

Clinical Education Initiative Support@ceitraining.org

ENDING THE HIV EPIDEMIC BY 2020: ARE WE ON TRACK?

Demetre C. Daskalakis, MD, MPH Deputy Commissioner, Disease Control New York City Department of Health and Mental Hygiene New York, NY

2/13/2018



Ending the HIV Epidemic by 2020: Are We on Track? [video transcript]

[00:00:00] Welcome to Physicians Research Network. I'm Jim Braun the course director of the monthly meetings of PRN in New York City since their beginning in 1990 PRN has been committed to enhancing the skills of our members in the diagnosis, management, and prevention of HIV disease as well as its coinfections and complications. We hope this recording of the presentation by Demetre Daskalakis, 'Ending the HIV Epidemic by 2020: Are We on Track?' will be helpful to you in your daily practice and invite you to join us in New York City for our live meetings in the future. PRN as a not for profit organization dedicated to peer support and education for physicians, nurse practitioners, and physician assistants and membership is open to all interested clinicians nationwide at our website, PRN.org. And now, allow me to introduce Demetre Daskalakis, Deputy Commissioner of Disease Control at the New York City Department of Health and Mental Hygiene in New York City.

[00:00:57] Good evening everybody, hello. So today as you heard we're going to talk a little bit about ending the HIV epidemic by 2020 and asking the question, are we on track? And so I sort of go backward a bit to the way that I'd like to start this talk, which is really the idea that we have in New York State a recipe to end the epidemic.

[00:01:17] And that recipe starts with science, and really the science is focused on multiple ways that we can prevent HIV. One very consistent way that has worked historically is condoms. We continue to distribute thirty seven point five million male condoms throughout New York City a year. We calculate we could cover the Empire State Building a couple of times. We have all sorts of sizes. And I think we're just releasing a new condom on February 14th. You all think it's Valentine's Day, it's really world Condom Day, just in case. And so there will be a new art condom, so take a look. So we've got condoms. They're an important part of our strategy.

[00:01:58] But we know that some people don't use condoms, and for people who are living with HIV we know that viral suppression means that people don't transmit the virus. So U=U. New York City and New York state are the first city and state in the U.S. to sign on to this, so it's really great. And then we also know that for people who are not living with HIV, but may not be able to use condoms 100 percent of the time, they potentially are candidates for pre and post exposure prophylaxis. So we have the technology, science is the first ingredient in this recipe.

[00:02:29] Now the second ingredient is community and so for those of you who work in science, you know that very often things that are innovations like to sit on a shelf for a very long time. Now our community in New York City and New York state said 'you have all of these innovations that make them work and make them work faster.' And so through a lot of community activation and activism, that really harkens back to the days of what happened in the 80s and 90s. That sort of is really where Ending



the epidemic began and then moved into this environment where despite not having a vaccine, we have the science and now the community backing to make it happen. It lands on fertile ground of political will. So that's the third ingredient necessary to ending an epidemic. And this is a picture of our governor announcing that New York state would be the first to end the epidemic of HIV. This was 2014 at Gay Pride.

[00:03:21] So what happens when this all comes together is that effort is motivated, science, community, political will come together. And for us what that meant was that we in New York state generated a really important document, which is as I like to call the HIV tablets from on high, the ending the epidemic blueprint. And that blueprint is really based on science, community input, all sorts of community both upstate and here. And ultimately New Yorkers all came together who were on that task force and said this is our path forward.

[00:03:53] And so the governor is a really smart man, but he had smart scientists working with them who knew HIV better. And when the idea of ending the epidemic came up, the vision really was that it had to be backed up with at least something of a model. And the model really was that we need to decrease the number of new HIV infections rapidly to an inflection point where fewer people are entering the system than exiting the system, but it can't be because of increased AIDS deaths. So AIDS that have to go down as well. And so the effect of that is that we have this idea that if you hit this inflection point, eventually over time the prevalence of HIV infection will go down. So you're not adding to the story, you're just seeing the story slowly extinguished. Now the prevalence may not be extinguished tomorrow because we're doing a great job of keeping people living with HIV, that's great. Good job everybody.

[00:04:43] So it may take longer but the bottom line is, fewer people entering the system at this inflection point, our goal be 2020 is critical. Now for the state, that number is 750 new infections or fewer by 2020 to be able to achieve sort of the vision of this of this bending the curve. Now like I said, the governor is smart but he had smart scientists and other clinicians. Charles Gonzalez from the states right there probably had something to do with the theory behind this. And the governor said that there are three things that we have to do to end the epidemic, and at least two of them a while back we'd already been doing pretty well. So identify people with HIV who are being undiagnosed and link them to health. That's like one of the cornerstones of HIV, so test more and treat more aggressively. If you find people who have HIV, start them on medicines as fast as you can to maximize viral suppression so they stay healthy and prevent further transmission. And then finally what was pretty seismic in 2014 was now that we have this technology, pre-exposure prophylaxis to prevent HIV acquisition in HIV negative folk, don't just sit there and stare at it. Make it happen in the jurisdiction and make it happen quickly.



