

Colorado All Payer Claims Database Data Release Application

Thank you for your interest in obtaining data from the CO APCD. As you fill out this application, please let us know if you have any questions or concerns by reaching out to ColoradoAPCD@civhc.org. We are here to help!

Also, please be aware that if you are requesting Protected Health Information (PHI), your request requires a recommendation for approval by the Data Release Review Committee (DRRC). Data elements that are considered PHI under HIPAA are indicated below. If PHI is requested, a CIVHC Account Executive will help you successfully complete an application and navigate the DRRC process.

Please use this application to submit information regarding your request for data from the Colorado All Payer Claims Database (CO APCD). This information will help the Center for Improving Value in Health Care (CIVHC), the Administrator of the CO APCD, answer any questions you have regarding your data request and assist us in helping you complete the data application form.

Note: Please reference the CO APCD Data Elements Request Form found at <http://www.civhc.org/get-data/data-release/> when completing this form.

Introduction: Section 10 CCR 2505-5-1.200.5 describes how the CO APCD Administrator addresses Requests for Data and Reports:

1.200.5.A. A state agency or private entity engaged in efforts to improve health care or public health outcomes for Colorado residents may request a specialized report from the CO APCD by submitting to the administrator a written request detailing the purpose of the project, the methodology, the qualifications of the research entity, and by executing a Data Use Agreement (DUA), to comply with the requirements of HIPAA.

1.200.5. B. A data release review committee shall review the request and advise the administrator on whether release of the data is consistent with the statutory purpose of the CO APCD, will contribute to efforts to improve health care for Colorado residents, and complies with the requirements of HIPAA. The administrator shall include a representative of a physician organization, hospital organization, non-physician provider organization and a payer organization on the data release review committee.

This Data Release Application serves as the written request for information noted in section 1.200.5.A.

PART ONE

Project Information	
Project Title:	22.114 Opioid Addiction Prevention in Members Suffering from depression
Date:	10/13/21
Organization Requesting Data:	Abzooba Inc
Contact Person:	Christopher J. Evers
Title:	Account Manager
E-mail:	chris.evers@abzooba.com
Phone Number:	(952) 270-8986
Person Responsible for the Project (if different than above):	TBD
Title:	
E-mail:	
Phone Number:	

Additional Data Requested Only / Original request was DE-ID. This original application stays the same with the exception of the below requested additions.

Date Elements: Data elements such as Admit_Dt, Discharge_Dt, Service_Start_Dt, Service_End_Dt, etc are needed for time-based features such as first date of Diagnosis of Type 2 Diabetes Mellitus, Length of stay during admissions, Dates of services such as encounter, Lab services, Dates of Prescriptions etc.

- It helps Machine Learning algorithm to understand how a particular disease progressed over time with respect to different diagnosis codes & procedure codes over a stay/visit period.
- Also, prescription date plays very important role to identify correlation between medical codes (diagnosis, procedure, etc) to the medicine prescribed.

Project Purpose:

Project questions to be discussed with client representative:

- Please describe your project and project goals/objectives.

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.
- What specific research question(s) are you trying to answer or problem(s) are you trying to solve with this data request? (Please list and number the individual questions.)

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.

- How will this project benefit Colorado or Colorado residents? (this is a statutory requirement for all non-public releases of CO APCD data)

Type 2 Diabetes Mellitus & Opioid Addiction Prevention

The members/residents suffering from Diabetes Type 2, who are most likely to suffer from depression to be shortlisted and their respective primary care providers to be notified to provide appropriate interventions for prevention of depression thus prevent worsening of health outcomes and lowering costs. The members/residents suffering from Depression, who are more prone to opioid abuse to be shortlisted and their respective primary care providers to be notified to provide appropriate interventions for

prevention of opioid addiction thus prevent worsening of health outcomes and lowering costs. It is envisioned that the research and analysis will contribute to a better understanding of comorbidity by public health specialists and health care providers alike, which in turn will help to promote a more integrated approach for patients with comorbidity.

- Please answer all applicable questions below (Note that your project must meet one or more of the Triple Aim criteria below to generate a benefit for Colorado):
 - If applicable, how will your project support lowering health care costs?

Type 2 Diabetes Mellitus

Ans: According to AHA, Patients with untreated depression and a chronic illness have monthly healthcare costs that average \$560 higher than those with just a chronic disease. With this project we will be able to shortlist the members/residents having Diabetes Type 2, who are likely to suffer from depression for appropriate timely intervention to prevent worsening of health outcomes and thus support lowering health care costs.

