



Limited and Identifiable Extracts

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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)					
10/11/2024	V.01	Initial version drafted with client.	Lucía Sanders, Key Account Manager					
10/22/2024	V.02	Incorporation of client updates.	Lucía Sanders, Key Account Manager					
10/25/2024	V.03	Updated project contacts, schedule, data linkage. Added request for Claim Paid Dates.	Lucía Sanders, Key Account Manager					
	V.04							
	V.05							
	V.06							
	V.07							
	V.08							
	V.09							
	V.10							

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Data Requestor Details

General Project Details

Project Title:	Continuity of Medicaid Under the Affordable Care Act (Phase 2)			
Application Start Date:	10/11/2024			
Requested Project Delivery Date:	1/31/2025			
Client Organization (legal name):	Boston University			
Client Organization Address:				
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:	25.59			
Condensed Project Title:	Continuity of Medicaid			

Project Contacts

Project Contact Name:	Sarah H. Gordon
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Analytic Contact Name:	Sarah H. Gordon
Analytic Contact Name: Title:	Sarah H. Gordon Assistant Professor





Invoice Contact Name:	Catherine Stresing
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Data Release Fee Signatory:	Catherine Stresing
Title:	Research Administrator
Email:	stresing@bu.edu
Phone Number:	617-358-2047
Data Use Agreement Signatory:	William Segarra
Title:	Senior Director, Industry Contracts
Email:	segarra@bu.edu
Phone Number:	(617) 353-6151

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Project Schedule and Purpose

Proposed Project Start Date ¹ :	2/1/2025
Anticipated Project End Date:	1/31/2028
Proposed Publication or Release Date:	3/1/2027

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.

Note: This project is a continuation of past project 20.59, which studied the research questions below using CO APCD data from 2012-2019.

The research project entitled "Continuity of Medicaid Coverage under the Affordable Care Act" seeks to evaluate the effect of policies in the 2010 Affordable Care Act (ACA) on stability of coverage among Medicaid beneficiaries in Colorado. While analyses suggest ACA policies have been effective in reducing the number of uninsured CO residents, existing assessments of the uninsured capture only a snapshot in time, when health insurance coverage is dynamic.

Health insurance "churning" is defined as unnecessary cycling off and on coverage, and is particularly important for pregnant women who experience frequent coverage changes before and after delivery. Nationally, 62% of women experience at least one change in insurance status during the prenatal period and 47% of women experience a coverage lapse within six months postpartum. Such periods of uninsurance have detrimental effects on maternal and child health outcomes, and potentially lead to preventable hospitalizations and emergency department visits.

In the prior project, we characterized pregnant women's enrollment patterns across different insurance types and quantified their health effects before and after Colorado expanded Medicaid and have published the results in several peer-reviewed papers.

For this data refresh, we seek to build on this prior project in light of the fact that Colorado is one of 44 states that has opted to extend postpartum Medicaid coverage for pregnant Medicaid enrollees to 12 months postpartum under the American Rescue Plan Act. This project will assess how extended postpartum Medicaid coverage has impacted enrollment, utilization, and health care outcomes among low-income postpartum women in Colorado.

Individual research questions:

i. We seek to characterize changes in insurance coverage among pregnant Medicaid beneficiaries over time and between sources of coverage before and after Colorado

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.

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- extended postpartum Medicaid eligibility (including while the FFCRA continuous enrollment provision was in place from 2020-2023).
- ii. We seek to evaluate the impact of extended postpartum Medicaid coverage on health care utilization, costs, and health outcomes in the postpartum year, as well as interconception care and pregnancy, birth outcomes in subsequent pregnancies, and overall spending in the postpartum year as well as out-of-pocket costs. We will examine whether there are differences in these outcomes by race, ethnicity, rurality, and socioeconomic status to determine the extent to which extended coverage may affect disparities across populations. We are particularly interested in examining patterns of mental health and substance use disorder treatment in the postpartum year given the prevalence of maternal mental health conditions and risk for postpartum morbidity and mortality.
- iii. We are interested in assessing effects of participation in any Colorado-specific maternal health initiatives (i.e., Special Connections) and state-wide or Medicaid-specific delivery reforms that may have potential impacts on postpartum outcomes.
- iv. Through the linkage with birth records, we will also examine whether there are positive spillover effects of maternal postpartum Medicaid coverage and health utilization on infant health insurance enrollment and outcomes within the first 5 years of life.
- 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.