[00:05:50] And so that is sort of the marching order that led to the task force coming up with this document. And my favorite thing to remind people is that we went to Albany several times, it was a lovely winter trip over and over again. Actually we didn't even make it to Albany, it was in Troy which I thought was Albany for a while because I'd never been there. But anyway we were up in Troy, New York and ultimately what happened was that everybody after a lot of conversation had unanimous agreement that these were the marching orders that we were going to use to make a change. I'll tell you people look at that and say 'oh that's nice, it's a document.' I use it at least once a week still. To say ' ah we can't really do that because look.' This is what the state and the City and everyone came together to agree upon. So when there's challenges that happen from other sort of folks in government, we actually have a really nice document that we can point to and say 'look we're on the right track.'.

[00:06:41] Now, when that document came out it was actually accepted by the governor in April 2015. A few months later, our mayor said 'well this is great, now New York City is going to be the first jurisdiction to actually put money behind an ending the epidemic strategy.' So a lot of cities like San Francisco say they're going to end an epidemic, but they actually have no new funding to do it. So our mayor actually gave us, for public health, 24 million dollars to actually motivate some new programming.

[00:07:13] And so when that happened in December 2015, we actually activated our Department of Health the way we would during a public health crisis. Why? Because HIV is a public health crisis still. And now we had to motivate effort to move things quickly. So you remember that the CDC estimates that one in 69 New Yorkers could potentially get HIV sometime in their lifetime. So we approximate the South pretty well. So really what we did was we turned on our emergency response system like we did for Zika and Ebola and meningitis and flu sometimes and all of that, and really went from 'here is 24 million dollars' to within a year at least implementing the majority of the programming. We hired over 100 people, over 60 contracts regenerated. For those of you who ever touched government, so it's very similar to academia if that's where you are, it was a miracle that it all moved so quickly.

[00:08:04] And so there are a couple of important highlights in some of our new surveillance reports, which you can get online that are really exciting and really demonstrate that even the thought of motivating effort to end the epidemic has already changed the story of HIV in New York. Now I'll remind you something about surveillance, so you'll note that I'm giving you annual surveillance from 2016. So what that means is, this is surveillance with ending the epidemic program barely starting. We have not even seen surveillance that includes full blossom of this programming. So even before this just by the fact that we did things to motivate PrEP and initiate treatment and move other things faster, a couple of really important things have happened.

[00:08:52] So the first is that we have historic decline in new diagnoses in HIV in New York City. There's an 8.6 decline in one year. What really ends up being some of our strongest evidence from the



perspective of pre-exposure prophylaxis is that for the first time since HIV reporting began in New York in 2001, new HIV diagnoses among MSM reached a statistically significant low in 2016. So it looks like it's not just like a little trend, we are seeing what is like the biggest drop. In fact, it was of almost 15 percent decline in one year. Now we'll go into this in a second, condom use being about equal and viral suppression going up by about 2 percent per year not like some drastic increase, the only thing the changed in the jurisdiction between 2015 and 2016 is that in our surveillance, our surveys, we saw that PrEP coverage in men who have sex with men went from around 7 percent to 30 percent. And so it is a little bit of a hypothesis, I can't 100 percent prove it, but that's the only thing that changed in the system. Which is that we saw PrEP really blossom and that really is a lot both on that sort of amazing work of New York State as well as what we did in New York City. So the other piece that's important is our viral suppression has gone to 76 percent of total estimated people living with HIV and in fact about 85 percent of people living with HIV in care were virally suppressed in 2016. That number is going up every year, it's really critical given that U=U. And when you put two things together, PrEP and that, we have a shot at actually achieving our 2020 goal.

[00:10:28] And so this is what the epidemic looks like looking at surveillance. And so a quick surveillance 101, we get the lab reports of all people living with HIV in our jurisdiction. So if you order a viral load in your practice, you get it, New York State gets it, and eventually we get it in surveillance. And so we can we can tell who's newly diagnosed, we can tell if people are virally suppressed, and what you'll see is that this new HIV diagnosis line is starting to get out quickly. And what is sort of important from the perspective of historical views of the epidemic is that we've added this line, which is new, that the FDA approved PrEP and we actually made it a milestone. Most of the other milestones have to do with testing and treatment. So it's really exciting that we have like actually efficacious intervention on that map as well. So the new diagnoses are going down and the good news is that that is both fueled by PrEP and also by the amazingly heroic New Yorkers who are maintaining viral suppression. Thanks to your hard work with them as well.

