Data Release Application
Limited and Identifiable Extracts

Navigation

Data Release Application
Limited and Identifiable Extracts

Client Application Revision History

The following reflects the history of changes made to this document during the application process prior to project production. Once in production, any further changes to the application may result in additional cost and production delays.

To be completed by CIVHC staff			
Date	New Version Number	Description of Change(s)	CIVHC Change Author (full name, complete title)
10/18/2024	V.01	Initial version drafted with client.	Lucía Sanders, Key Account Manager
11/27/2024	V.02	Added details regarding past project 21.81, which includes mother data.	Lucía Sanders, Key Account Manager
12/9/2024	V.03	Clarified dates of original 21.81 data request.	Lucía Sanders, Key Account Manager
12/10/2024	V.04	Updated date range for member match and added pharmacy claims.	Lucía Sanders, Key Account Manager
	V.05		
	V.06		
	V.07		
	V.08		
	V.09		
	V.10		

Data Release Application
Limited and Identifiable Extracts

Data Requestor Details

General Project Details

Project Title:	Understanding Disparities in Preventive Care Utilization, Hospitalization and Emergency Department visits Among Children of Deaf and Hard of Hearing Mothers
Application Start Date:	10/15/2024
Requested Project Delivery Date:	2/1/2025
Client Organization (legal name):	The Lundquist Institute for Biomedical Innovation
Client Organization Address:	1124 W. Carson St, Torrance, 90502 CA
CIVHC can publicly share the Client Organization's name in its Change Agent Index.	☒ Yes ☐ No
To be completed by CIVHC staff	
CIVHC Contact (full name, complete title):	Lucía Sanders, Key Account Manager
Project Number:	24.49
Condensed Project Title:	Disparities Children DHHM

Project Contacts

Project Contact Name:	**Frank Wu**
Title:	Research Associate
Email:	Frank.wu@lundquist.org
Phone Number:	310-222-3699
Analytic Contact Name:	**Dennys Estevez**
Title:	Biostatistician
Email:	Dennys.estevez@lundquist.org
Phone Number:	310-222-3699

Data Release Application
Limited and Identifiable Extracts

Invoice Contact Name:	Rie Sakai-Bizmark
Title:	Associate professor
Email:	rsakaibizmark@lundquist.org
Phone Number:	310-222-3699
Data Release Fee Signatory:	Rie Sakai-Bizmark
Title:	Associate professor
Email:	rsakaibizmark@lundquist.org
Phone Number:	310-222-3699
Data Use Agreement Signatory:	Rie Sakai-Bizmark
Title:	Associate professor
Email:	rsakaibizmark@lundquist.org
Phone Number:	310-222-3699

Data Release Application
Limited and Identifiable Extracts

Project Schedule and Purpose

Proposed Project Start Date[1]:	6/1/2025
Anticipated Project End Date:	6/30/2028
Proposed Publication or Release Date:	10/1/2028

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

This project is an both a reuse and an expansion of past project 21.81: Prenatal and Postpartum Healthcare Utilization among Homeless Women in Colorado. The original 21.81 data extract included eligibility and claims data for women who delivered infants in 2016-2021. This new request (24.49) seeks to extract eligibility and claims data for children aged 0-2 years and also match them with Vital Statistics data, which will enable creation of mother/baby pairs.

Individual research questions:

    i.   Are there differences in healthcare utilization between children of deaf and hard of hearing mothers (CD/HHMs) and children of hearing mothers?

    ii.   Are there differences in healthcare utilization between children of deaf and hard of hearing mothers (CD/HHMs) served by clinicians who see a large volume of CD/HHMs compared to those served by clinicians with a low volume of CD/HHMs?

    iii.   Are there differences in healthcare utilization between CD/HHMs and non-CD/HHMs served by the same clinician?

---

[1] After all required documents have been signed, typical production time is 30-60 days for a Limited or Identifiable Extract. Anticipate a longer production period for projects including a Finder File or creation of a Member Match File.

2. Describe your methodology or how you will be using data from the Colorado All Payer Claims Database (CO APCD) to answer your research questions.

