



## **Data Release Review Committee (DRRC)**

### **CO APCD Data Requests Summary**

### **Meeting: April 6, 2022**

#### **22.45 Freedman Healthcare Prevalence and Treatment Patterns of Behavioral Health Conditions in Patients with Cancer**

##### **Project Purpose:**

This project is for academic research and publication. Patients with cancer often have concomitant behavioral health conditions, including depression and anxiety, which may complicate their cancer care. We seek to learn more about those conditions and their treatment. By using claims data, we plan to measure the types and prevalence of behavioral health conditions among patients with the most common types of cancer. Using the CO APCD, our intention is to gather insights on prevalence (the proportion of the population with behavioral health diagnoses among individuals diagnosed with cancer).

Further, we will explore the treatments used by these patients, particularly psychotherapy (sessions with psychiatrist, psychologist, or social worker) and prescription medication. Where possible, we are interested in determining if there is an observable underdiagnosis or undertreatment of behavioral health conditions for those diagnosed with cancer. Our goal is to determine if there is a lack of behavioral health services provided to those diagnosed with cancer, and among those receiving behavioral health treatment, to estimate the rate of effective treatment.

##### **Specific Aims:**

##### Population-based Questions

1. What is the prevalence of various cancers among Colorado residents?
2. What is the prevalence of relevant behavioral health diagnoses (Major depressive disorder, adjustment disorder, dysthymia, anxiety, etc.), among patients with cancer?
3. What are the differences, if any, between patients diagnosed with various forms of cancer?
  - a. Consider different stages (severity) of cancer
  - b. Examine differences by patient characteristics (such as age, gender, insurance type)
4. How does rate of diagnosed behavioral health conditions for patients with cancer compared to literature, expert opinion of prevalence, and to similar data in other states?

##### Behavioral Health Services Questions

5. What is the percent of patients diagnosed with cancer who have seen a mental health professional (psychologist, psychiatrist, social worker)? Of those, what percent have a visit with a primary diagnosis of a mood disorder?

6. What is the percent of patients with certain highly-prevalent cancers, who have seen a mental health professional?
7. What is the magnitude of undertreatment for behavioral health conditions for those diagnosed with cancer?

#### Behavioral Health Medication Questions

8. What percent of patients diagnosed with cancer filled a prescription for SSRIs, SNRIs, MAOIs, or other antidepressants?
  - a. Repeat for anxiolytics and other relevant BH medications
  - b. Measure variation in use across type or severity of cancer diagnosis and patient characteristics
  - c. Compare to patients not diagnosed with cancer
9. What is the percent of patients who were prescribed a behavioral health medication by the same provider treating the underlying cancer?

#### Dose Escalation and Switch Rate Questions

10. How often do patients who receive behavioral health medications receive clinically recommended dose escalation or medication switch over a six- to twelve-month period?
  - a. Examine for differences by prescriber type (primary care vs. oncologist vs. BH specialist, e.g.)
  - b. Compare to patients not diagnosed with cancer

#### Healthcare Utilization and Variation Questions

11. For patients diagnosed with cancer and behavioral health condition(s), what is the:
  - a. overall cost of care – per year and per “episode of care”?
  - b. number of visits to oncologist or cancer clinic?
  - c. number of ED visits, over the course of treatment?
  - d. number of urgent care visits, over the course of treatment?
  - e. number of hospitalizations, over the course of treatment?
  - f. age of patients over vs under the age of 65?
  - g. percent of patients diagnosed with mood disorders?
  - h. prevalence of BH prescriptions, over a select period?

#### **Type of Data Requested:**

Limited Data Set



## **22.18 University of Colorado, Anschutz Medical Campus Applying Palliative Care to Parkinson's Disease**

### **Project Purpose:**

Parkinson's disease (PD) is the second most common neurodegenerative illness affecting approximately 1.5 million Americans and is the 14th leading cause of death in the United States. PD is traditionally described as a movement disorder with characteristic motor symptoms (e.g. tremor). However, more recent research demonstrates the impact of nonmotor symptoms such as pain, depression, and dementia on mortality, quality of life (QOL), nursing home placement and caregiver distress.

Our CO APCD request is a planned aim from an NIH-funded pragmatic comparative effectiveness study examining the impact of a novel community-based model of palliative care in Parkinson's disease and related disorders (PDRD) on patient, caregiver, and clinician outcomes.

### **Specific Aims:**

- 1) Determine the impact of community-based palliative care on patient quality of life and caregiver burden
- 2) Determine the impact of this intervention on healthcare utilization and cost; and
- 3) Utilize mixed methods to identify opportunities to optimize this intervention.

For our second Aim, we sought to use two complementary methods to examine cost and healthcare utilization, namely patient/caregiver self-report and CO APCD data.

