

LISA WAGNER: Welcome, and thank you for standing by. All participants are in a listen-only mode. Today's call is being recorded. If you have any objections, you may disconnect at this time. My name is Lisa Wagner and I am on the policy team at the National Center for Health Statistics, or NCHS. I am pleased to introduce today's speaker, Dr. Renee Gindi. Renee is the chief of the Population Health Reporting & Dissemination Branch in the Division of Analysis and Epidemiology where she leads the team that works on Health, United States. Renee's prior work at NCHS has included working on the redesign of a nationally representative health survey and developing methods to analyze trend data. The Health, United States program provides long-term trend data on a number of different health topics and brings together multiple sources of data from inside and outside of NCHS. Renee will present information from the most recent Health, United States report released this week, review tools for using the data and health-disparities research, and provide an update on modernization efforts for Health, United States. The presentation will be followed by a question-and-answer session. Just a reminder: The audience is currently in a listen-only mode. Questions or comments may be entered through the Q-and-A feature, and we will address them as time permits during the question-and-answer session. And now I turn it over to Renee.

DR. RENEE GINDI: Thank you so much, Lisa. It is a pleasure to be here today with all of you to talk a little bit about Health, United States, 2019, the annual report that was just recently released. This report represents months of work by the population health research and dissemination branch here at the Division of Analysis and Epidemiology, and I'm thrilled that I'm able to be able to share a lot of this work with you today. I want to start off with a brief outline, for those of you who may not be familiar, about the Health, United States program. Then, I'll talk a little bit about some of the themes that we have found throughout the Health, United States, 2019 annual report. I'll go through some of the tools that you can use on the Health, U.S. website to explore some of these themes yourself and I'll end with some of the features that we have planned for the redesigned Health, U.S. that may make this kind of exploration easier. We're here at an NCHS webinar. NCHS is the National Center for Health Statistics, one of 13 principal health statistical agencies, and it is the nation's principal health statistical agency. NCHS is one of many agencies that takes its statistical policy direction from the chief statistician's office at the Office of Management and Budget, or OMB. And the NCHS mission is to provide timely and relevant and accurate data to help guide decision-making. In order to fulfill that mission, NCHS employs a number of different data-collection avenues. And, starting on the left here, we have the National Vital Statistics System. And that is an opportunity to collect and disseminate information from birth and death certificates from states and health jurisdictions. The National Survey of Family Growth is a -- survey-based information that provides more information and more exploration of changes in natality, fertility, and births. The National Health Interview Survey is a household interview survey around the nation that provides detailed information on health conditions, health behaviors, health-care access, and utilization. The National Health and Nutrition Examination Survey, in addition to providing detailed information about nutrition and what we eat in America, also provides information, objectively measured information on lab and clinical measures. The National Health Care Surveys are a little bit different from the data collections that I just talked about, where this one is about establishments. And so we'll have survey data from doctors' offices, hospitals, and long-term care facilities. In addition to using these major data-collection programs, NCHS also extends the utility of these data through the Data Linkage Program. One of the reasons that I want to make sure to talk about all of these different data sources is that Health, U.S. is an opportunity and a report that brings together data from across NCHS. Health, U.S. is a congressionally mandated report from the secretary of Health and Human Services to the president and Congress and it's been published by the National Center for Health Statistics since the 1975 report. Our legislative mandate has us covering four major subject areas, including health status and determinants, health-care utilization, health-care resources, and health-care expenditures and payers. Health, U.S. has two major overarching program goals: to educate and inform the public and policymakers on key health topics. We do that really by focusing in three areas. One is that we bring together health information from multiple data sources, not only the NCHS data-collection efforts that I showed you earlier but also data collections outside of NCHS, from CDC surveillance systems to administrative data from the Centers for Medicare & Medicaid services, and even additional sources of information from professional associations. We also have a strong focus on trends over time. We don't just want to be able to bring you most recent or current information but also an understanding of the context and the trajectory. How did we get to where we are right now? And, finally, Health, U.S. has a long history of examining health disparities between population subgroups and that's a theme and a focus that I'll touch on a couple of times throughout this presentation. The Health, U.S. 2019 annual report consists mostly of a chartbook on the health of Americans. This has 20 figures and analytic text. Mostly, these figures concentrate on trends that are found between 2008 and 2018, although those years may change based on data availability. We have highlights, which highlight information from the figures in analytic text. Mostly, these highlights look at 2018 data but sometimes some basic