Our analyses will use descriptive statistics to compare rates and means of insurance duration, health care utilization, and maternal health outcomes within the postpartum year. We will also compare outcomes among the Medicaid-enrolled population to a matched control group of commercially-insured enrollees as a comparator group to help assess whether the changes observed among Medicaid enrollees were due to extended coverage or overall trends in postpartum health care utilization in the state. As in our prior project, we will use income data to implement regression discontinuity techniques (a causal inference study design) using income as a form of random assignment of eligibility versus non-eligibility for Medicaid by comparing individuals just on either side of the income eligibility cutoff (please see: Gordon SH, Lee S, Steenland MW, Deen N, Feinberg E. Extended Postpartum Medicaid In Colorado Associated With Increased Treatment For Perinatal Mood And Anxiety Disorders. Health Aff (Millwood). 2024 Apr;43(4):523-531; Gordon SH, Hoagland A, Admon LK, Daw JR. Extended postpartum Medicaid eligibility is associated with improved continuity of coverage in the postpartum year. Health Affairs. 2022 Jan 1;41(1):69-78.)

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

The proposed project benefits Colorado residents because it is specifically focused on improving the quality and equity of care delivered to low-income pregnant women and mothers in the state. This proposal addresses a national crisis in maternal health and maternal mental health. In Colorado, the maternal mortality rate doubled between 2008-2013, demonstrating a disproportionate burden of mortality among low-income residents of color.

Our work could provide the Colorado Department of Health Care Policy & Financing with an assessment of how their adoption of extended postpartum Medicaid coverage has impacted enrollment, health care use, and health outcomes. This information can directly inform policy strategies to improve maternal health among pregnant women and new mothers.

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

This proposal supports lowering health care costs because it will examine system-wide as well as out-of-pocket costs in the postpartum year for Medicaid-enrolled versus commercially-enrolled individuals. The extension of postpartum Medicaid coverage represents a shift from commercial to Medicaid insurance. We will examine the cost implications of this shift to help identify inefficiencies in the delivery of maternity services throughout the perinatal and postpartum (~1 year after birth) periods. The proposal supports value in health care by looking at preventive care versus emergency care for the postpartum population, and explicitly examines postpartum maternal health outcomes to assess how state-wide Medicaid coverage policies have impacted maternal health in the state.

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.

Race and socioeconomic disparities in maternal health outcomes are persistent and stark nationwide and within Colorado. Our project is focused on postpartum Medicaid enrollees who, on average, are lower income and more likely to identify as racial or ethnic minorities than those who are enrolled in commercial insurance. Thus, examining policy levers to address maternal health within the Medicaid program is critical to population-level approaches to address maternal health equity.

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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.

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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.

The results of this research will only be public insofar as results in aggregated and de-identified forms will be disseminated for publication in peer-reviewed academic journals and presented at national conferences. The proposed audience for this the published manuscripts that utilize these data includes the health policy, health economics, and health services research communities, health policy analysts, policymakers, state and federal Medicaid officials, health insurers, and providers.

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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

	e submission.
Will you p	provide CIVHC with a Finder File as part of this project?
	No Yes
Membe	r Match File
	r Match File is a file that CIVHC creates on your behalf to send to a registry or other outside 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:
W	ho will receive the Member Match File?
	Tho will receive the Member Match File? OPHE Vital Statistics (birth records)
	DPHE Vital Statistics (birth records)
Control	OPHE Vital Statistics (birth records) Group Group is a group of individuals who can be used to compare against the cohort identified in
Control A Control the Finder	OPHE Vital Statistics (birth records) Group Group is a group of individuals who can be used to compare against the cohort identified in

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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?