This aspect of the study will evaluate patient use of healthcare services (i.e., ER services, hospitalizations, hospice and palliative care services, respite care and other stays in long-term care facilities, home health services, and caregivers' use of psychological health services) as well as outpatient visits to physicians to determine impact of palliative care intervention on health care utilization and cost. APCD utilization data evaluations will include hospitalizations, ICU stays, ER visits and use of home health services. CO APCD data will be used to address both methodological questions (1. How well do APCD data and patient self-report agree?) and scientific questions (2. Does community-based palliative care impact the overall cost of care for PDRD? 3. How does community based-palliative care shift the costs of PDRD care (e.g. more home health, less ER).

Analysis of the CO APCD data will provide evidence as to whether Colorado could potentially experience lower healthcare costs for Medicaid patients who have Parkinson's disease. Colorado residents could experience better quality of life and cost savings from reduced copays and insurance payments resulting from hospital stays, ER visits, home health, and other medical services.

### **Type of Data Requested:**

Limited Data Set



## **22.30 OnPoint Medical Group Specialty Referral Network Development**

### **Project Purpose:**

OnPoint Medical Group is looking to develop a specialty referral network. We are a local medical group in the Denver area with 8 FP/IM clinics as well as 2 pediatrics and 1 OBGYN. We would use this data to research, analyze and develop a specialty referral network to refer patients to. This project and research will allow us to better serve our patients and community, the data provided will allow us to analyze the data and compare costs to make an informed decision and provide them choices when looking for where to send our patients for specialty care needs.

### **Specific Aims:**

Our goal is to research and analyze CO APCD Data in hopes of lowering and minimizing downstream costs for specialty care for our patients.

1. Where is there opportunity for patients to save money while still receiving needed services?
2. Is there opportunity to recommend patients receive healthcare services from the same provider at one location over another?
3. Is there a significant difference in healthcare expenditures across common procedures in the area that OnPoint can recommend to patients?

### **Type of Data Requested:**

Limited Data Set



## 22.119 Stanford University CO APCD and Census Data Linkage

*\*This is a proposal to use the existing data set for 21.116, DRRC approved 06/02/2021*

### **Project Purpose:**

The purpose of this request is to leverage data to enhance clinical and public health ability to better identify and serve patients and populations at increased health risk due to sociodemographic factors.

We aim to leverage data from several sources to examine specific area-based socioeconomic indices / social deprivation indices and assess and validate these indices with the intent to help inform patients and populations at risk and validating measures with the highest public health, policy and clinical utility.

The specific focus of this request is to share the Colorado APCD fully identifiable data set (#21.116) which was delivered to Stanford in December 2021 with US Census to perform linkages with a range of census data. Census data including but not limited to American Community Survey (ACS), death file, tax data, disability data and social services data.

### **Data Sources For Overall Project**

1. Area based socioeconomic measures will be created from public use US Census data;
2. Individual level US Census data accessed through Federal Statistical Research Data Center (FSRDC). Team has previously worked in the FSRDC environment and has approval for this proposed project;
3. The American Family Cohort (AFC) is a research dataset derived from EHR data collected as part of the PRIME Registry by the American Board of Family Medicine (ABFM). The PRIME Registry collects data from nearly 800 small primary care practices. This dataset is currently managed by Stanford Population Health Services (PHS) team.
4. Claims data including commercial and CMS claims data (i.e. CO APCD claims data) as well as other national or state-level claims data;
5. National Death Index, Numident death file or public use derivatives to assess relationships between indices and mortality.

The intent is to complete the linkage between the above data sources and utilize the combined data to address the research questions spelled out below.

Data for Colorado will be particularly rich due to the inclusion the Colorado APCD data.

### **Specific Aims:**

1. Stanford is in process of imputing race and ethnicity information associated with the 21.116 data set. One research question to be addressed with this new project will be validation of the methodology and these imputed measures with census data.
2. Validating and refining small area social deprivation indices to improve predictive power for outcomes and reduce bias. We will compare the performance of several small area measures of



social deprivation with individual-level measures of social deprivation to understand how well small area measures perform and for which populations and health conditions their performance may be better or worse.

3. Assess claims based quality measures (conditions include cervical cancer screening, breast cancer screening, diabetes care eye exam, etc.) as spelled out in the attached narrative in Table 2.

**Type of Data Requested:**

Expanded Use of an already approved Fully Identifiable Dataset

**21.116 Stanford University CO APCD and CDPHE data set Linkages**

*\*This is a proposal to use the existing data set for 21.116, DRRC approved 06/02/2021*

**Project Purpose:**

The purpose of this request is to link an already approved data set with CDPHE data, specifically mortality data. The main research aims of 21.116 are around (1) incidence, prevalence, etiology and epidemiology of COVID and long-haul COVID and (2) factors contributing to an increase in all-cause mortality during pandemic. CDPHE has mortality data – and, several other data sets – that are necessary or will enhance client ability to examine their research aims. Linking with mortality data at CDPHE may have been implied with the 21.116 application, but we wanted to be explicit about the planned linkage and obtain sign-off.

**Specific Aims:**

No specific changes to the research aims approved 06/02/2021

**Type of Data Requested:**

Expanded Use of an already approved Fully Identifiable Dataset