> We will use birth records to identify infants born between September 2016 and December 2021. Using linked data, we will examine their CO APCD records within one year after birth, as well as their mothers' CO APCD records nine months before delivery and up to two year after, aiming to focus on pregnancy and one year postpartum (via prior 21.81 data extract of data for women who delivered one or more babies in 2016-2021). Thus, this longitudinal study will cover January 2016 (i.e., nine months before September 2016) through December 2023.
>
> Using the previously delivered 21.81 data extract, we will identify Deaf and hard of hearing (D/HH) mothers using ICD-10-CM codes (H90, H91, and Q16), which have been used in existing studies, including NIH funded projects. To improve the accuracy of D/HH mother identification via ICD-10-CM, we will examine mothers' CO APCD records nine months pre-delivery and up to one year postpartum. Mothers with H90, H91 or Q16 codes in their APCD records anytime during this period will be classified as D/HH.
>
> Clinicians will be limited to pediatricians and family medicine physicians because their responsibilities include infant care. These clinicians will be identified using the provider taxonomy codes listed in CO APCD. The clinician responsible for patient care will be defined as the pediatrician or family medicine physician who billed the largest number of claims identified in CO APCD data for a given CD/HHM patient. In cases where a patient had two or more clinicians submitting an equal number of claims, we will choose the clinician who submitted the first claim.
>
> We will rank clinicians based on the number of CD/HHMs they serve. Clinicians will be categorized into two groups (i.e., "high-volume CD/HHM [HVC] clinicians" and "low-volume CD/HHM [LVC] clinicians") based on the number of patients assigned to each, aiming to include an equal distribution of patients across both groups.
>
> Outcomes of interest are infants' well-baby visit and vaccination schedule adherence within the first year of life. We will also examine hospitalizations, ED visits, and outpatient care as other forms of healthcare utilization.

3. Explain how this project will benefit Colorado and its residents.[2]

> Findings from this proposed project will reveal if there are any associations with being CD/HHM and adverse infant health outcomes and healthcare utilization. This will provide valuable information for the development of potential interventions to reduce communication barriers between healthcare settings and DHH mothers in Colorado.

4. Describe how your project will improve health care quality, increase health care value, or improve health outcomes for Colorado residents.[2]

> If our proposed study finds an association between a clinician's volume of CD/HHM patients and health outcomes, regionalizing CD/HHM patient care to experienced clinicians may yield improved health outcomes.

5. Health equity is defined as the state in which everyone has a fair and just opportunity to attain their highest level of health. Explain how your project addresses health equity.

> D/HH women face a higher risk of pregnancy complications and adverse birth outcomes, such as preterm birth, compared to their hearing counterparts. Communication and cultural barriers, along with mistrust in the healthcare community, are key factors contributing to adverse health outcomes among D/HH individuals. Despite reported disparities in healthcare utilization and health outcomes among D/HH individuals, disparities among CD/HHMs remain uninvestigated. This project will aim to assess the factors associating with CD/HHMs' healthcare utilization.

6. Describe any publication you plan to develop based on your use of CO APCD data, its intended audience, and whether it will be made publicly available.

> Findings will also be disseminated through multiple other channels. First, we aim to publish the research findings in top-ranked, peer-reviewed journals including JAMA and the American Journal of Epidemiology and present the findings at medical conferences. Second, additional dissemination methods will include individual consultations, group training sessions, conference workshops, newsletters, magazines and newspapers, and the project's website.

---

[2] It is a statutory requirement for all non-public releases of CO APCD data to benefit Colorado or its residents. Contributions to generalizable knowledge alone are not sufficient to satisfy this requirement.

Data Release Application
Limited and Identifiable Extracts

Data Matching and Linkage

Finder File

A Finder File is a file you submit to CIVHC with information about a pre-selected cohort for matching to CO APCD data. Ask your CIVHC Contact for more information about this process and requirements for Finder File submission.

Will you provide CIVHC with a Finder File as part of this project?

☒ No
☐ Yes

Member Match File

A Member Match File is a file that CIVHC creates on your behalf to send to a registry or other outside entity to create a crosswalk connecting data from the CO APCD to the other entity's data.

Does this project require the creation of a Member Match File?

☐ No
☒ Yes. Consult with your CIVHC Contact about completing a separate Data Element Selection Form specifying the data elements that should be used to create the Member Match File.

Answer the following:

Who will receive the Member Match File?
CDPHE

Control Group

A Control Group is a group of individuals who can be used to compare against the cohort identified in the Finder File.

Will you need CIVHC to create a Control Group as part of this project?

☒ No
☐ Yes. Consult with your CIVHC Contact about completing a separate Control Group Data Element Selection Form specifying the data elements that should be used to define the Control Group.

Data Release Application
Limited and Identifiable Extracts

Linkage

Data Linkage is a method of joining data from different sources together to create a new data set.

Will the CO APCD data be linked to another data source?