[00:11:32] Now this is a little, this is like the nerd moment, you have to look really hard to be able to see this. This shows multiple populations and really the trends between 2001 and 2016. And what's important is that you're seeing more and more of them get into statistical significant decline. You can see the trend in MSM, and so that's a nice downward deflection. There are some groups that are not seeing a downward deflection. So generally speaking when you see this sort of pattern, where it looks like a little funny sign or cosine wave, that population is small so there's like fluctuation. Now that's transgender people, and so what you'll see is that's not really going down. Remember that the denominator is really small, so the number of new cases is not very big but it's a significant number of folks who are getting HIV. You'll also see that with the Asian, Pacific Islander population that it's really not going down, that it's sort of vacillating.



[00:12:29] So when you actually look at our new diagnoses, this is the number like I said. 2279 and you'll see that the majority are still male. This bar female, we need to sort of unpack that for you a little bit because there's a couple of things about it. 91 percent are black and Latina, so it would be really unfortunate if in a few years we stand up here and say we've had no cases in white or Asian women and all the cases are black and Latina women. But at this point unless we sort of accelerate prevention in those populations, it's not impossible. Also we had a 5 percent increase in new diagnoses among women. A little bit older, again mainly black or Latina. So hold on tight for March, because you're going to see a barrage of PrEP for women. So a brand new take on how to promote pre-exposure prophylaxis. So there's a lot of pride going into that we're psyched to get that out, along with some very clear guidance for providers as well as resources for what to do.

[00:13:27] You'll see that age continues to be a disparity. So 20 to 29 year olds are overrepresented in the HIV epidemic. Thankfully New York State has made a significant change in regulations. HIV is now an STD type B, shocking, and that means that adolescents are able to consent for both treatment and prevention without parental consent. Yipee. So like we actually have a chance at launching pre-exposure prophylaxis better than we have in the past and also treatment. MSM represent the majority of new diagnoses still. I told you about that transgender bar and then also folks who live in high poverty areas are overrepresented in the epidemic. So when you're looking at ending an epidemic, as Dr. Bassett who is our city commissioner says the best way to to address disparity is to end an epidemic. So there are no new infections because that's the great equalizer. So the goal of getting to a point where we don't have new infections is really important because it addresses a lot of the issues, pretty much by eliminating the possibility of transmission. So we're getting there, we're not getting to zero yet but we I think are on target for the end of the epidemic from the perspective of our numbers.

[00:14:40] Now one of the things that we also show is incidence. So you can see what's going on with new diagnoses in estimated incident infections. So we don't see a lot of movement on incidence, the other piece of this is like the assay is a little bit questionable. I think that's the other part and this is about to change the way it's measured. So we're going to have a whole new universe of figuring out what this means, but we hope that with increasing PrEP uptake, that incidence starts to also go down over time. So we haven't seen it yet but the good news is new diagnoses are definitely going in the right direction.

[00:15:16] When you look at death, there's a lot of focus on mortality among people living with HIV. You'll see something really important that 2008 was a big year where HIV related deaths actually dipped below non-HIV related. So that's good news and also a challenge. I like to say I think I convinced Charles King of this, that you cannot end the epidemic of HIV without acknowledging that tobacco is killing people. And so we have a lot of work to end smoking, to be able to sort of say that we can address mortality. Because even though we're doing great with HIV related mortality, that other line is looking a little flat to us. And so there's a lot of work to do.



[00:15:56] Now we have an interesting visualization that we did this year for the first time, which really shows the trends and underlying cause of death. Now of course the data are limited, we're using stuff from vital statistics, that means what's on people's death certificates and what that intern at 2 a.m. said. But what you can see is that HIV deaths are getting lighter and lighter and lighter, while cardiovascular disease, cancer, infectious diseases footnote that is Hep-C, and other causes, external causes like drug overdose and suicide continue to sort of represent significant challenges to our desire to address HIV mortality. So though the HIV bar is looking better and better, we have a lot of work to do for other disease prevention especially as we see this population aging. So it's just an important message embedded within the ending the epidemic vision.

