



CENTER FOR IMPROVING  
VALUE IN HEALTH CARE

## Colorado All Payer Claims Database Data Release Application Part I

Part I of the Data Release Application should be used to submit background information related to your organization's 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, understand the questions you are trying to answer with your data request and assist us in helping you through the data request process. All CO APCD data requests go through a careful review and approval process and involve a licensing fee. CIVHC has a team of Health Data Solutions Consultant who will work closely with you throughout the data request process.

Prior to completing the questions below, please review the information on requesting data and reports located at <https://www.civhc.org/get-data/non-public-data/>.

Project Information	
<b>Project Title:</b>	22.119 Stanford _ APCD and Census Data Linkage
<b>Date:</b>	March 3, 2022
<b>Organization Requesting Data:</b>	The Board of Trustees of the Leland Stanford Junior University
<b>Contact Person:</b>	Isabella Chu
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<b>CIVHC Contact:</b>	David Dale

### Project Purpose

- I. Describe your project and project goals/objectives in detail.

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.

2. 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.)
  1. Stanford is in process of imputing race and ethnicity information associated with the 2010 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.
3. How will this project benefit Colorado or Colorado residents? (This is a statutory requirement for all non-public releases of CO APCD data. Contributions to the generalizable knowledge is not sufficient.)

Combining CO APCD Data with US Census data and other data specified in this application will provide a rich resource to better understand Colorado patients and populations at risk due to social factors. Validating area deprivation indices / social deprivation indices will inform clinical capacity, public health and payment policy decisions as well as help identify and inform how to better direct social service and health care resources to improve overall health outcomes and health equity.

Both the imputed race data and detailed information on the reliability of these data will be shared with CIVHC. The inclusion of this information will enable the state of Colorado to better respond to Biden's Executive Order 13,985 "Advancing Racial Equity and Support for Underserved Communities".

4. Describe how the project will meet one or more of the Triple Aim criteria below.
- Improve the patient experience of care (including quality and satisfaction)
  - Improve the health of populations
  - Reduce the per capita cost of health care

Our objective is to produce one or more Social Determinants of Health (SDOH) indices that are the least biased for predicting: 1) quality measures 2) area prevalence of conditions, quality, utilization, costs (claims data); and 3) mortality (state-collected death data or derivatives). Our approach to assessing bias is based on a similar degree of prediction between individual and area-based measures for key subgroups of the population based on race, ethnicity, age, geography, rurality, and gender. It is our hope is more accurate measures of disparities will result in better concordance between resource allocation and need, improving both quality of care and patient outcomes.

While it remains to be seen whether this reduces costs in absolute terms, such adjustments to resource allocation are likely to improve value and outcomes.

5. The State of Colorado and CIVHC are committed to ensuring everyone, regardless of demographics, has access to the care they need when they need it. How might your project contribute to that?

The primary objective of this project is to produce one or more Social Determinants of Health (SDOH) indices that are the least biased for predicting: 1) quality measures 2) area prevalence of conditions, quality, utilization, costs (claims data); and 3) mortality (state-collected death data or derivatives). While such measures do not expand access to care, they should certainly will aid in estimates of what care and resources are needed to improve outcomes and equity.

6. Can CIVHC publicly share your organization's' name in the work we do to promote our Change Agent clients in our [Change Agent Index?](#) ☒ Yes ☐ No

**Type of Output Requested:** Select the level of detail that you are requesting. If you are unsure, please contact us at [ColoradoAPCD@civhc.org](mailto:ColoradoAPCD@civhc.org).

Stanford received a fully identifiable data set from CIVHC in December 2021. This request is to share that same data set with US Census to accomplish the aims outlined. No new data is being requested.

- ☐ Standard De-identified Data Set  
☐ Limited Data Set  
☐ Identified Data Set  
☐ Standard Report  
☐ Custom Report

**Lines of Business:** Which payers do you need for your project purpose?

- ☐ **Commercial Payers (Includes Medicare Advantage)**
- ☐ **Health First Colorado (Colorado's Medicaid Program)** – Note: Medicaid only data requests must be reviewed by the Colorado Department of Health Care Policy and Financing (HCPF) to ensure alignment with administration of the Medicaid program as required by federal law.
- ☐ **Medicare Fee For Service (FFS)** – Note: Data requests for Medicare FFS are only available for authorized users for research purposes and must be approved by HCPF.

**Years Requested:** What years of claims do you need to meet your project purpose?

- |                                          |                                          |
|------------------------------------------|------------------------------------------|
| <input checked="" type="checkbox"/> 2012 | <input checked="" type="checkbox"/> 2019 |
| <input checked="" type="checkbox"/> 2013 | <input checked="" type="checkbox"/> 2020 |
| <input checked="" type="checkbox"/> 2014 | <input checked="" type="checkbox"/> 2021 |
| <input checked="" type="checkbox"/> 2015 |                                          |
| <input checked="" type="checkbox"/> 2016 |                                          |
| <input checked="" type="checkbox"/> 2017 |                                          |
| <input checked="" type="checkbox"/> 2018 |                                          |

**Data Needs**

The following questions are related to Protected Health Information (PHI) to determine if you need a Limited Data Set or an Identifiable Data Set. The Data Elements Dictionary detailing the fields available for both types of data can be found at <https://www.civhc.org/get-data/non-public-data/>. **Note that any data request including PHI will need Part 2 of the Application and approval by the Data Release Review Committee.**

1. 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**.  
  
☐ Yes   ☐ No
2. 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).  
  
☒ Yes   ☐ No