statistical comparisons between groups or showing some slight changes over time. We also have data tables, so, the ability to provide the estimates that underlie those figures, as well -- as any of our regular Health, U.S. readers will know -- a wealth of technical notes to help you understand the methodology we've used in putting these figures and text together. In addition to the chartbook, Health, U.S. 2019 also has supplementary products available online only. The supplementary trend tables are 49 longer-term trend tables that provide information on more indicators than are available in the chartbook and also provide more detailed population groups. So, where you'll see me walk through some examples from the chartbook that perhaps look just at sex and age, look at a health topic by sex and age, perhaps we're also looking in the trend tables at that health indicator by income level or by urban-rural status. We also have an at-a-glance table, which brings together many key indicators from those detailed trend tables, often providing the most recent year of data, another recent year of data, usually one or two years prior, as well as a baseline year, usually from about a decade or more prior. And, again, those appendices, the wealth of technical information that Health, U.S. provides, we could probably do an entire webinar just on the technical information that Health, U.S. provides, lots of descriptions and detail not only about the data sources from which we draw our analyses but also the methodology and the measures for people who are interested in some sort of replication of our work. And, finally, on the website we also have social media-friendly visuals, and these are shareable images to help communicate the highlights from the report. Now, if you already follow the NCHS Twitter account at @NCHStats, you may have already seen some of these Twitter graphics tagged with the hashtag #HealthUS. And we are very excited about this opportunity to help broaden our audience and to help our readers communicate some of these findings easily with any of their followers. One thing that our more frequent users and readers may know is that both the Health, U.S. 2019 and the Health, U.S. 2018 reports do not have what we call the special feature. The special feature is an opportunity between 2003 and 2017 where Health, U.S. really had a chance to delve more closely into a specific topic. Sometimes this was about a specific population group like young adults or adolescents and sometimes this was on a specific health topic; for example, prescription drug use, emergency-room use, or use of medical technology. During the last two years of the report, we have really been focusing a lot of our effort on redesign and modernization -- again, something I'll talk about later in the webinar today. But, even without a dedicated special feature, we thought it was really important to be able to showcase some themes that you're still able to pull out of this report. And the ones that I'll talk about today are heart disease, cancer, and the leading causes of death, continuing health disparities by race and Hispanic origin; and I'll end with changes in health insurance and access. Again, noting that one of the strengths of the Health, U.S. program is the ability to pull across multiple data systems, I'll start by talking about the leading causes of death and mortality rates, both of which are drawn from the National Vital Statistics System mortality data. I'll also bring in the heart disease prevalence and history of cancer trends that come from the National Health Interview Survey. In 2018, heart disease and cancer were the top-two leading causes of death in the United States and together accounted for 44% of all deaths. Recently released data from the National Vital Statistics System for 2019 showed that this pattern largely continued into 2019. As we all know, 2020 brought many changes for the study of mortality statistics. And, in fact, from preliminary data that we've seen, that has been released by NCHS, deaths that are due to COVID-19 are looking like they might be the third leading cause of death, with over 300,000 deaths recorded in 2020. Again, we don't just want to look at the most recent or, in this case, the 2018 data. We want to be able to see what were the trends that got us here, what's been happening before this most recent year of data. And, for heart disease and cancer, we can see that in fact, those are pretty consistently the two leading causes of death. And this graph shows that, for cancer and heart disease, we have seen decreases for both men and women over time between 2008 and 2018. Now, for cancer, those declines were pretty stable for both men and women. But when we looked at heart disease deaths, we actually saw the death rates for heart disease decreased from 2008 to 2018. But the rate of that decrease actually slowed between 2011 and 2018. Now, we don't just want to look at mortality rates. We can also bring in some indication of prevalence to help understand and understand those trends a little bit better. So here with data from the National Health Interview Survey, we looked at trends in heart disease among adults age 18 and older by sex and by age group. And we looked at six different sex and age groups and found that, for three of them, we saw decreases in heart-disease prevalence, and that was among men and women age 65 and over, as well as among women age 45 to 64, but, of course, not seeing those decreases in all of the groups. We did a similar analysis for the reported cancer history among adults age 18 and older by sex and age, and founding -- finding slightly more mixed results in this case, with most trends stable but a decrease in reporting a history of cancer among women aged 18 to 44, and an increase among women aged 65 and older. Now, we don't just have to look at cancer -- cancer mortality, and cancer prevalence, cancer history. We can also look at cancer screening. We can also look at prevention. And that's what we'll do to start off the second theme on health disparities by race and Hispanic origin using cancer-screening information from the National Health Interview Survey. Again, thinking about how we pull data together from multiple data-collection sources, we also look at maternal mortality from the National Vital Statistics System