Diabetes' Impact in Colorado

https://www.colorado.gov/pacific/sites/default/files/DC_Factsheet_Facts_For_Action_Diabetes_In_Colorado_November_2015.pdf

Opioid Addiction Prevention

Ans: Treating addiction is very expensive. U.S. healthcare organizations spend more than \$500 billion annually caring for patients suffering from opioid addiction alone. With this project we will be able to shortlist the members/residents who are more prone to opioid abuse for appropriate timely intervention to prevent worsening of health outcomes and thus support lowering health care costs. Opioid crisis has cost Colorado's economy at least \$21 billion (<https://corxconsortium.org/report-opioid-crisis-has-cost-colorados-economy-at-least-21-billion/>).

- If applicable, how will you project help improve the health of Coloradans?

Type 2 Diabetes Mellitus

Ans: The members/residents suffering from Diabetes Type 2, that are most likely to suffer from depression can be shortlisted and their respective primary care providers can be notified to provide appropriate interventions for prevention of depression thus improving health outcomes.

Opioid Addiction Prevention

Ans: The members/residents suffering from depression, that are more prone to opioid abuse can be shortlisted and their respective primary care providers can be notified to provide appropriate interventions for preventing opioid addiction thus improving health outcomes.

- If applicable, how will your project improve the quality of care or patient experience?

Type 2 Diabetes Mellitus

Ans: The primary care provider can plan appropriate intervention such as referring to a mental health provider, counselor or even prescribing anti-depressant medications. This will help in better coordinated care for the patients for improving their health outcomes.

Opioid Addiction Prevention

Ans: For the members/residents who are more prone to be opioid addict, the primary care provider can plan appropriate intervention such managing chronic pain with use of non-opioid medications (NSAIDs), altering the dose of opioids if necessary, managing depression more effectively, etc. This will help in better coordinated care for the patients for improving their health outcomes.

- Do you need a claims data set or would you like a custom report generated by CIVHC that addresses the specific questions/problems your project seeks to address?
- Do you need Protected Health Information (PHI)? No
 - Do you need patient-specific dates (e.g., dates of service or DOB) or 5 digit zip code. If so, this is a request for a **Limited Data Set**. n/a
 - Do you need direct patient identifiers such as name, address, or city? If so, this is a request for an **Identifiable Data Set** (requires IRB approval). n/a
 - If you do not require any PHI, please only complete PART ONE of the application.

Please note: your CIVHC representative will work with you to complete **Addendum I – Analyst Supplement** to address data warehouse specific questions.

PART TWO

I. Type of CO APCD Analytic Data Set Requested (Not applicable for Custom Report Requests)

Please select the type of data set that you are requesting by checking one of the boxes below (**select only ONE option**). Details on each type of CO APCD data set can be found in *The CO APCD Companion Instruction Guide* (available from your CIVHC representative):

Types of Analytic Data Sets (Please select ONE below)

For users interested in a wide range of data to analyze on their own.

- ☐ De-Identified Data Set
- ☒ Limited Data Set*
- ☐ Identified Data Set *

*These types of data requests include Protected Health Information (PHI). Under HIPAA, PHI may only be released in limited circumstances for public health, health care operations, and research purposes under the terms of a HIPAA compliant data use agreement (DUA).

2. **Requested Data Elements – Limited and Fully Identifiable Data Sets**

The CO APCD is committed to protecting the privacy and security of Colorado’s health care claims data. The CO APCD will limit the use of the data to purposes permitted under applicable laws, including APCD Statute/Rule and HIPAA/HITECH, to information reasonably necessary to accomplish the project purpose as described in this Application.

Data Element Selection and Justification

If you have not already done so, please use the Data Element Dictionary (DED) to identify the specific data elements that are required for this project. In keeping with the minimum necessary standard established under HIPAA, CO APCD policy is to release only those data elements that are required to complete your project.

Type of Data	Justification for Elements on the DED
Names	
Street Address	
City	
Zip Code	
Health Plan Beneficiary Numbers	
Dates (including Day and Month detail.) Specify which date fields are needed and why.	For several reasons, dates of service are critical for our research: - track disease progression related to medical services -tie medical and pharmaceutical treatments with outcomes -understand and evaluate episodes of care along with progression of treatments (medical and pharmacy)
Provider Identifying Information	

A. Counts, Totals and other Summary Statistics

The CO APCD seeks to provide aggregated summary data whenever possible. Applicants are encouraged to request counts, totals, rates and other summary values whenever such information can reasonably accomplish the purpose of the project (add rows to the table below if necessary). The CO APCD supports the federal CMS minimum cell size suppression policy that requires any cell in any report or data table, printed or electronic, with less than eleven records or observations to be replaced by “Less than eleven” or similar text. You must also apply complementary cell suppression techniques to ensure that cells with fewer than eleven records cannot be identified by manipulating data in adjacent rows and columns.