[00:16:47] OK so that's the background of HIV in the jurisdiction, a little bit of the story of ending the epidemic and so you know New York City tends to want to do their own thing. And so when the governor's plan came out, we sat down and said 'so what are we going to do here? How are we going to implement this vision to go from a three pronged plan from a blueprint, into what we can do here with that generous funding that we got from the De Blasio administration?' And so the first thing that we wanted to do was work on our sexual health clinics, they used to be called STD clinics. I hope you're all aware there are no more STDs clinics in New York City, they sexual health. And I think it's, I can't remember which county, someone already did it, a couple of counties are chaning to sexual health in New York State as well. So our first goal was to make them destination clinics for sexual health services. So rather than places that you had to go because of a drip or a sore, we wanted to make it an exciting place where you could go to pursue sexual health services and if you're going to do that there you may as well make them really efficient hubs. Probably the most efficient hubs for HIV treatment and prevention that I've heard of, I think at least in... maybe the world. So we're doing a pretty good job with that. So that's really the vision, like make the sexual health environment own HIV in a way they never have before since they are the frontline for many of our new diagnoses.

[00:18:07] We also wanted to launch PrEP better than we had, and repair the nPEP delivery system. So for anyone who's prescribed PEP you know that it's terrible. It's harder than PrEP and it's fraught with complications including the urgent care aspects, insurance, et cetera. So really how do you make it better to actually make it an efficient delivery system? We wanted to think of new ways to support priority populations. So our funding streams from HRSA and CDC are limited, we can't do all the exciting stuff to sort of build organizational capacity, so we were looking at ending the epidemic funding to specifically do that. We needed to get our New York City viral suppression from good to excellent so 74 to 76 percent is good, but we want to see it jump up not just sort of creep up. And then finally, it's really important for us to make the point that in a universe where U=U and people with PrEP don't get infected with HIV, the difference between a positive person and a negative person is kind of becoming irrelevant. And so it's important for us I think to create a stigma response, which is to really look at New York City as a status neutral space versus one that is a polarity positive and negative. So I think we're



getting there especially since our language is now being used by a lot of jurisdictions, a sort of status neutral approach. Including the CDC that mentioned it in I think in a couple of their RFAs.

[00:19:26] So this is truly the thing that I think we've done the best so far in ending the epidemic, which is changing the sexual health clinics. Changing STD from a scary place to a place people want to go. And also making it a more efficient place for HIV treatment and prevention. Now this is in the background of really rising STI rates throughout the cities, so you'll see increases in syphilis, latent syphilis, gonorrhea, and chlamydia. Compared to the U.S. we're winning on primary and secondary syphilis and latent syphilis, we're lagging a bit behind gonorrhea, and everybody in the world has chlamydia. And so we have a lot of work to do to jive the idea of HIV prevention with the idea of STD control. Please note my language. So better control of STDs may be the right strategy, and so we're working really hard to harmonize better and I think have some interesting ideas.

[00:20:22] This also tells you a little bit about why the sexual health clinics are important, there are only eight of them. There are a lot of other places that do STI testing and what you can see is that they actually diagnose about 9 percent of the new HIV and about 17 percent of all the acute HIV in the city. Only eight clinics. They don't diagnose a lot of chlamydia, but as 8 clinics they do a bunch but you'll see primary and secondary syphilis are pretty well represented there, as is latent. So they are doing a lot of work in identifying cases.

[00:20:57] Now what's really important to think about is that our data from the clinics really tell you is that they are the right place to do this work. So an MSM historically walking into one of our STD clinics before they were sexual health clinics, just being there meant that one in 42 of them would seroconvert within the year. So being sort of at risk and walking in, you know we had these people right under our nose and we didn't really have a lot to offer them other than 'here's your gonorrhea, chlamydia treatment. See you later, get retested soon.' One in 20 MSM diagnosed with primary or secondary syphilis in New York City would seroconvert within a year and one in 15 diagnosed with ano-genital gonorrhea or chlamydia at one of our clinics historically seroconverted within the year. So imagine the shift, so you get diagnosed with rectal gonorrhea. 'Here's your ceftriaxone, here's you azithromycin.' We say a Hail Mary and say 'hope you go away and you don't seroconvert. See you in three months for a repeat test.' So that's not what happens in those clinics anymore. You're diagnosed with rectal gonorrhea, chlamydia or have other risk and we offer you pre-exposure prophylaxis on the spot. 'Do you want to start PrEP today? Here's a 30 day starter pack. We've got your HIV test, we got your labs, we'll call you if there's a problem.' By the way there's never a problem. And what happens is we connect them to care to places that we trust for ongoing pre-exposure prophylaxis services.