mortality data, infant mortality from the linked birth and infant death data set, and, finally, ending with teen births from the National Vital Statistics System birth data. Looking at colorectal cancer screening -- cancer testing among adults age 50 to 75, we looked at this by race and Hispanic origin, and actually saw that there were increases in the rates of testing for all of the race and Hispanic origin groups that we studied. However, there were differences that persisted into 2018, with non- -- with the non-Hispanic White population having the highest rates of colorectal cancer testing among adults in this age group. There was a little bit of a different picture when we looked at the use of mammogram in the past two years among women age 40 to 74 -- again by race and Hispanic origin. In this case, we saw no trends, no differences over time for each of their racial and Hispanic origin groups that we studied. However, in 2018, we still saw some differences by race and Hispanic origin group where women who were non-Hispanic White and women who were in the non-Hispanic Black population had higher rates of mammogram use. Still, on the theme of women's health and health disparities by race and ethnicity, we also looked at maternal mortality. For the first time in over a decade, NCHS was able to produce an official statistic on maternal mortality. And here at Health, U.S. we were very excited to be able to present that estimate as part of our annual report. We note that maternal mortality was higher among non-Hispanic Black women than among non-Hispanic White and Hispanic women in 2018. And we further looked specifically at the impact of age on those differences by race and Hispanic origin. As you can see from this figure, women who were age 40 and older had had higher rates of maternal mortality than women in younger age groups. And when we looked specifically at women age 40 and older, we saw that non-Hispanic Black women had a rate about three times as high maternal mortality rate, about three times as high, when compared with women who were non-Hispanic White. We look not only at maternal mortality rates but also at infant mortality rates by race and Hispanic origin. And here, looking at those trends between 2008 and 2018, we found that infant mortality was highest consistently among infants born to non-Hispanic Black women. Now, webinar listeners and watchers, if you are paying attention to this graph, you probably see two things that are a little bit unexpected. One is the presence of some dashed lines. And the second is that there are more racial and Hispanic origin groups than on the previous figures and that now we can take a little detour into some of that great methodological work that Health, U.S. often presents. This is really due to changes in the way that we have worked with the standards for the classification of federal data on race and ethnicity. If you recall, OMB, the Office of Management and Budget, does set statistical policy for the different statistical agencies. And, in 1997, the OMB standards on the classification of federal data for race and ethnicity were revised to make a number of changes. The two that I'll focus on are -- the first change where we moved from the older standard, the 1977 standard, where Asian or Pacific Islander was considered a single group. Now, according to the newer standard, we are breaking down this group into two separate categories, Asian, and then Native Hawaiian or other Pacific Islander. Another big change was that respondents could now identify as more than one race. And so you'll often hear the 1997 standards referred to as single race. Now, you may be wondering, 1997 standards, why is this the first time that we're starting to see these dashed lines, that we're starting to see this move towards this different way of collecting and presenting the racial data? And that's because it actually took quite some time to have the birth and death certificates revised. So the states began revising the birth and death certificates in 2003, to bring them up to the -- this newer standard. And those were phased in by the states over a number of years. This phase-in was completed by 2015, for the birth certificates; and by 2017, for the death certificates. So it's really only coming up on these recent years that we're able to be able to provide a standardized national estimate that uses the newer standards. One thing that we had to do during this phase-in period, in order to provide a standardized national estimate by race and ethnicity, was we were -- no matter how the states were collecting this information on births or deaths, we were always bridging back to that older standard. So while you're -- you'll hear the newer standard referred to as single race, you'll hear the older standard referred to as bridged race. And so coming back to that graphic again, now we have a better understanding. Those solid lines refer to the data that were collected and presented under that older standard. These are bridged-race estimates. The dashed lines are those that are collected and presented under the newer standard. These are the single-race estimates. And one thing that I wanted to highlight for you specifically was this breaking out of the Asian or Pacific Islander line -- that is the orange line at the bottom of the graphic -- to now show, to now be able to distinguish the infant mortality rates among the non-Hispanic Asian population with the lower rectangle, and the non-Hispanic, Native Hawaiian or other Pacific Islander population in the square that is higher up. And, again, with that dedication that Health, U.S. has to being able to provide high-quality information to examine racial and ethnic health disparities, this is really a very important, a very important improvement for us to be able to make. Moving to another data source and, again, moving between the bridged-race and the single-race data, we were able to look at teen births using the natality or birth certificate data. And, similar to the colorectal cancer testing example that I showed at the start of this section, teen births had a similar trajectory, where we saw improvements among all of the racial and Hispanic origin groups that were studied. However, throughout the period, we saw that teen births were highest among non-Hispanic American Indian or Alaskan Native teens, Hispanic teens, and