Field Number and Name	Requested Count or Sum
	<i>[add rows as needed]</i>

B. Linkages to Other Data Sets

The CO APCD seeks to ensure that data cannot be re-identified if it is linked to or combined with information obtained from other sources. If this project requires claims line level detail or includes linkages to other databases, or if CO APCD data will be combined with other information, provide a justification for each proposed linkage. Be sure to describe how this will contribute to achieving the project purpose, including whether the project can be completed without this linkage, and the steps you will take to prevent the identification of individual patients:

Will you link the CO APCD data to another data source?

- ☒ No.
- ☐ Yes. If yes, please answer the following questions.
- Which CO APCD identifying data elements will be used to perform the linkage?
 - Once the linkage is made, what non-CO APCD data elements will appear in the new linked file?
 - Have all necessary approvals been obtained to receive and link with the other data files (e.g., IRB or Privacy Board approval)?
 - ☐ Yes, if so please provide copy
 - ☐ In progress, anticipated approval date: _____
 - ☐ No or N/A, reason: _____

C. Distribution of the Report or Product: **Prior Review by the CO APCD Administrator**

If you are producing a report for publication in any medium (print, electronic, lecture, slides, etc.) the CO APCD Administrator must review the report prior to public release. The CO APCD Administrator will review the report for compliance with CMS cell suppression rules; risk of

inferential identification; and consistency with the purpose and methodology described in this Application.

- Please describe your audience and how to you will make your project publicly available?
- If the report is not to be made publicly available, then briefly describe how the information derived from this data will be used and by whom:

Other Organizations: Do you intend to engage third parties who will have access to the data requested as part of this project? If so, list the organizations below, describe their role(s); and explain why they will be granted access to the requested data.

Organization/Company Name:	
Contact Person:	
Title:	
Address:	
Telephone Number:	
E-mail Address:	
Role or responsibility in this project	<i>[add rows as needed]</i>

Project Schedule:

Proposed Project Start Date:	November 15 th , 2021
Project End Date:	October 2022
Proposed Publication or Release Date:	September 2022
End of Date Retention Period:	November 2022

D. Frequency

Data in the CO APCD Warehouse is refreshed every other month and data products can be provided on a one time basis or under a subscription model (e.g., quarterly, bi-annually or annually). Please select frequency below.

☒ One Time

OR

Subscription (Please select subscription model below)

- ☐ Quarterly
☐ Bi-annually
☐ Annually

E. **Project Reporting**

CIVHC highlights projects and data analysis on the public website: www.civhc.org/change-agents. This display of CO APCD projects provides future data requesters with ideas of how they can structure their analysis, and allows CIVHC's stakeholders to see how CO APCD data recipients are working to accomplish the Triple Aim for Colorado. Data recipients have the option of choosing whether to be identified or to not be identified.

- ☒ Yes, it is okay for CIVHC to identify my organization
- ☐ No, I do NOT wish for CIVHC to identify my organization

If you are requesting a Custom Report with analytics to be provided by CIVHC; please stop here and submit the information above to your CIVHC representative.

PART THREE

DATA MANAGEMENT PLAN (Not applicable for Custom Report Requests)

I. Organizational Capacity

As an Attachment, please provide copies of the Data Privacy and Security Policies and Procedures for the Requesting Organization as well as those of any third parties that will have access to the requested CO APCD data.

- Has the Requesting Organization or any member of the project team ever been involved with a project that experienced a data security incident? If so, describe the incident, the response procedures that were followed and any subsequent changes in procedures, processes or protocols to mitigate the risk of further events.