☐ No
☒ Yes. Answer the following:

What is/are the other data source/s?
CDPHE birth records, CO APCD data extract 21.81
Who will perform the data linkage?
CDPHE, Lundquist
What identifying data elements will be used to perform the data linkage?
Mother's first and last name, SSN, and date of birth
What non-CO APCD data elements will appear in the new linked file?
Birth records data: (DOB, race/ethnicity, prenatal care, c-section, gestation, birth weight, etc)

Data Release Application
Limited and Identifiable Extracts

Data Inclusion Criteria

Make selections in the following sections based on what data you want to have included in this extract. If you will be creating a Control Group, complete this section for your study population and not the Control Group.

Protected Health Information (PHI)

Indicate which Protected Health Information data elements you require for your project purpose:

Available for Limited and Identifiable extracts:		
☒ Member 5-Digit Zip Code	☐ Member County	☐ Member City
☒ Member Dates of Service	☐ Member Eligibility Dates	☐ Claim Paid Dates
☐ Employer Name	☐ Member Census Tract	☐ Member Census Block
☐ Member Census Block Group		

Available for Identifiable extracts only (see also Identifiable Data Use Approval):	
☐ Member Name	☒ Member Date of Birth (if requesting more than year only)
☐ Member Street Address	☐ Member Latitude and Longitude

Provide detailed justification for the inclusion of all PHI data selected above, and explain how its inclusion meets the Minimum Necessary Requirement.[3]
Zip code will be used to determine income quartile as an adjustment variable. Dates of service will be used to assses if infant followed well-baby/vaccination schedule adherences. Date of birth will be used to identify starting date of analysis for infants.

---

[3] Limited and Identifiable extracts must adhere to the Minimum Necessary Requirement under the HIPAA Privacy Rule; only that data required to answer the project purpose can be included in the request.

Data Release Application
Limited and Identifiable Extracts

Line(s) of Business

☒ Commercial Payers
☒ Health First Colorado (Colorado's Medicaid and CHP+ programs)[4]
☐ Medicare Advantage
☐ Medicare Fee for Service (FFS)[5]

Year(s) of Data

☐ 2012 ☐ 2013 ☐ 2014 ☐ 2015 ☒ 2016 ☒ 2017
☒ 2018 ☒ 2019 ☒ 2020 ☒ 2021 ☒ 2022 ☒ 2023
☐ 2024[6]

Claim Type(s)

☒ Inpatient Facility ☒ Outpatient Facility ☒ Professional
☒ Pharmacy ☐ Dental

Financial Detail by Line Item

☒ Charged Amount ☒ Allowed Amount ☐ Plan Paid Amount
☐ Plan Pre-Paid Amount ☐ Member Copay ☐ Member Deductible
☐ Member Coinsurance ☐ Total Member Liability

---

[4] Medicaid-only data requests must be approved by the Colorado Department of Health Care Policy and Financing.
[5] Medicare FFS data are not available for all requests and must go through a separate approval process.
[6] This year's data is incomplete and not fully adjudicated. Consult with your CIVHC Contact to find out what data is available at the time of your request.

Data Release Application
Limited and Identifiable Extracts

Filter Criteria – Services, Providers, Facilities

If you need data for specific services, providers and/or facilities, specify that filter criteria below (ask your CIVHC Contact about including an additional file with this application for large code lists):

ICD Diagnosis Code(s):

Procedure(s) (list CPT, HCPCS, DRG, ICD, and/or CDT codes):

Drug(s) (list pharmacy NDC and/or HCPCS codes):

Facility Type(s):

Facilities (list NPIs and/or Pharmacy IDs):

Facilities within these geographical areas (list county, zip code, Census Tract, etc.):

Provider Type(s):

Provider(s) (list NPIs):

Providers within these geographical areas (list county, zip code, Census Tract, etc.):

Specific payers (minimum of five):

Data Release Application
Limited and Identifiable Extracts

Other claim specification:

Filter Criteria – Members/Patients

If you need data for specific member/patient groups, specify that filter criteria below (ask your CIVHC Contact about including an additional file with this application for large code lists):

Ages:		
<= 2 years old		
☒ At the time of service	☐ At year end	☐ By another anchor date: *Specify here*
With these ICD Diagnosis Code(s):		
Who have had the following procedure(s) (list CPT, HCPCS, DRG, ICD, and/or CDT codes):		
Within these geographical areas (list county, zip code, Census Tract, etc.):		

Value-Add Data Elements

☐ Medicare Severity Diagnosis Related Group Codes (MS-DRGs)
☐ 3M All Patient Refined Diagnosis Related Group Codes (3M APR DRGs)
☐ Medicare Repricer (available at the claim line level)
☐ Fields from the American Community Survey (available at the Census Tract level):

Specify here

Additional Documentation

Data Element Selection Form (DESF)

The Data Release Application must be accompanied by a completed Data Element Selection Form. Ask your CIVHC Contact for more information about completing this form.