non-Hispanic Black teens. We've had an opportunity to look through a number of results and findings that have a lot to do with the health status and determinants area. So I wanted to make sure to bring in some additional topics from the health expenditures and payers and health-care utilization areas that Health, U.S. is mandated to cover. Also, we've talked quite a bit about differences by sex in the cancer example, as well as differences by racial and Hispanic origin. And this is an opportunity to showcase some of the Health, U.S. data as it pertains to age groups. We'll be looking at health insurance among both children and adults, supplemental Medicare coverage among adults age 65 and older, and, finally, unmet need due to cost. And all of these health indicators are coming from the National Health Interview Survey. Health insurance is an absolutely critical topic in terms of health-care provision and how we think about health care in this country. And so we wanted to make sure to look at health insurance coverage. We can start off among children age 18, under age 18 years. We saw -- focusing just on the percentage of children who are uninsured, we saw that the percentage of children who were uninsured under age 18 in 2018 was 5.2%. And that was in fact lower than the percentage we saw in 2008. Now, this was not a straight-line decrease, and there were a number of changes throughout that time period. So, for people who are interested more in the details of both the uninsured rate and how that's changed, and as well as the patterns among privately insured, and children and children with Medicaid, I definitely encourage you to go out and check the analytic text. That's part of the chartbook under this figure. In a similar way, we looked at the health insurance coverage among adults age 18 to 64 -- similarly, by type of coverage, again, looking at private coverage, Medicaid, and those who are uninsured. Again, the percentage of adult adults age 18 to 64 who were uninsured in 2008 was 13.2%, which is, again, lower than the percentage that were uninsured in 2008. And we -- again, similarly not a straight-line decline. And I definitely encourage people who are interested in those statistical patterns to check the analytic text under -- in the chartbook. Now, we wanted to not only discuss coverage types for that population age 0 to 64, but also to really look at coverage among the entire life course among the entire population. Now, that can be a little bit difficult because Medicare coverage is near universal for people age 65 and older. So, instead, we decided to look at what types of supplemental coverage or no supplemental coverage Medicare beneficiaries age 65 and older might have. Now, we found between 2010 and 2018 that approximately 20%, one in five Medicare beneficiaries, in this age group had no supplemental health insurance coverage. They had traditional or Original Medicare. We got to see a little bit more when we brought in those other sources of supplemental coverage. We saw declines over the period between 2010 and 2018 in Medigap, employer-, or union-sponsored coverage. We saw increases during the period in the -- in the percentage of Medicare beneficiaries who had elected for Medicare Advantage supplemental coverage. We saw no change in those Medicare beneficiaries who had Medicaid as a supplemental coverage. And we did see some increases in the percentage of beneficiaries who had military coverage, the sharper intake there in 2018 being the result of some improvements to data collection in this particular area. Now, health insurance is a very important part of how we access and pay for health care in this country. But, at the same time, we still need to understand what the -- what the barriers to health care might be in understanding and monitoring who might be delaying or not having their medical needs met in the past 12 months. Now, this particular example looks at delay or unmet medical need in the past 12 months due to cost. And we looked at this by age group. And we found that between 2008 and 2018 -- adults age 19 to 64, now specifically in the 19- to 25-year-old, and 26- to 64-year-old age groups were most likely to have delayed or unmet medical needs during this entire period. Again, there were certainly a number of increases and decreases that we're seeing in all of these age groups over the period. And, for more details on that pattern, I encourage our readers to head to the chartbook to learn more. Now, this was a great opportunity to just talk through some of the themes, some of the indicators and findings that we had in the chartbook. And I would encourage all of our webinar attendees to go and explore this for themselves. I will walk through an example, just a very high-level example, of what it might look like if I were interested in examining more about health disparities. But, certainly, this sort of tool can be used for most of your health-topic research needs. So we'll start off by looking at the Health, U.S. 2019 Data Finder. That is something that should be accessible on the Health, U.S. report main page but also can be found over on the left navigation bar under Data Finder. So, Data Finder is a -- just an organizational tool where we are able to store information, the Excel and PDF and PowerPoint versions of all of the figures and tables that are available through the Health, U.S. program this year, not only the 20 chartbook figures and data tables but also those 49 detailed trend tables. So we'll take a look at one of those trend tables today. Now, if I was -- if I were interested in learning a little bit more about disparities, specifically thinking about some racial and Hispanic-origin population subgroups, I can come over here to the population subgroup drop-down menu, pull up the American Indian or Alaska Native group -- perhaps that's the interest -- the group that I am most interested in studying more about -- select that from the drop-down, I then get a Data Finder table that selects filters just for the tables that contain information on the American Indian or Alaska Native population. I've selected Table 002 because I want to know more about infant mortality in this particular group. Now, I do have the opportunity to select a PDF. That is a one-page printable. It is a printable PDF that could be used for reference. I could also -- if I