To the extent that the Data Privacy and Security Policies and Procedures, provided as an Attachment, do not already do so, please answer or attach answers for the following:

- **Physical Possession and Storage of CO APCD Data Files:**
 - Describe how you will maintain an inventory of CO APCD data files and manage physical access to them for the duration of the project:
 - Describe your personnel/staffing safeguards, including:
 - Confidentiality agreements in place with individuals identified as being assigned to this study. Include, for example, agreements between the Principal Investigator or Data Custodian and others, including research team members, and information technology and administrative staff:
 - Staff training programs you have in place to ensure data protections and stewardship responsibilities are communicated to the research team:
 - Procedures to track the active status and roles of each member of the research team throughout the project and a process for notifying the CO APCD of any changes to the team:
 - Describe your technical and physical safeguards. Examples include:
 - Actions taken to physically secure data files, such as site and office access controls, secured file cabinets and locked offices.
 - Safeguards to limit access to CO APCD data and analytical extracts among the research team (Note: if the distribution of analytical data extracts among the researcher team is part of your data management plan, the extracts remain subject to the terms of your Data Use Agreement).
 - Provide a brief description of your policies and procedures for ensuring that CO APCD data are protected when stored on a server.
 - Describe how your organization prevents the copying or transfer of data to local workstations and other hard media devices (CDs, DVDs, hard drives, etc.). Note that Applicants are required to encrypt CO APCD data both in motion and at rest:
 - Data Reporting and Publication
 - Your organization must ensure that all analytic extracts, analyses, findings, presentations, reports, and publications based on CO APCD

data files adhere to specific requirements of the Data Use Agreement (DUA: refer to sections 6, 7 and 8 in the Data Use Agreement). **Briefly describe your plan for demonstrating that data reporting and publication processes will be consistent with the DUA, including adhering to CO APCD cell suppression policies:**

2. Completion of Research Tasks and Data Destruction

Your organization must ensure that it has policies and procedures in place to destroy the CO APCD data files upon completion of the project and that you have safeguards to ensure the data are protected when researchers terminate their participation in the research project. Describe your plan for demonstrating that your organization has policies and procedures in place to reliably destroy the data files upon completion of the research:

3. Request for Privacy Board Approval *(Only Applicable to Identifiable Data Requests)*

Projects that request Identifiable information for a research purpose may require approval from the DRRC acting as a Privacy Board if an IRB is not available.

- The DRRC, acting as a Privacy Board, may approve a waiver of the individual authorization normally required to release PHI under CFR § 164.508 if:
- It would be impracticable for researchers to obtain written authorization from patients that are the subject of the research; and
- The research could not practicably be conducted without access to and use of the PHI.
- The DRRC, acting as a Privacy Board, is required to evaluate certain criteria in considering whether to approve an authorization waiver. If you are requesting Identifiable Information for a research purpose, explain why your proposed use of PHI involves no more than a minimal risk to the privacy of patients that are the subject of the research. Evidence of minimal risk to the privacy of patients that should be addressed in your explanation includes:
 - An adequate plan to protect PHI identifiers from improper use and disclosure;
 - An adequate plan to destroy PHI identifiers at the earliest opportunity; and
 - Adequate written assurances that PHI will not be reused or disclosed.

Appendix I

Certification of Project Completion and Destruction or Retention of Data

(Please Save)

Name:	
Title:	
Organization:	
Address:	
Tel Number:	
Fax Number:	
E-mail Address;	
Project Title:	
Data Sets:	
Years:	
<input type="checkbox"/> Certification of Data Destruction	Date the Data was Destroyed:
<input type="checkbox"/> Request to Retain Data	Date Until Data Will Be Retained:

Instructions: Data must be destroyed so that it cannot be recovered from electronic storage media in accordance with the methods established by the "Guidance to Render Unsecured Protected Health Information Unusable, Unreadable, or Indecipherable to Unauthorized Individuals," as established by the U.S. Department of Health and Human Services (HHS).

I hereby certify that the project described in the Application is complete as of this date
_____, ___, 20__.

Complete the appropriate section, below:

☐ I/we certify that we have destroyed all Data received from the CO APCD Administrator in connection with this project, in all media that were used during the research project. This includes, but is not limited to data maintained on hard drive(s), diskettes, CDs, etc.

☐ I/we certify that we are retaining the data received in connection with the aforementioned project, pursuant to the following health or research justification (provide detail, use as much additional space as necessary and state how long the data will be retained).

☐ I/we hereby certify that we are retaining the Data received from the APCD Administrator in connection with the aforementioned project, as required by the following law. [Reference the appropriate law and indicate the timeframe].

By signing this Agreement, the Receiving Organization agrees to abide by all provisions set out in this Agreement.

SIGNATURES:

For the CO APCD:	For Receiving Organization:
Signature:	Signature:
Name: Pete Sheehan	Name:
Title: VP of Client Solutions & State Initiatives	Title: