CIVHC
CENTER FOR IMPROVING VALUE IN HEALTH CARE

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

22.52 Emory University - The Cost and Treatment of Epilepsy

Project Purpose:

Epidemiological data suggests that 10% of Americans will suffer a seizure at some point in their lifetime (i.e., more than 33 million people). Epilepsy, a condition generally characterized by recurrent, unpredictable, spontaneous seizures, is the fourth most common neurological condition in the US (Zack & Kobau, 2017). Nearly 3 million adults in the US currently live with active epilepsy, a heterogeneous group of chronic disorders with multiple etiologies (e.g., generic, acquired), each presenting with a variety of seizure types (e.g., focal vs generalized onset), and subcategorizations (e.g., motor, impaired awareness) (Scheffer et al., 2017).

The advent of newer generation antiepileptic medications such as ezogabine, clobazam, perampanel, eslicarbazepine, brivaracetam, and cannabidiol (Rudzinski et al., 2016) has expanded treatment options. The shift away from older generation anticonvulsants to newer, better-tolerated drugs and their more economical generic formulations has substantially modified patients' access and adherence to treatment.

The overarching goal of our project is to estimate the costs incurred and treatments received by patients with epilepsy and/or seizure. We include seizure because epilepsy is underdiagnosed, and patients with epilepsy may only have "seizure" recoded on claims for emergency department or hospital encounters.

Specific Aims:

1. What are the costs incurred by patients with epilepsy and/or seizure?

2. To determine how provider characteristics (age, specialty, gender, practice location) influence the treatments patients receive and whether they visit the emergency department.

3. What are the relationships between insurance type (Medicaid/Medicare vs private) and costs and drugs received.

Type of Data Requested:

Limited Data Set

CIVHC
CENTER FOR IMPROVING VALUE IN HEALTH CARE

22.114 Abzooba – Opioid Addiction Prevention in Members Suffering from Depression

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

•Business 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

•Business 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