wanted to know more -- have earlier years than just those thrown on the PDF to be able to look at some of the confidence intervals or statistical uncertainty information. Or if I wanted to be able to graph something myself easily, I could be downloading the Excel version of that table. So here's a screenshot of the Excel version of that table. And I've outlined the American Indian or Alaska Native group, if I wanted to repeat those trends that you saw in the chartbook. Now, one thing I want to highlight for you here is that this particular screenshot shows just 2008 to 2018 but the table itself goes back to 1983. We do have differing information on the different racial and Hispanic origin groups based on data availability back that far, but, at the same time, you know, that's where the table starts, if you are able to use those data to go back a little bit farther if you're looking for longer-term trends. Now, I don't only have to look at trends for a specific group. I can also do comparisons between the groups. And here I'm just highlighting for you that, within 2018, we have the ability -- or actually for all of the years. In this -- in this screenshot, we have the ability to compare not just the American Indian or Alaska Native estimate but compare it to -- compare that estimate to the estimates for other groups, highlighting here in this rectangle that, again, we present both the estimates for the bridge race and the single race, where applicable. Now, again, if we -- if you are trying to do some of this work yourself, I think the detailed trend tables are an excellent place where you can get some guidance and some grounding for your own research. If you want to know more about how we did our work, we do have those appendices available. And, here on the appendix page, you can click on the appendix PDF, and, for example -- if we're interested in infant mortality -- can get a sense of an overview of the data set that was used the link birth -- linked birth and infant death data set, not only a brief overview and some links to more documentation on those datasets but also our methodology of how we might have used those data and any issues that might have affected the interpretation of those data, including changes over time. For example, there are several places where the change between bridged-race and single-race methodology are referenced in our appendices for those of you who might want more details. So we've had an opportunity to talk through some of the Health, U.S. history, some of the findings from this year's report, and explore at a very high level some of the tools that you could use to do some of this work yourselves. As I mentioned at the top, we have been focusing for the last couple of years on the Health, U.S. redesign, really thinking about how since 1975 our product has really needed to change. We have actually I think always been on the forefront of innovation back from the very first floppy disks that we used to send out with the trend tables in 1990 to our first publication that hit the World Wide Web in Y2K. And I think that Health, U.S. is really trying to continue to make sure that we update and modernize to meet the needs of our stakeholders. To that end, we had an opportunity to do a lot of research and talk with many of our data users over the last couple of years. One of the things that kept coming up was the idea that our readers and users really want to see some customizable data visualizations, a little bit more on the web, a little more interactive, things that were maximally flexible and the ability to pick variables in spreadsheets as well as the ability to create their own user-defined tables and perhaps simplifying some of our technical terminology. So, those are the kinds of things that we're really keeping in mind as we move forward with our redesign. We have a number of plans to try to make our product even more timely. We're looking to really focus on -- really focus on those detailed trend tables and really bring in more frequent table updates to those trend tables with the ability to get them up online a little bit sooner. We really want to move in a direction that makes Health, U.S. more customizable for all of you. We want to be able to offer not just the detailed trend tables in Excel but make them more interactive and make them a little bit easier to visualize while you're on our site. We also want to make our data more accessible. We know that it can feel like it's a little bit hard to find what you're looking for. So we're looking to bring in some topic-based organization, as well as a way to integrate our appendices so that it's very easy to find that detailed technical information when you're looking for it. Now, I won't say that we'll have all of these for you immediately. But these are the kinds of -- these are the kinds of efforts that we have that we are phasing in at this time. I have two key takeaways for you at the end of this talk today. And the first is that Health, U.S. really can be a year-round resource -- even though it's an annual report -- because it really provides key content and context on a number of health topics. The ones that we happened to talk about today were about the leading cause of death, health disparities by racial and Hispanic origin, and access to health care and health insurance. And I want to make sure that we end with the idea that the Health, U.S. redesign, we hope will make researching health topics even more timely, customizable, and accessible. So this is an opportunity where we can take your questions, and I hope that we can get you the answers that you're looking for. Lisa?

MS. WAGNER: Thank you, Renee. We are now entering the question-and-answer session. As time allows, Renee will address questions from the Q-and-A feature. Please submit your questions through the Q-and-A feature now. If your question or comment is not addressed, please direct it to PAOquery@cdc.gov. That's P-A-O-Q-u-e-r-y@CDC.gov. All right. Renee, I thought I would just maybe kick it off. Let me turn on my video, too. I would kick it off maybe with a little bit more on the modernization piece. You mentioned that there's a desire to have more frequent updates to this -- what traditionally has been an annual report. Do you have in mind how often you might be updating data, and how

people can sort of keep an eye out and look out for that?

DR. GINDI: Oh, that's a number of very good questions, Lisa. Thank you. So, one thing that I actually do want to start off with is that Health, U.S., as many of our readers and watchers may have noticed, really currently relies on using final data. And we're exploring how and whether to incorporate some of the experimental and preliminary data that are available from NCHS. So, I think that right now we are expecting to be able to update those trend tables with final data annually or, you know, as often as the final data are released. You know, some of those NCHS surveys are coming out with data, new data, every other year, or sometimes less frequently than that. So, we're still working on how quickly we can release the tables to the web. Likely this will be a few months after data are released. But I think that's -- that we're really looking to be -- being able to still update those tables annually but more frequently than in the past. You also asked a very good question about how our Health, U.S. readers and stakeholders will know that new data are available. Probably through many of the same avenues where you obtained a link to this webinar. We are looking to make sure that we have an email that will go out to our -- to our users through the Health, U.S. listserv, potentially being able to reach out, again, through partners. And certainly we will be highlighting these in our social media -- in our social media blasts.

MS. WAGNER: Great. So we have a question here on the immigrant population and health disparities with that population. Is any of that information available through Health, United States? Or can you think of any other resources to point that person to?

DR. GINDI: That is an excellent question. That is not an issue that we delve into much in the current Health, United States. And I would actually really encourage the person who asked that particular question to think about, you know, any particular topic that they are interested in. And this is a place where those technical notes and the documentation is a wonderful, wonderful resource. Because it also may differ across different topics. I know that we've looked at that quite a bit over the last -- over the last couple of years. So, for example, if you were interested in health insurance or health care access or unmet need, you would be looking at National Health Interview Survey data. And that would be an opportunity to look at our technical information about that data source to see that -- you know, that the National Health Interview Survey does, in fact, collect some information about where -- historically has collected information about where a person was born, as well as citizenship status -- not something that we're reporting on in our tables in Health, U.S. But, you know, perhaps that would give you a place to start. That also may be a little bit different, again, when looking at vital statistics, and those -- that has changed quite a bit over time as well. I was doing a talk earlier this year where we were talking about the NCHS data, the Health, U.S. data that goes back to the 1950s, which was, of course, before Alaska and Hawaii were part of the part of the -- part of the U.S., and so really being very sure, very clear about who is included in that population. So, the technical documentation is an excellent source for those kinds of questions.

