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Data Release Review Committee (DRRC)
CO APCD Data Requests Summary
Meeting: March 2, 2022

22.114 Abzooba: Opioid Addiction Prevention in Members Suffering from depression

*Originally reviewed at 2/2/22 DRRC Meeting, edits made:

- Improve background on Benefit to Colorado
- Better outline tool/mechanism used
- Identify how outreach will be performed
- Provide limited ICD and NDC codes for limiting

Project Purpose:

From current research we know that those who have depression have a higher likelihood of being afflicted with other comorbidities. For this research project we would like to focus on two main areas which are Type 2 Diabetes Mellitus and Opioid dependency. We understand that there are limitations to this research, specifically around SUD claims and 42 CFR Part 2, but we feel with what data is available, that we will be able to shed light on how these conditions overlap and potentially are correlated.

Prediction of Depression in patients with Type 2 Diabetes Mellitus for early intervention & better outcomes

• Identification of Problem:

a. 15% to 30% of people with diabetes also have depression, resulting in worse outcomes, such as higher body-mass index and increased risk of other conditions (e.g., coronary artery disease, cerebrovascular disease, etc.)
b. Patients with untreated depression and a chronic illness have monthly healthcare costs that average $560 higher than those with just a chronic disease, according to the American Hospital Association.

• Project Objective:

a. To develop an AI based solution to predict depression in members suffering from Type 2 Diabetes mellitus.

Opioid Addiction Prevention in Members Suffering from Depression

• Identification of Problem:

a. Individuals with a history of depression and anxiety, are more likely to become drug seekers or abuse pain medications.
b. Drug addiction interferes with health outcomes for patients being treated for other conditions.
c. Treating addiction is very expensive. U.S. healthcare organizations spend more than $500 billion annually caring for patients suffering from opioid addiction alone.

- Project Objective:
    a. To develop an AI based solution to identify opioid abuse in members who are suffering from depression.

Specific Aims:

What is the correlation between depression and Type 2 Diabetes Mellitus and Opioid dependency? Depression occurrence is two to three times higher in people with diabetes mellitus, the majority of the cases remaining under-diagnosed. The purpose of this research and analysis is to show the links between depression and diabetes, point out the importance of identifying depression in diabetic patients and identify the possible ways to address both diseases.

Type of Data Requested:

Limited Data Set

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22.34 Freenome Cancer Risk Research

Project Purpose:

Freenome is committed to broad patient access and to multiomics blood tests for the early detection of cancer. Freenome's multiomics platform detects key biological signals from a routine blood draw. The platform integrates assays for cell-free DNA, methylation, and proteins with advanced computational biology and machine learning techniques to understand additive signatures for early cancer detection.

This strategy incorporates a multidimensional view of both tumor- and non-tumor-derived (e.g. immune) signatures that enable the early detection of cancer, instead of relying only on tumor-derived markers, which may miss the early signs of cancer. By decoding cell-free biomarker patterns of once unthinkable complexity, Freenome's blood tests are powered by our multiomics platform and designed to detect cancer at its earliest stages to help clinicians optimize treatments and the next generation of precision therapies.

Although risk factors often influence the development of cancer, most do not directly cause cancer. Some people with several risk factors never develop cancer, while others with no known risk factors do. Knowing your risk factors and talking about them with your doctor may help you make more informed lifestyle and health care choices.

The purpose of this application is to request CO APCD Data for this research project to reinvent disease management through early detection and precision intervention and to equip all individuals and families with the tools they need to detect and treat cancer at its earliest and most manageable stages.

Specific Aims:

The project is to better understand risk factors that drive cancer and why it is happening in early stages. This research is being conducted to better understand predetermined risks around procedures within the cancer patient population above 40 years of age

1. What are the risk factors that drive cancer?
2. Why is cancer occurring in younger age group 40+?

Type of Data Requested:

Limited Data Set

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22.53 Colorado Health Institute with Analytic Support from UCLA: Disaggregating Race/Ethnicity Data in Colorado's Data Systems to Understand Differences in Behavioral Health

Project Purpose:

Disparities in health outcomes, access to care, utilization, and quality of care between people of different races/ethnicities have been well documented. To understand these disparities — as well as strengths and areas where groups excel — data with accurate and robust reporting must be available to inform policy initiatives and other programmatic changes to address these inequities. Unfortunately, data quality and availability are often limited, making it hard to characterize existing differences or similarities.
In general, data sources used to quantify these disparities rely on aggregated racial categories: African American/Black, Asian American/Native Hawaiian/Pacific Islander, American Indian/Alaska Native, and white. Many data sources also include a separate indicator of Hispanic/Latinx ethnicity, which is often combined with the racial categories to create mutually exclusive groups such as non-Hispanic/Latinx African American/Black.

While some data sources use more categories, others must use fewer because of small population sizes and other reporting issues. Because these categories are so broad, they tend to mask differences within these groups. Understanding and addressing health disparities requires greater granularity within the data.

Gathering more specific race/ethnicity data — referred to as data disaggregation — provides visibility to groups that might otherwise be invisible in current estimates of health outcomes. Disaggregating data on race/ethnicity is a collaborative process between those who collect the data and those who are represented in the numbers. By making more specific race/ethnicity data available, communities can inform policy to address existing disparities and highlight strengths that might be masked by current methods.

To address reporting issues at the local level, the Colorado Health Institute (CHI) is exploring a strategy of disaggregating health data in Colorado. CHI is focusing on key data systems that were rich sources of information about health outcomes and health care access. These data systems include the Colorado Health Access Survey (CHAS), a biennial survey of health data administered by CHI; the Colorado Health Observation Regional Data Service (CHORDS), a regional network of health systems and providers that bring together their electronic health records for public health research; and the Colorado All-Payer Claims Database (CO APCD), housed within the Center for Improving Value in Health Care (CIVHC).

In this project, CHI will develop a statistical model based on CHAS data to predict the likelihood that someone within the dataset identifies as a sub-group for those who identified as Hispanic or Latino. CHI will then attempt to apply that model to CIVHC and CHORDS data to expand existing systems with more granular, disaggregated data. CHI will also investigate imputation methods to expand race/ethnicity data that exist for race/ethnicity within all three data systems.
After expansion of the datasets of interest, CHI will investigate differences in mental health care utilization patterns and mental health outcomes, like depression diagnoses, among different racial and ethnic

subpopulations. CHI aims to look at temporal changes in these patterns across multiple years of APCD data.

CHI's partner in this work is the UCLA Center for Health Policy Research. The UCLA Center for Health Policy Research will act as a technical advisor during the process. The UCLA Center for Health Policy Research will access the data as such to understand the process and contents within the Colorado APCD system.

CHI is submitting this project for expedited IRB review as well.

Specific Aims:

1. To what extent can statistical modeling methods be used to disaggregate race and ethnicity data within the CO APCD?
2. To what degree can CHI adjust for missing race/ethnicity data within the CO APCD system?
3. How does utilization of health care services differ between different racial/ethnic groups in Colorado?
4. Specifically, how do mental health diagnoses and utilization of mental health services differ between racial/ethnic groups in Colorado? Among people who identify as Hispanic/Latino?
    - To what extent have these differences changed over time?
    - Are certain groups more likely to receive behavioral health screenings/services compared to others?
    - Are there differences in the mode in which care is delivered between racial/ethnic groups (telehealth vs. in-person visits)?
    - Are there differences in the types of providers delivering behavioral health care between racial/ethnic groups (physician, psychologist, nurse practitioner, etc.)?

Type of Data Requested:

Limited Data Set