[00:22:24] We were so proud of this work that rather than doing it quietly, we put ads all over the subway and the effect was that our visits increased at the sexual health clinics. We had a 60 percent



increase in express visits, so if you make them a good place, guess what? People come. So we're demonstrating the fact that we could create destination clinics. Now what we wanted to do in the clinics beyond make them nice, is launch HIV prevention and treatment in a way that had not been done together. The first thing that we wanted to do was to not do little starter packs of of post-exposure prophylaxis, then throw everybody out there and say good luck and send them to one of you guys where you're like 'oh Jesus I have to do the prior authorization. Thanks a lot guys.'.

[00:23:09] So instead what we're doing is giving full 28 day courses. And so it's really costly, but so far you'll see what happened in a bit. Immediate PrEP starts like I talked about. So you have gonorrhea, chlamydia, syphilis. You talk about risk. You can start PrEP that day. And my favorite program is JumpstART, which is your newly diagnosed with HIV in the sexual health clinic, and rather than say 'let's think about this for a while or send you somewhere in a bit,' we're like 'here, do you want to start your meds today? Great we are going to navigate you somewhere good to get your follow up care.' And so for me because we're thinking about this as status neutral, this all falls into one bucket which is biomedical intervention. Like it's ART for some recent treatment or prevention, it's all the same because they all eventually sort of go down the same path. Like the care is pretty much identical. And so everybody who enters this system has a social worker who assesses them for social determinants as well as insurance connection when feasible. And then we navigate them to longitudinal care services for either negative or positive clients to get them away from the safety net and into long term care. The good news is that we're seeing them connecting. And you'll have to come to CROI to hear more about that, but it's going to be a fun poster. And then really come to the CDC STD conference if you want to really see surveillance data on that, which I really can't talk about.

[00:24:32] So really there's the idea, PrEP navigation, initiation, 28 days of PEP and JumpstART. And so here's what we've seen so far. So PrEP navigation, which meant that we just sent someone somewhere to do PrEP through like a navigator. We've already done 6300 encounters as of Halloween 2016, so that's more than most other states and some countries. So that's all from those eight clinics. PEP28 is a blockbuster, we expect to do about three or four hundred in a year. Whoops we've done 1408 which means that we've done a pretty good job with post-exposure prophylaxis. JumpstART, my personal favorite has started 239 people newly diagnosed with HIV on HIV medicines on the first day of their diagnosis. 71 percent of them are black and Latino. I will also remind you that this launched slowly, it was one clinic then it was stuck there for a while then a second clinic came on so it built up. So we haven't even seen it in a full year blossom yet, so we'll have to watch out for that. And then finally PrEP initiation, 935 PrEP starts since the end of December 2016. It is the slowest intervention to launch because of space issues and volume and so we still have one clinic that's not started yet, which is Morrisania, but it's coming very soon. It's important to realize these numbers, about 60 percent of our PrEP starts are black and Latino which is a lot different than what the demographics that are reported nationally are, so I think we're doing the right thing in the right place.



[00:26:05] So I am going to leave our sexual health clinics for a minute and talk about some of our other work, launching PrEP and repairing the nPEP delivery system. We have something called the PlaySure network which is all sorts of programs, testing programs, clinics, CBOs that come together to create a net of prevention over New York City. They are cross-linked by memoranda of understanding and are spread pretty well throughout the city, given that this is a competitive process for contracting. And the news for this so far is about 800 people have been started on PrEP through this network. So competing pretty well with the sexual health clinics. This is also some of the landing points for people who start PrEP in the sexual health clinic and then need a place for longitudinal service.

[00:26:47] So this is what we're seeing in the jurisdiction, using our primary care information project. I'm showing you that PrEP uptake really has launched pretty significantly in our jurisdiction. It's going pretty well. But there are the stereo instructions that really represent the challenge. The blue line is males, the red line is females. That female line, it looks pretty flat. So PrEP for women is launching a very big way. We tried before with PlaySure but we're doing it completely differently this time to see what happens, including a detailing program where we're going to go to GYNs and other providers of care to women to tell them about PrEP and how to do it. So given our numbers and increase in new diagnoses this is going to be really important. You'll also see that youth are doing pretty well. So we're seeing that 18 to 29 year olds are doing great with the uptake of PrEP and 30 and above aren't doing too bad either. But it's really exciting that the younger folks are really launching this pretty big. And you'll also see that at least in this data, though different from our sexual health survey data, we do see a racial disparity where the majority of starts are among white folks. And you'll see sort of lagging behind of Hispanic and black. Our sexual health survey among MSM 18 to 40 showed them in dead heat. So among the people who respond to that survey it's about 30 percent across the board.

