TRANSCRIPT

HOST: Many health policy questions faced by the nation today can not be addressed without the integration of different sources of data. This integration – or linkage -- of data enables analysis that is evidence-based and crucial to supporting federal, state, and local public health policymaking. NCHS is linking a wide range of health-related administrative data to its national population and health care surveys to create innovative data resources that can bring new insight to these complex problems. For example, linked data from NCHS have been used to examine health outcomes and mortality after hospitalization. Linked data have also been used to examine the health consequences of Medicare enrollment policies. And these linked data have also been used to evaluate the long-term effects of national public health policies aimed at reducing harmful lead exposure and reducing birth defects.

NCHS has been a leader among federal agencies in developing a data linkage program that builds the data resources needed to better understand the health of the U.S. population and the effects of public health policies meant to protect or improve the health of all Americans.

Joining us today is Lisa Mirel, Director of the Data Linkage program at NCHS. Lisa, could you briefly describe the NCHS data linkage program?

LISA MIREL: Sure I'd be happy to. So the NCHS Data Linkage program links the NCHS survey data, like the National Health Interview Survey and the National Health and Nutrition Examination Survey, to vital and other administrative records and we perform record level linkages at the person level. So sometimes this is referred to as entity to entity linkages. In addition to the household surveys that I mentioned we also link some of our establishment survey data from the health care division and so one of the main surveys that we've been working with recently is the National Hospital Care Survey and that survey actually samples hospitals and then gets information on the patients who were seen at those hospitals for the year and we have linked the patient records to the National Death Index and also to Medicare data from the Centers for Medicare and Medicaid Services.

HOST: So what kind of data are needed to address complex public health issues?

LISA MIREL: So at NCHS there's many different types of surveys that collect national population health estimates and also we have the health care surveys. And both of those sources represent what is really going on in terms of the population and in terms of patients in the healthcare system. So we link these sources these survey data to other sources to get more information. So we have information you know with some of the household surveys at a snapshot in time - most of them are cross sectional - and then we can link those data to other sources and get more information about health outcomes, about health care utilization, subsequent health conditions, and even causes of death information. So when we bring in this information from the other sources and connect it with our survey data which has a vast information on self reported health behaviors or nutrition and health care access that by combining these sources, we really create a resource that has information that's not found in just the one source but it really creates this complex picture of what's going on in terms of health of the nation, in terms of the health care system, and we can really answer some very, you know, as you stated, complex public health questions or research questions.

HOST: So what is NCHS doing to strengthen its data linkage efforts?

LISA MIREL: This is, it's a, it's a really important area right now in particularly because in 2018 there was the passage of the Evidence Act, which really focused on being able to have data to kind of build an

evidence based policy making. And so, one of the things that we've been doing, and we have been we've been doing it for quite a while now, is working with different agencies. For example, some of our linkages take place with the Centers for Medicare and Medicaid Services data. We also work with Housing and Urban development and so each of these agencies have different purposes for their data collection right? It's more for programmatic purposes for getting people their health care benefits through CMS or for getting people federal assisted housing through HUD. So our efforts in terms of working with them, it's quite complex right? Because we have to get this ability to protect the privacy and confidentiality of the other agencies data and then of our data in terms of the survey participants. So our group has done a lot of work to make agreements with the other agencies that are very standardized and that we can have language between the two of us - you know, the two different partners - about data security protections and how we're going to protect confidentiality. We also spend a lot of time looking into new sources of data that we can link to. One example of that is an upcoming linkage that we're going to be doing with our survey data and the Veterans Affairs data to get information on healthcare utilization among veterans. So those are those are two areas that you know we're really kind of working on strengthening our data linkage efforts. And then another one which is pretty new - we're very early in the process of this project - but we're also assessing using privacy protected or privacy preserving record linkage strategies. And what this would do it would mean that we wouldn't have to share personally identifiable information between our group with the survey data and then other outside entities. So it really has the potential to expand the sources of data that we can link to. You know, it might even open up the possibility of linking to private sector data which we have not done in the past. You know, getting data like hospital claims from employer insurance or you know, lab information, perhaps from LabCorp as just an example, but you know we're really, I think what we're doing right now within the group is working very much on kind of thinking what are the next steps - where can we go with the data linkage program.

HOST: Join us next time for part two of our conversation with Lisa Mirel on data linkage activities at NCHS.