MS. WAGNER: Great. A next -- the next question is, is the data available on Health, United States suitable for research studies involving secondary data analyses?

DR. GINDI: Also an excellent question. We recently completed -- as part of our redesign, research work, we did a -- not a literature review but a citation review, to see how people were referring to citing Health, United States in the academic peer-reviewed literature. We ended up looking at I, think, over about seven reports' worth -- seven or eight years of reports' worth and ended up seeing something like 3,500 citations. And we weren't able to review all of those citations in great detail, but we did about a 10% sample to look more closely. Often, what we were seeing is that the way that researchers were using the Health, U.S. data was it would be in an introduction -- in an introduction and in a background setting. Because we do have those, the ability to say -- make some statement about -- that something is a leading cause of death now and it has been for X number of years, or that there has been an increase in a prevalence of a -- of a condition or being able to say, you know, what were the changes over time in health-care expenditures, which isn't necessarily information that you're getting elsewhere. Now, that certainly was some of the citations that we saw. And sometimes we saw -- sometimes we saw papers where researchers were -- just took the table right out of Health, U.S. and published it in the journal. So I think that there is a lot in between that can be used. I think that, if you are doing research that especially focuses on trends or comparisons between subgroups, then it could be data that could be useful to you in your work. I would also say that, you know, certainly ecological-type epidemiology studies where, again, you're maybe looking for associations that aren't necessarily at the individual level, but are more at the unit level: Our tables are probably pretty well suited to that sort of work.

MS. WANER: Great, thank you. We have a question here on health inequities. Is Health, U.S. -- the data from Health, U.S. good at looking at health inequities?

DR. GINDI: I'm so glad that this question was asked. Thank you so much. So, as I said earlier in the webinar, Health, U.S. has a -- has a really long history actually of being able to be used to generate conversation about and study health inequities, health disparities even going back to the 1983 Health, U.S. report, which was the impetus, the generation for

the Heckler Report. The Heckler Report was a landmark 1985 study -- a 1985 report that was published by the U.S. government, by the secretary of Health and Human Services at the time. And that report really called attention to the fact that, while there had been improvements in the lives and health of Americans over time, the improvements weren't shared equally by all racial and ethnic groups. And so the Heckler Report really picked up on the work of Health, U.S. and then further focused on the six causes of death that were particularly important in racial and ethnic minorities. And, you know, the kinds of -- the kinds of work that were being done in that report in that period are really very much the same kinds of issues that we still are addressing today in Health, U.S. 2019. And I think that -- you know, especially in those trend tables, I think you saw in the -- in the part where I was going through the Data Finder tool, you really have an ability to search on many different kinds of -- if you're interested in health inequities by race and ethnicity, you have the ability to search on many of those groups to be able to look at how those inequities are changing over time or where they still exist. But if you're interested in other social determinants of health, not just race and ethnicity, but also education or income and poverty or urban-rural differences, our tables are also really an excellent source of information on those topics as well.

MS. WAGNER: Great. The next question is on the 10 leading causes of death. Is there a single location where users are able to view the top 10 leading causes of death but stratified by race and ethnicity and the two-gender, male and female?

DR. GINDI: So, the quick answer to that question is, yes, we have a leading causes of death table. I don't know the table number offhand. But please, person who has asked that question, please go to the Data Finder, and look for the leading causes of death. You can search that on the on the topic-finder slider, and you can search that -- pull up that -- pull up that table, and you can definitely look for the leading causes of death, and those breakdowns.

MS. WAGNER: Great. So the next is about the sources of data that we're using. In particular, is there an idea of the unknowns which are not categorized or are missing? Particularly, they give an example of if there are a number of infant deaths not reported and details such as by race and ethnicity or any other kind of groupings?

DR. GINDI: So I feel like there might be kind of two questions there. So one is about how to deal with missing data. And another is maybe about data source and coverage issues. And so let me try to address missings first. We do try to be really transparent in our methodology and talk about how we address -- how we address missing data, especially if we're in -- especially if we're doing something that maybe is a little bit different from what another data source would be. So if -- and often what you'll see on the side of our detailed trend tables -- when we talk about race and ethnicity in particular, sometimes we don't have a reported race and ethnicity for -- you know, for whatever the data point is, you know, whether it's health insurance, or whether it's -- whether it's infant mortality. In some cases, the data systems will actually be doing some imputation. And imputation, if you're not familiar with the term, is -- we were missing the data; is there a way that we can statistically kind of fill that in so that we can -- so we can present statistics by groups. And, in some cases, there is no imputation for that missing data. So, sometimes you'll see, on the race and ethnicity data, actually, that we will present an estimate that is for the overall population. And that would include people who are, you know, missing information on the race and ethnicity groups. And then, when we go into the estimates on the race and ethnicity groups, it would only be included for those people, where they're -- where we had complete information. Now, on the data source side, I think we might be getting into issues of coverage, right? So what do you do when you want to be able to answer a question with, let's say, birth or death certificates, but you're worried that we just -- we're not collecting a birth or death certificate for -- you know, for certain groups of people? Unfortunately, we are not currently -- in Health, U.S. in final data that we use, I don't think we're currently really doing a whole lot of imputation, again, sort of statistical filling-in around missing data sources. But, you know, I think that that is a place that it is possible that NCHS could be, you know, looking into some of those -- some of those methods. You know, as we, you know, we start to understand that there are some limitations to data collection, if we don't collect it, we can't report on it. So, what do we do when we know that something exists but you know, we're missing it in our data-collection system?

