosis and compare that, if you will, to what it meant 30 years ago when the first case of HIV was identified.

Dr. Anthony Fauci: Well, it really is a stark contrast from 30 years ago, and I can remember very clearly in patients that I saw in the very early years in the early 1980s who would come to our hospital and usually by that time, they had advanced disease that the median survivals for those individuals would be measured in several months, somewhere between six and eight months. 30 years later, today, with the drugs that we have used in combination, for example if a 20-year-old comes into the clinic with a newly diagnosed HIV infection and you put that person on appropriate combination therapies that we know have been lifesaving, you can mathematically project that that person will live an additional 55 years. So the difference is just extraordinary between what it was 30 years ago.

Margaret Flinter: And Dr. Fauci, the first decades of your work, of course, focused on what was happening right here in the United States and all across our country. Now of course, a global focus on HIV/AIDS and brining the benefits of the research and the development in the treatments to all countries, especially those with really severely restricted resources, and you have been key to this effort. I know you have been instrumental since President Bush's creation of the President's Emergency Plan for AIDS Relief. Maybe you can share with us, what is the current state of the global effort and maybe both in affluent or developed countries and those that are really undeveloped and lacking in those resources.

Dr. Anthony Fauci: Well, for example, in the developed world, starting there, even though the epidemics are under reasonably good control, they are still extremely serious, and the United States could be a good example. So far, we have had now about 600,000 deaths. There are about 1.1 million people currently infected with HIV, 20% of whom do not know they are infected, and that's a real problem because those are the people who inadvertently, about half to 60% of the new infections are transmitted by people who do not know that they are infected.

We have about 56,000 new infections each year in the United States. That's completely unacceptable in the year 2011 when we know how to prevent the transmission of HIV. So we still have a long way to go in getting prevention modalities, getting into the community, getting people tested and getting them on therapy. In the developing world, particularly in Sub-Saharan Africa, it really still is an extraordinary problem, a disastrous problem. There are worldwide about 34 million people living with HIV infection and about 2.6 million new infections each year. Of the global distribution, about 90% of the infections are in the developing world and about 67% in Sub-Saharan Africa.

What has happened over the last few years, particularly over the last eight years or so, seven or eight years with the President's Emergency Plan for AIDS Relief and the Global Fund, is that individuals in the developing world who had no chance of getting prevention or treatment or care modalities are now having a greater access to that such that now there are about 6.7 million people worldwide on therapy. That's the good news. The **sobering** news is that only really encompasses about 40% of the people who actually need therapy. And for every person we put on therapy, two to three people get newly infected mostly in the developing world. So we have a long way to go. We have come out an enormously long way both in prevention and in treatment but the challenges ahead are still formidable.

Mark Masselli: Dr. Fauci, in responding to epidemic, humanity has the ability both to learn from the past and provide models good and bad for the future. As you look back over the past 30 years' battle in fighting AIDS, aside from the stigma associated with AIDS, were there other issues that got in the way of an effective response to the epidemic? And what have we learned for the next challenge?

Dr. Anthony Fauci: Well, what we have learned is that people do not really appreciate the facts as they unroll. Most of the time, in countries in which there was a problem and is a problem, and they were in a lot of infection that we noted, there was the assumption, "oh, it's not going to be our problem, it's going to be some other country's problem." It started off with "oh, it's only gay man in the United States in the developed world" and then "well, no, not really, there is injection drug uses." And then when it became very apparent to us that this was not a western world disease but it was a disease of the developing world, heterosexual transmissibility is the major modality of transmission worldwide

And it was a lack of appreciation as these things were unfolding that in the disease that sexually transmitted, that's the virus, that can kill you, this is really a very foolish, not prudent at all to believe that a country or a people or a region is going to be exempt from this type of thing. So even though we knew this was really a problem in the early '80s, there wasn't that mass mobilization globally to prevent infection and to educate people about infection. And that's why right now, it's a terrible global problem.

Margaret Flinter: And if I can pick up on some of these threats, I certainly think that stigma and discrimination against persons with AIDS or persons who might have AIDS was so strong in the early days of the epidemic and I think that's gotten much better. But we still face the reality, and I often heat it presented this way that as many as third of infected people in the U.S. aren't aware that they are infected, and that's despite years of recommending first testing for people in risk groups, then recommending routine testing, providers being trained to that. What's getting in the way do you think in the United States, especially where we have access to testing? Is it provider resistance, is it still denial and fear or just really lack of understanding that people are at risk for this infection?

Dr. Anthony Fauci: It's a combination of that because if you look in the United States, the correct number is about 20%, 21% of the 1.1 million people who are infected don't know they are infected. So if you look at the United States which has a population of 12% of people in the United States are African-American, about 50% of the new infections are in the African-American population. These are individuals as a group that have less access to health care, that are living in regions and in places and locations which there is injection drug use. There is all of the health issues that relate to economic deprivation. And now, you are talking broadly as a group, obviously, that you can't take any individual or any particular place and say that this is where everybody is in that category.

But as a group, African-Americans don't have as good access to medical care, to the counseling that you can get for medical care. And also, within the African-American community, there is less of a tolerance of homosexuality, of being a gay person. There is a major stigma in the African-American population, among themselves about gay men and homosexuality, much less so in the white population in the United States. So there is really a double disadvantage as lack of access to a health care system and a considerable amount of stigma that has prevented the access into that group of individuals to get them counsels and get them tested.

In fact, a major effort is going on right now to seek out in those communities that have a higher incidence and prevalence of infection to get to individuals, get them tested and linking them to care because it happens sometimes that you actually get somebody tested but they don't have a health care system to link to so they go ahead and are infected and don't even know it because they never come back for the follow-up result of their tests. So there are many reasons why we still have this problem.

Mark Masselli: This is Conversations on Health Care. Today, we are speaking with Dr. Anthony Fauci, Director of the National Institute of Allergy and Infectious Disease. He has been involved in the fight against HIV/AIDS since its beginning 30 years ago. Now, activism has played a huge role in the fight against HIV and AIDS in this country. Can you tell us a little bit about the role of activism in the

battle against AIDS and what's your relationship been with the activist community and how have they influenced policy in the implementation of science and otherwise?

Dr. Anthony Fauci: Well, in the AIDS story in the United States, the role of activism has been extraordinarily important. It has been very, very positive from the very early days of gaining the attention of the general public of the scientific community, of the regulatory authorities. The activists, and at that time mostly gay activists, played a major role in improving the situation and getting funding for the research endeavor, in getting clinical trials to be designed, to be user friendly so that people can more easily get into the trial, to loosen up and make more flexible the regulatory system, to approve drugs more rapidly, particularly when you have what was then a uniformly fatal disease which now thankfully with the drugs that we have, that's not the case. So the role and the impact of activism has been extremely positive.

I developed early on in the '80s a very good relationship with the activists because I took the time early on to, despite their confrontation, despite the fact that they were very iconoclastic and disruptive to gain attention appropriately so, if you listen to what they were saying, it made perfect sense. If you read what they wrote, it made perfect sense. So very early on in the '80s, I developed a relationship, a collaborative relationship with the activist community to the point where they are now a major part of our advisory groups, our ad-hoc working groups, our councils. They are involved at every level of the AIDS endeavor in the scientific regulatory and otherwise. So it's really a classic example of the important, positive impact of activism on a very important disease like HIV/AIDS.

Margaret Flinter: And Dr. Fauci, along with that activism, certainly the development of effective drug treatment has been such a game changer but still very hard to get the drugs distributed and taken correctly in areas where there is limited infrastructure. We read and talk a lot with people who are involved in new technologies, particularly using mobile health technology overseas, particularly Sub-Saharan Africa and remind people about treatment, also go to trained local health workers to give advice and consult to local health workers. What are you seeing in the effectiveness of these innovations globally? Is this something that's really going to help us in the worldwide fight against AIDS?

Dr. Anthony Fauci: It's working, it's actually working. There was an incorrect presumption early on that you couldn't get people in the developing world, particularly Sub-Saharan Africa, to take their medications every day. You couldn't get them to come in and get tested or followed up. And that has proven to be absolutely false and incorrect because right now, particularly with the President's Emergency Plan for AIDS Relief and the Global Fund and the Gates Foundation and other groups, they are right there in the trenches delivering prevention treatment and care in the developing world, it is doable and it is much more successful than people had assumed incorrectly.

Mark Masselli: Dr. Fauci, I want you to pull the thread for us a little. Could you paint us a picture of the best and worst case scenarios of the progress of the HIV disease over the next 10 years. What would it look like and what would be some of the key turning points?

Dr. Anthony Fauci: Well, it's interesting that you ask that question because we are at a critical point right now. There has been a recent study, literally just a few weeks ago, that showed that if you treat the infected partner of a couple in which one person was infected with HIV and the other was uninfected, and you treated the infected person for their infection earlier rather than later, in other words earlier than what the regular guidelines are, that not only is good for the patients who is infected but you have a major positive impact in preventing that person from transmitting the infection to their uninfected partner. It is what we call Treatment as Prevention.

The reason that's important is that there is a big push now globally to both prevent infection and treat infection. There is limited resources. We have now, at our disposal, all of the capabilities to have a major, major impact on slowing down and ultimately ending the AIDS pandemic. The big game changer obviously will be when we have a vaccine which we don't have right now. But even without a vaccine, we can have a major impact on slowing down this epidemic.

The issue is it's very, very much demanding on resources and although billions and billions of dollars are put in, now with the constraints economically, globally, there isn't enough resources to meet the need and the demand. And that's exactly what is the challenge that we are facing with. In fact, we had a big important high-level meeting at the United Nations a couple of weeks ago in which this particular issue was discussed in great detail. Now is the time if you invest billions now more than we are doing, you will save many billions years from now by preventing infection, by treating people and giving them access to prevention modalities.

So when you talk about best and worst case scenarios, the best case scenario is if we get the resources and utilize them now, we can really turn around the epidemic. The worst case scenario is if we don't do that and 2.6 million people continue to get infected each year, so that the burden and the needs of treatment will accelerate rather than decrease over the next few years. That's the worst case scenario.

Margaret Flinter: Today, we have been speaking with Dr. Anthony Fauci, Director of the National Institute of Allergy and Infectious Diseases at the National Institutes of Health. He has been at the frontline of the fight against HIV/AIDS since it began just over 30 years ago. Dr. Fauci, thank you so much for joining us today on Conversations.

Dr. Anthony Fauci: You are quite welcome. It's my pleasure.

Mark Masselli: Each week, Conversations highlights a bright idea about how to make wellness a part of our communities into everyday lives.

This week's bright idea focuses on song, something at the heart of all cultures and a powerful tool that can be used to convey crucial health care information. In the west, we receive the majority of our health information in writing. But in many third world countries where the illiteracy rate is high, health officials and community organizers are responding with something most anybody can understand, song.

In Cambodia, for example, many wells and rivers are contaminated. A group called Resource Development International is teaching locals about water safety with karaoke videos. Trucks carrying karaoke equipment arrive in villages where adults and children gather to sing along to videos. In this song, they are singing about arsenic poisoning in the well.

(Song)

The lyrics are saying that the water educator has come to test all the wells for arsenic in the village. If the well is painted green, that means that the water is safe to drink. But if the well is painted red, that means it's contaminated with arsenic and should not be used for drinking.

In Mali where more than 800,000 people are infected with malaria, a song about prevention sung by local musicians has been playing on the radio. The song urges people to use insecticide-treated nets. After the campaign ended in 2007, a survey found that 81% of all households had nets as opposed to 29% just a year earlier.

Singers in Western India have been using street theater to educate mothers about immunization, breast feeding and newborn care. In these song lyrics, the message is about the power and strength of breast feeding. Specifically, they are saying breast feeding protects child from disease and should be done until the child is two years old.

(Song)

The project began in 2004, and after the first five years, researchers found that immunization of children in Western India ages 12 months to 23 months rose from 48% to 78%. Not only a song way to get a message of across but throughout history, it is proven to be an effective way to learn and retain information. Singing public health care messages to save lives in developing countries, now that's a bright idea.

Margaret Flinter: This is Conversations on Health Care. I am Margaret Flinter.

Mark Masselli: And I am Mark Masselli. Peace and health.

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