Birth records via CDPHE Vital Statistics

Who will perform the data linkage?

BU will perform data linkage with birth record data

What identifying data elements will be used to perform the data linkage?

Medicaid ID, Member Composite ID, Vital Stats ID

What non-CO APCD data elements will appear in the new linked file?

Standard birth record fields (i.e., race, ethnicity, marital status, primary language, health status, pregnancy, delivery, and birth outcomes)

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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 County	☐ Member City			
☐ Employer Name	☐ Member <u>Census Tract</u>	☐ Member <u>Census Block</u>			
☐ Member <u>Census Block</u> <u>Group</u>					
Available for Identifiable extrac	ts only (see also <u>Identifiable Dat</u>	a Use Approval):			
☐ Member Name	☐ Member Date of Birth (if re	questing 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					
Five-digit zip codes are necessary to control for area-level factors at a sufficiently granular level of measurement.					
In order to assess the utilization of health services and enrollment in health coverage, precise dates of service (including claim paid dates) and enrollment are required.					
Note: All PHI requested here was previously approved and delivered via project 20.59.					

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





Line(s) of Busines	S						
	 ☑ 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	\boxtimes	2020	⊠ 2021	\boxtimes	2022	⊠ 2023
	□ 2024 ⁶							
Clain	Claim Type(s)							
			○ Outpatient Facility		\boxtimes	Professiona	I	
	□ Pharmacy		□ Dental					
Financial Detail by Line Item								
	□ Charged Amount				\boxtimes	Plan Paid A	mount	
	☑ Plan Pre-Paid Amount				\boxtimes	Member De	eductible	
	⊠ Member C	oinsurance	□ 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.

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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, <u>Census Tract</u> , etc.):
Provider Type(s):
Provider(s) (list NPIs):
Providers within these geographical areas (list county, zip code, <u>Census Tract</u> , etc.):
Specific payers (minimum of five):

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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:								
Women ages 19-55 years, all c	hildren 0-18 years							
□ At the time of service	☐ At year end	☐ By another anchor date: Specify here						
With these ICD Diagnosis Code	e(s):							
Who have had the following p	rocedure(s) (list CPT, HCPCS, DRG	, ICD, and/or CDT codes):						
Within these geographical area	as (list county, zip code, <u>Census Tr</u>	<u>act,</u> etc.):						
Value-Add Data Elements								
	Related Group Codes (MS-DRGs) Rosis Related Group Codes (3M Al							
Medicare Repricer (available	e at the claim line level)	,						
☐ Fields from the <u>American Co</u>	ommunity Survey (available at the	: Census Tract level):						
Specify here								

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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 For has been completed.	m
☐ If applicable, by checking this box the Client Organization confirms that a separate Member Match File Data Element Selection Form has been completed.	er
☐ If applicable, by checking this box the Client Organization confirms that a separate Control Group Data Element Selection Form has been completed.	l
Identifiable Data Use Approval	
If you are requesting <u>Identifiable</u> information, approval from an <u>Institutional Review Board (IRB)</u> or a <u>Privacy Board</u> is required before such data can be released.	ì
$\hfill \square$ 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.

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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:	10/25/2024
Date Approved by CIVHC:	

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 <u>Data Destruction</u> <u>Certificate</u>⁷ must be completed and returned to <u>DataCompliance@CIVHC.org</u> by 3/1/2028 based on the <u>Anticipated Project End Date</u>.

⁷ Available on the <u>Data Release Application and Documents</u> page of CIVHC's website under *Privacy, Security, and Regulatory Information*.





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
Sarah Gordon	Principal Investigator	Boston University
Nigel Deen	Data Analyst	Boston University
Sobin Lee	Data Analyst	Boston University
Samantha Auty	Co-Investigator	Boston University

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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.03	Presented at CIVHC Application Review
V.03	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:	Sarah Gordon
Title:	Key Account Manager	Title:	Assistant Professor
Date:		Date:	





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.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:	Sarah Gordon
Title:	Key Account Manager	Title:	Assistant Professor
Date:		Date:	