MS. WAGNER: Great. The next answer we have the person gives you kudos and thanks you for your presentation. And they also asked how content gets decided of what's included in the report. And is there a way for users to propose new areas? And another part to that is, should they expect to see any COVID-19 data in future reports?

DR. GINDI: I'm going to take the second part of that question first, because that's an unequivocal yes. Now, one of the things you may be seeing in the Health, U.S. 2019 report is that we are, you know, in that report using 2018 data. If you are users of NCHS data, you know that the final data, you know, we have a real commitment to quality, and triple-checking everything that comes out. And so the final data often can take a little bit -- can take a little bit of time to get out. So we don't really expect to see, I think, the 2020 data, so the first year where we would really be collecting information about and during the pandemic until late 2021 in some cases. And, in some cases, you know, we may be even farther out than that. And, again, I'm talking about final data here, and thus far, the kind of data that would be included in the Health, U.S. report. So, yes, we absolutely intend to include COVID-19. I don't think we'll see that until

at least the 2022 report, because we'll need the sources of data. But, at the same time, I think that there are ways that we can incorporate, you know, our current understanding. It's going to be very hard -- you know, we're working on the reporting right now. We're working on pulling -- developing materials right now. You can't do health statistical work these days, I think, without, you know, having the mind-set of what has been going on in our world in the past year. So, certainly we'll have to figure out ways or we are figuring out ways to incorporate even just the sort of 2020 hindsight, quite literally, in our reporting. The first part of that question was about how topics get decided and whether our users can provide feedback. I absolutely encourage and welcome feedback. That can go to HealthUS@cdc.gov. And, if you can't find us at HealthUS@cdc.gov, I believe the PAOquery can also make sure to get any questions back to us. So, feedback, welcome about the redesign, about the topics. Just, in general, we would really love to hear from our users so that we can make sure that we have a product that meets your needs. How we talk about the topic selection -- again, we're thinking very much about those four mandated areas: health status and determinants, health-care utilization, health-care resources and health care expenditures and payers. Now, one thing that you might note, if you are looking through the list of detailed trend tables or the chartbook: We are currently -- we are currently, I think, doing, I think, a very good job of pulling out major health topics and the health status and determinants areas as well as health-care utilization. Some of the areas where I think we are really looking to expand our -- expand our analytic capability are in the health-care resources, which is really very much about health-care workforce, as well as health-care expenditures and payers. So, those are really the areas where I think I see us focusing over the next couple of years and being able to build up that content. When we are looking to build up content, it's not just that we can just sort of snap up any old source of data. So, we want to make sure that we are using really high-quality sources of data. Very often we're looking for nationally representative sources of data. We also want to make sure that those data are consistent over time. These trend tables do often go back to the 1980s, 1990s to provide long-term trends. And so we can't just use a source of data that might be changing quite a bit over time. We really have to make an effort to harmonize that. So I think that there's a lot that goes into the selection of a data system, a data collection source, and a data -- and a health topic for Health, U.S. MS. WAGNER: Great. So we have a question on the trend tables, particularly the number of trend tables. So the 2017 report included many, many more trend table, it seems, than the -- this 2019 edition and perhaps even the 2018. So, for trend tables that are no longer released, is data available elsewhere, and why this sort of reduction?

DR. GINDI: Yeah, so, thank you for the question. You know, unfortunately -- unfortunately, I guess -- we had 114 trend tables that were part of the 2017 report, 47 that were part of the 2018 report, and now 49 in this current -- in the Health, U.S. 2019 report. As we were working towards a redesign, we did, again, need to kind of focus our resources, and elected to not update all of the trend tables. We wanted to make sure to update many of them because they really are a cornerstone product for our report. And we decided to just update a selection. And the way that we selected those trend tables was that we picked trend tables that really were related to or underlying the chartbook, that -- the figures that were presented in the chartbook; or if they were underlying FastStats, which is NCHS's kind of quick, quick statistical pages that are -- that are also topic-based. So those are the -- those are the pages that we updated over the last two years. We are certainly planning to go back and update many of those with as many years of data as we need to bring them up to speed. Not all of those trend tables will be able to come back. In some cases, the data source has stopped collecting that piece of information and or is collecting it in a fundamentally different way. And so we will, I think, see some re-baselining of tables. And I'd also really like to see -- you know, as pertains to the last -- the last question, I'd like to see us bring in some new tables. I have a feeling we'll start to be adding to some of those surveillance tables, for example, on infectious disease and COVID-19 vaccination rates. So, I think that there are going to be -- there's going to be plenty more monitoring to be done. And I do think that we will see a real -- a refocusing on the trend tables over the next couple of years. One of the things that hopefully came through in that discussion of our redesign, is that we do really want to focus on those trend tables going forward. They're a really cornerstone part of the report and of the program. And so I think that one thing that focusing on the trend tables will really allow us to do is to be reporting statistical trend information simply on more topics, right? So, right now we can only fit in the topics that are in the -- you know, 20-figure chartbook or in the past on the -- on the special feature as well. Still, it wasn't really that many, or - I shouldn't say like that. There was a limitation in space and in analytic capabilities. And we're really hoping that, by focusing on the trend tables directly, we'll be able to increase that capability quite a bit.