- ☒ By checking this box, the Client Organization confirms that the Data Element Selection Form has been completed.

- ☒ If applicable, by checking this box the Client Organization confirms that a separate Member Match File Data Element Selection Form has been completed.

- ☐ If applicable, by checking this box the Client Organization confirms that a separate Control Group Data Element Selection Form has been completed.

Identifiable Data Use Approval

If you are requesting Identifiable information, approval from an Institutional Review Board (IRB) or a Privacy Board is required before such data can be released.

- ☐ Not applicable; the Client Organization is requesting a Limited Extract.

Approval Type

- ☒ IRB Approval

- ☐ Privacy Board Approval

Approval Type

- ☐ Approval request not yet submitted.
  Anticipated submission date:

- ☐ Approval request submitted and under review.
  Anticipated project approval date:

- ☒ Approval already received.

Approval Documentation

- ☒ By checking this box, the Client Organization confirms that the IRB or Privacy Board **application and approval documents** have been provided to CIVHC.

Data Release Application
Limited and Identifiable Extracts

Data Management Plan

An organization requesting CO APCD data must submit an organizational Data Management Plan to CIVHC outlining the organization's data security and data management policies and procedures to safeguard the data. This Data Management Plan must be approved by CIVHC prior to any data release.

Date Submitted to CIVHC:	11/8/2024
Date Approved by CIVHC:	11/11/2024

Client Acknowledgements and Signatures

Report or Product Distribution

If your project results in the production of a report for public distribution in any format (print, electronic, lecture, slides, etc.), including peer-reviewed publication, it must be submitted to CIVHC for review prior to public release. CIVHC will assess compliance with CMS Cell Size Suppression Policy, risk of inferential identification, CIVHC and CO APCD citations, and consistency with the purpose and methodology described in this Data Release Application. CIVHC will not assess the accuracy of the study results or attempt to recreate results.

This requirement is further defined in the Data Use Agreement. Failure to pursue and obtain CIVHC approval prior to publication will be a violation of the Data Use Agreement and may put the organization's future access to data from the CO APCD at risk.

☒ By checking this box, the Client Organization acknowledges this requirement.

Data Destruction Period

All data must be destroyed within 30 days of the project end date. If your project end date changes from this application, please reach out to your CIVHC Contact for a project extension request form.

☒ By checking this box, the Client Organization acknowledges that CIVHC's Data Destruction Certificate[7] must be completed and returned to DataCompliance@CIVHC.org by 7/30/2028 based on the Anticipated Project End Date.

---

[7] Available on the Data Release Application and Documents page of CIVHC's website under *Privacy, Security, and Regulatory Information*.

Data Release Application
Limited and Identifiable Extracts

Data Users

List any individuals that will be working with the data. The Data Use Agreement must be updated through your CIVHC Contact every time individuals are granted access to the data during the course of the project.

Full Name	Title/Role	Organization
Rie Sakai-Bizmark	Principal Investigator	The Lundquist Institute for Biomedical Innovation
Frank Wu	Research Associate	The Lundquist Institute for Biomedical Innovation
Dennys Estevez	Biostatistician	The Lundquist Institute for Biomedical Innovation
Emily Marr	Assistant Researcher	The Lundquist Institute for Biomedical Innovation

Data Release Application
Limited and Identifiable Extracts

Data Release Application Version Approvals

The Client Organization has reviewed and confirms that the final version number of the Data Release Application reflected below correctly represents the project objectives.

Version	Checkpoint
V.02	Presented at CIVHC Application Review
V.04	Presented to the Data Release Review Committee (DRRC)
V.00	Final version approved for production

CIVHC Sign-Off		Receiving Organization Sign-Off	
Signature:		Signature:	
Name:	Lucía Sanders	Name:	Frank Wu
Title:	Key Account Manager	Title:	Research Associate
Date:		Date:	

Data Release Application
Limited and Identifiable Extracts

Data Element Selection Form Version Approvals

The Client Organization has reviewed and confirms that the final version number of the Data Element Selection Form reflected below correctly represents the data specifications needed to meet the project objectives.

Version	Checkpoint
V.03	Presented at CIVHC Application Review
V.04	Presented to the Data Release Review Committee (DRRC)
V.00	Final version approved for production

CIVHC Sign-Off		Receiving Organization Sign-Off	
Signature:		Signature:	
Name:	Lucía Sanders	Name:	Frank Wu
Title:	Key Account Manager	Title:	Research Associate
Date:		Date:	