[00:28:09] So it's unclear, we're going to be learning more about this as we go in PrEP measurement but we have some mixed signals. So we have a little bit, like I said I'm going to go quickly through this, we're monitoring some important aspects of our continuum for pre-exposure prophylaxis. The punchline is that there's a lot of discussion of PrEP and also about 30 percent of people, these are MSM 18 to 40, are on PrEP. If I were to show you this graph for women I would be embarrassed because the bars are flat. So we have a lot of work to do. So no point in showing your blank screen. It's me telling you that that's what it looks like. And so it's less than 1 percent are on PrEP of women who are potentially eligible.

[00:28:48] So we have our PEP Centers of Excellence bricks and mortar where people can go through urgent care to get post-exposure prophylaxis. There's one in each borough except for Staten Island, although we're supporting them in a different way. And so the majority of the people who are coming are MSM. We're also seeing women who are coming, which is great. And you know we have to do more work in terms of getting the word out to trans communities but we're on it.



[00:29:11] So the other piece is that we have a little bit of underreporting. We expect this number to go up but PEP is of course the gateway to pre-exposure prophylaxis, so we expect that as we run the program longer and we get more complete data this will look higher. But at least 50 percent of the people who have been prescribed post-exposure prophylaxis have been assessed for PrEP. We also have our PEP call center, 24 hour line 844-3-PEPNYC. Write it down for your patients. Let them know about it. Perfect. Let them know about it. It is a hotline in New York City. You call that number a clinician answering the phone, it's a moonlighting infectious disease fellow yay! Or a nurse practitioner. And what they do is assess for exposure and they call a starter pack in to some of the 24 hour pharmacies in New York City. People can pick that up without any questions asked. No HIV test, no nothing. And what they can do is at follow up with our PEP Centers of Excellence, the bricks and mortar. Now the state is launching a pilot where pharmacists are going to be able to do this, give seven day starter packs, so hopefully one day this becomes obsolete and we don't need to do it because pharmacists will just do this as a matter of routine. But for now, we have this option. I always sort of warned them not to talk about it, but they even went out to Fire Island. I know that's not New York City but it was pretty cool that they were using this the pharmacy too. It's like you know, that's great, it's not New York City but I'll take it. So the PEP line, write it down, use it. Feel free to distribute it to your patients. I think it's like a really great strategy for people who may not want to go to the E.R. and wait seven hours for postexposure prophylaxis.

[00:30:56] So the PEP call volume, it's actually kind of a lot, so they actually get a lot of phone calls. And so this is what it looks like. And whenever they do work, whenever they start advertising especially on hookup apps, all of a sudden the numbers take off. So there's more work with them to sort of go deeper into hookup app advertising but the good news is that it is very well utilized. And it actually is a little bit different than the other folks who are coming to bricks and mortar, so it is whiter which is interesting and the ethnicity is non-Hispanic most commonly. And so I think that it just sort of shows you that there are different strategies for different people and that all of them, sexual health clinic based, Center of Excellence based, PEP hotline based, are all worthwhile to pursue. The good news is that there's a lot of interest in further evaluation of this. Like I said I don't think we've ever seen PEP so easy in a jurisdiction, so I think a lot of folks are interested in how this works.

[00:31:55] You'll also see from the perspective of sexual orientation with the hotline, the majority are gay lesbian, well the majority are LGBT, but we also see again a preponderance of males. We're seeing more females calling which is great. So I think that as we launch more of the PrEP work we'll hopefully see that number increase as well.

[00:32:16] When you look at how people got to the PEP hotline, which the majority of people google it. So an internet search is where it landed, some people landed at our site, but you know everyone uses Google. And so there have been some folks who say Grindr was the way but it's really interesting that



even if they didn't say it was Grindr, the numbers in terms of how it launched seemed to go pretty well with when Grindr ads went up.

[00:32:41] You can also see the number of engagements with these ads on Grindr, so it's actually pretty remarkable how many folks saw this at least momentarily when they were on the hookup app. Also in terms of risk, it was pretty real. A couple of really important things really are that we have a mean of about 30 hours after exposure. And you can see sort of where people live, like the belly is around 38 hours. So you know people are pretty quick in terms of getting up on post-exposure prophylaxis. So you make it easy and you avoid the E.R. and guess what? People use it. So I think that that's an important lesson.

[00:33:29] Also there's other data about the PEP hotline in terms of alcohol and drug use. So a lot of folks who do say that they have been using drugs or alcohol. And what's really interesting is that folks who are using the hotline are experienced, so 87 percent of them have used post-exposure prophylaxis. That means that they've had to think about what to search. They found it online, and this was the path of least resistance to get the drug. Additionally the majority of the callers PEP was indicated and there was a lot of folks with private insurance which is great because they get the starter pack and when they go to the place it does a continuation of care, insurance can be used. There's time for prior authorization. All that stuff to be able to make it less of an emergency, because we all have the patient who's gotten the PEP prescription and has gone to the pharmacy only to find out that a PA is needed or even better mail order required. That's my favorite. So that's something that we have the ability to sort of troubleshoot.

[00:34:24] And again from the PEP hotline perspective, this is where they've been referred to so the program is centered at Mount Sinai. So many of the folks, 45 percent actually went to Mt. Sinai for follow up but another 40 percent went straight into that PlaySure network so they distribute the patients because the volume can be very high. So for instance the weekend of The Black Party they had 30 calls that weekend, which is really really high. So that poor fellow was very busy. But ultimately we even accept them at our Department of Health clinics so they can come and see us there for follow up to.

[00:34:59] So I'm going to leave PEP, which is I think an interesting part of our story and talk a little bit about our priority population support. And so one of them is Bare it All. They always make me put this picture up to embarrass me in public, but that's OK. So it's our idea of really telling people that if they can't talk to their providers about sexual health or drugs that they're probably with the wrong provider. In this room, with a roomful of folks that sort of know HIV and touch this issue, it's sort of preaching to the choir but it's not always preaching to the choir everywhere. There's a pretty large scale marketing campaign, but it wasn't just a picture and a story. We actually vetted over 130 providers who actually



passed our survey and looked like they were LGBTQ competent. And so if someone can't talk to their provider about sex and drugs they can call 3111 and now we can refer them to knowledgeable providers. And so it's tilting the odds in our favor because we can teach people to do things, but some people may be unteachable. And so rather than have patients parked there, we want them to make sure that they get places where they can get optimal care.

[00:36:08] Along with that, simultaneously New York City introduced the first jurisdictional LGBTQ health care Bill of Rights in the U.S. One of the really great things about this is that we just look at the great laws and regulations in New York State and other rights in New York City, put them together and we convinced the general counsel of New York City, of the Department of Health, of everybody to call it a Bill of Rights and then the mayor's office of the Commission on Human Rights said 'Well what we'll do is we'll put our number on the bottom and if someone goes to a place and they feel like this has been violated, they can call this number and we'll investigate them.' So it's actually got some teeth rather than just being a document, which is exciting. And so we're putting these signs up all around clinics. More and more of this is coming up. It's translated in Spanish. So we hope that this will continue to be something that folks use.

[00:37:02] And so we got a lot of positive coverage regarding both of these things. Really it's been an exciting time in terms of really getting the word out and making the point that you are supposed to get good care. And so why is this HIV prevention? It's obviously HIV prevention because we have had so many challenges down in this jurisdiction as well as in others, hearing that people just can't talk to their provider. And so those are all missed opportunities for HIV prevention and control. And so I think that that's sort of what lives behind that.

[00:37:38] Now we also noticed increased crystal methamphetamine use in our jurisdiction. There was even an article New York Times yesterday about increases in crystal meth around the country. And so when we saw the increase, part of our ending the epidemic plan was to do an evaluation of what crystal meth services looked like in New York City. And what we saw was that there were a couple of high quality places, some of which were only doing abstinence to places that were doing harm reduction were oversubscribed and sometimes had wait lists. And so we said we should launch a jurisdictional program that is harm reduction based. That has a heavy emphasis on HIV treatment and prevention, but that is really about crystal meth use and safe use or if you want to get off meth, strategies for getting off meth. And so far in a year we've enrolled 65 people, 50 percent of them are MSM of color, about half are under 30, and almost half are uninsured. It is GMHC and Housing Works that have come together to do this. They are doing a lot of work to get the word out and I think we're seeing traction, which is exciting. I'll also remind you that when I say harm reduction I don't just mean, you know use drugs smarter, but they've been coupled with syringe exchange programs so literally it is syringe exchange along with meth programs embedded in HIV and behavioral services.



[00:38:59] So now moving viral suppression from good to excellent. So one of our really important steps in doing that I think was being the first city in the country to sign on to U=U that undetectable is equal to untransmittable, even though it's not really a word, but it is undetectable is equal to untransmittable. And the exciting news is that our very close partners signed on as well, so New York City and New York State are now in sync and really are working to refine our messaging to make it clear that people living with HIV are not vectors of disease and that by being virally suppressed, they're doing great by themselves as well as for our entire community.

[00:39:40] But beyond that we are really investing in a lot of ways to improve viral load suppression. So I don't really have a lot of data about these yet because they are not old enough to show data. One of the things that we're doing is we've launched with Housing Works, a program called the Undetectables. It's a kitchen sink strategy to viral load suppression, so medical care, social services, directly observed therapy if you need it, and if you touch two social services you qualify for the program and the program includes financial incentives. So 100 dollars per quarter for viral suppression. And so we're looking to see what that does we'll see the outcomes. Remember the HPTN study that everyone said it didn't show that incentives worked? Well it kind of did, at specific kinds of clinics. And the good news is that the clinics that are in our program look a lot like the HPTN clinics that were successful. So we'll take a look in the future to see what the effect is of this.

[00:40:38] The second thing that we're doing that's new is our public health lab has learned how to do resistance testing. Tt's doing that because it's part of our JumpstART program. So if you start HIV medicines, we do our own resistance test. The turnaround time for that is about seven days. Five business days. I actually just JumpstARTed a patient in my clinic and I got it in five days, so I was a secret shopper and it worked. It was great. The part of that that's important is we then get the sequence of their HIV in real time. We put it into our computer and we compare it to a hundred and thirty six thousand other sequences and we can build clusters and identify potential patterns of transmission. We can identify people in those clusters who are potentially not virally suppressed, if they are not in care we prioritize them with our field services staff to go out and reach out to them and bring them back. Historically we have a 50 percent hit rate. So if we go out and meet someone we get them into care about 50 percent of the time. Now for people who are in care but are virally suppressed, we actually reach out to their provider and say 'ls there anything that we can do to help you to get this person virally suppressed?' And if we don't get a lot of response that way, we then whip around to the patient through field services as well to see what we can do to support them. So this is still you know pretty novel and we don't have a lot of data to show you ye,t but it's actually in action now.

[00:42:03] And so the effect that so far is that we are looking pretty good. We can always do better. Ninety five percent of the folks living with HIV in our jurisdiction we think are diagnosed. That's actually based on a sero survey from the Bronx. So it's really, it's pretty great. 82 percent are prescribed antiretroviral therapy and 76 percent are virally suppressed. For those of you who follow the U.N. AIDS



90-90-90 sort of mission which is fast track cities to get 90 percent diagnosed, 90 percent on meds, and 90 percent of those on meds virally suppressed. We are actually 95, 87 so we're penalized for like diagnosing a lot of people kind of, and then 92. So we're doing great. And we're getting there. But really I think that with programs like JumpstART, my hope is that our antiretroviral prescription number will shoot up and we will actually achieve the goal hopefully before 2020.

[00:43:01] And finally just really quickly, the idea of making New York City Status Neutral. So one of the things about continua of care whether it's for PrEP or for treatment, is that they seem to have an endgame. And the endgame always seems to be cramming a pill down people's throats. So we're really looking at a biomedical model for HIV treatment and prevention. U=U and PrEP, but really our mission isn't just to shove pills down people's throat but rather to engage them in either preventative services or treatment services. And by engaging them, having you do all the right stuff from the perspective of guidelines and getting them on pre-exposure prophylaxis or treatment. So we think that that HIV test is really the gateway, positive means you go down the treatment engagement side. High quality care means people stay in care and if you're in care and you're living with HIV in 2018 that means you start antiretroviral therapy and hopefully get to viral suppression which means you don't transmit. Now if you're HIV negative and at risk for exposure, you go down that prevention engagement piece of the cycle. High quality prevention services and harm reduction means that you stay engaged and if you need to be on PrEP or PEP you get on it.

[00:44:11] So the effect is that really we think that people on pre-exposure prophylaxis at risk for HIV exposure and the folks who are undetectable therefore untransmittable are really the same person, we are doing the same thing for them. So why should we look at them as positive or negative. It's the same people. And so we really are trying to design things in our jurisdiction to try to make everything Status Neutral and we always use the example of our little kit that we distribute all over the city which was based on a patients experience. One of my patients actually came in with his little speaker case, like his Beats his headphones, and in it he had condoms, lubricant, and his HIV medicines. And so I took a picture of it and when I came to DOH we sent it to an industrial designer and we came up with this kit, which is a lubricant, condom, pill combination box. And so really makes the message that whether it's treatment or prevention, if you put everything together in whatever messy way that you have to, to sort of make your sexual life pleasurable, you're going to prevent HIV. And so we ended up distributing 200,000 of these and on World AIDS Day we revealed our latest collaboration with Marc Jacobs. So that's right, I got away with putting penises on something that said NYC. Thanks Marc Jacobs. So it's kind of an exciting. And you can look at that as a heart, I guess, it's other things too. So you can take a look at it yourself. So the really exciting news is that you know I think from the perspective of where we are, we are seeing movement in our surveillance. Things are going in the right direction, where things are going in the right direction we're working on strategies to improve them, and really watch out for surveillance 2017 because that's actually going to be when we see these programs touching our data for the first time. Thank you.

[End]