MS. WAGNER: Great. So there was a follow-up on the immigrant question I think from very -- maybe one of the first questions that we had. Particularly, does NCHS collect any information on primary spoken language in order to determine immigrant status or not in any of its data?

DR. GINDI: So this is a place where I am primarily familiar with the National Health Interview Survey. And so I don't know that I can speak to all of the surveys on that. And, therefore, I can't really speak to -- you know, for example, Health, U.S. And immigrants -- immigrant status really has to be determined by where someone was born, and not



necessarily by language spoken, right? Language spoken tends to be more of a measure of acculturation rather than immigrant status. And so, I know that in the past National Health Interview Survey has collected both place of birth, in the U.S. or not; as well as there have been some efforts to measure acculturation and in language spoken. But, again, that's not something that I can answer for all of the surveys.

MS. WAGNER: Great. And then there's another question here on dental care and mental-health care. The person -- the questioner asked that they see that data, but they didn't see any references to vision care or vision health. Is there any data available in that area? Or is there any potential for future expansion into that area?

DR. GINDI: This is a place where I don't want to give an answer that may be incorrect. So I think that that would be -- I know that we have in the past covered in Health, U.S. some areas of functional limitation. And that that may have been part of the 2017 set that are not updated. But, if there are specific questions about vision care and vision health that are more specific, please do reach out to us through either the Health, U.S. or PAO mechanisms.

MS. WAGNER: Great. OK. So we have another question that just came in. And they're talking about Esri and ArcGIS users -- let me -- let me -- let me read through this -- so -- who are -- who might be conducting epidemiological modeling or cluster analysis. Is there any sort of geographic and, like, GIS geographic information systems that NCHS has or any future work that might take place?

DR. GINDI: I am a long-time-ago ArcGIS user. So, thank you for joining us here at the webinar today. Health, U.S. itself does not necessarily provide any detailed geographic information. Some detailed geographic information is available for some data systems at NCHS. I definitely recommend that you check out the Research Data Center, the RDC, the NCHS RDC. That would be a wonderful place to investigate whether there are data-collection efforts that you're interested in that provide the level of geographic data that you're looking for. Geographic data is, of course, fairly private and confidential. And NCHS takes those -- they respect -- sorry about that. NCHS does take the privacy and confidentiality of our respondents and our data collection very, very seriously. And so often those data systems -- that sort of data would be available on a restricted-use-only basis. So, again, the Research Data Center, the RDC, is a great place to go to see if you can get some information. Health, U.S., while we don't provide, you know, the kind of information that you'd need in either Esri or ArcGIS, does provide some geographic information. As you'll see in the Data Finder tool, we have both -- in some cases, we provide some information by urban or -- and rural status, which is, of course, developed by, you know, having an understanding of, for example, what county a record is coming from. We also often provide information by state. And so, while that's not necessarily something that you would use, you know, in your development of a -- you know, a heat map or a choropleth, or something like that, it could be the kind of contextual information that could be useful. So, for example, our, to go back to our previous question, information on dentists, as well as information on doctors, is available -- the rate of dentists and doctors per state. So that could be a data point or a trend that would be of interest if you were looking at geographic information by state.

MS. WAGNER: Great. Thank you. And we have one other question that just came in related to how we release data really as a federal statistical agency. And I wonder if you can speak a little bit about our policy around openness and transparency about the release -- public release of data and ensuring that we're remaining sort of unbiased and with little influence.

DR. GINDI: I think this is an excellent question that I would primarily be happy to have somebody from the Office of Planning, Budget and Legislation answer, or someone from the Public Affairs Office answer. In a very, very high-level answer for now, please, webinar user, please follow up with us. Or, if Lisa wants to take this question. I think that, you know, we really try to adhere to the OMB statistical-policy directives in providing information in advance of when those releases will occur. And I think that -- Lisa, I don't know if you have anything you want to add to that but I would encourage you to.

MS. WAGNER: Yeah, I would -- sure. Yeah, I would encourage you to explore maybe more on our website. We are a part of the Federal Statistical System. And so, we do ensure that all of our data we collect is public, in some way ensuring privacy and confidentiality standards, of course, as well. I think that that concludes our webinar. Thank you all so much for attending today's NCHS webinar on Health, United States. I think there were a couple of questions we didn't have the time to get to. So, if you do have those questions that you want answered, please feel free to email the PAOquery@cdc.gov email. That's P-A-O-Q-u-e-r-y@CDC.gov. Thank you so much, Renee.

DR. GINDI: It's been a pleasure, Lisa.

MS. WAGNER: All right. Take care.

DR. GINDI: It's been a pleasure, Lisa.

MS. WAGNER: All right. Take care.