



Limited and Identifiable Extracts

Navigation

Client Application Revision History	. 1
Data Requestor Details	. 2
Project Schedule and Purpose	. 4
Data Matching and Linkage	
Data Inclusion Criteria	
Additional Documentation	13
Client Acknowledgements and Signatures	

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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 staf	ff
Date	New Version Number	Description of Change(s)	CIVHC Change Author (full name, complete title)
4/25/2024	V.01	Initial version drafted with client.	Lucía Sanders, Key Account Manager
5/17/2024	V.02	Updated to indicate this is not a new data extract, but rather a new use case for a previously delivered data extract. Selected PHI data elements and filter criteria of previous extract.	Lucía Sanders, Key Account Manager
5/21/2024	V.03	Incorporated justification for inclusion of PHI data elements.	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:	Insurance Networks and Market Competition	
Application Start Date:	4/22/2024	
Requested Project Delivery Date:	6/19/2024	
Client Organization (legal name):	New York University	
Client Organization Address:	19 West 4 th St, New York, NY 10012	
To be completed by CIVHC staff		
CIVHC Contact (full name, complete title):	Lucía Sanders, Key Account Manager	
Project Number:	24.24	
Condensed Project Title:	Networks Market Competition	

Project Contacts

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Data Release Fee Signatory:	Anne Stubing
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Title:	Senior Director, Research Data Management and Security
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Phone Number:	

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Project Schedule and Purpose

Proposed Project Start Date ¹ :	7/1/2024
Anticipated Project End Date:	7/1/2029
Proposed Publication or Release Date:	10/30/2026

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 application is not a request for a new claims data extract. Rather, this application is a new use case for a CO APCD data extract previously delivered to NYU under project 21.36 on 7/8/2021.

Individual research questions:

- i. What role do provider networks play in improving healthcare access and containing costs?
- ii. How do changes in provider networks affect patient health outcomes, health equity, and health costs? Are there differences between demographic groups?
- iii. What are the factors that affect insurer-provider network formation? To what extent do market competitiveness in the insurer/provider markets influence prices?
- iv. What are the intended and unintended consequences of regulating insurance networks and provider contracting? How do consumers, providers, and insurers respond to changes to the insurer-provider contracting environment due to network adequacy regulations or shifts in market competitiveness (e.g. mergers)?

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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5

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.

This project studies the implications of insure-provider network design on the healthcare market for in Colorado. To quantify the tradeoff between improving healthcare access, containing costs, and promoting competition, I will first use statistical methods, such as instrumental variables and difference-in-differences, to quantify the effect of network adequacy and other changes to the insurer-provider contracting environment (for example, hospital mergers) on market competitiveness, provider networks, and prices. The results will be used to build and estimate economic models of consumer, insurer, and provider behavior. The estimated model will be used to simulate counterfactual policies to inform the design and regulation of healthcare markets.

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

This project will directly contribute to our understanding of the design and regulation of the health insurance market. Networks are a central characteristic of insurance plans; however, insurers have incentives to provide narrow networks – insurance networks with a limited set of providers – to negotiate lower reimbursement prices, steer patients away from expensive providers, as well as attract low-utilization consumers. In response, various federal and state policies have been put in place to limit the presence of narrow networks through network adequacy regulations, yet the wide variation in these policies attests to a lack of consensus on whether and how to regulate insurance networks. One aspect of this project particularly relevant to Colorado and its residents is the study of the 2017 network adequacy law in Colorado. The CO APCD data will allow us to quantify the impact of the regulation on different demographic groups and study how we can further broaden health care access and bring down health care costs for Colorado residents.

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

Provider network design is central to healthcare access and healthcare cost, both of which are vital for improving health care quality, increasing health care value, and improving health outcomes. On the other hand, the many stakeholders involved in provider network design — including insurers, providers, and patients — require careful consideration of different incentives. The CO APCD data will allow us to characterize the interplay of different forces and provide insights into how changes in the insurer-provider contracting environment, such as network

Back to Navigation 020-007.1.3-FOR 202404

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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adequacy regulations and hospital mergers, can be managed to improve health care quality and outcomes for Colorado residents.

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.

Market competitiveness affects both the accessibility and affordability of healthcare, both of which are vital components of health equity. This project will provide insights into the role of provider network design on different consumers in terms of insurance plan affordability, provider accessibility, and health outcomes.

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.

I plan to use the CO APCD data for my doctoral thesis. The end products will be in the form of presentation slides and manuscripts. The intended audience will mainly be academic researchers in economics or related fields. The completed manuscript will be accessible to the public as it will be published online.

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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

Finder File	data. Ask your CIVHC Contact for more information about this process and requirements for e submission.
Will you p	provide CIVHC with a Finder File as part of this project?
	No Yes
Membe	er Match File
	er 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?
W	/ho will receive the Member Match File?
W	/ho will receive the Member Match File?
Control	
Control	Group Group is a group of individuals who can be used to compare against the cohort identified in
Control A Control the Finde	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?

What is/are the other data source/s?

✓ Yes. Answer the following:

I expect to link CO-APCD with three sets of public data: 1) data on population characteristics, such as the American Community Survey (ACS); 2) data on the characteristics of plans sold in different geographical markets, such as HIX Compare (https://hix-compare.org); 3) data on provider characteristics, such as the CMS Hospital Provider Cost Report Data (HP(https://data.cms.gov/provider-compliance/cost-report/hospital-provider-cost-report) and the National Plan and Provider Enumeration System (NPPES)

Who will perform the data linkage?

Principal investigators

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

We will link using the following data elements: (1) ACS will link by both member zip code (Member_Zip_Cd) or provider zip code (Zip_Cd) (2) Hospital Provider Cost Report Data and NPPES will link using provider NPI (National_Provider_ID) (3) HIX Compare we will link aggregate plan characteristics to insurance plans by variables such as plan type, metal tier, year, and broad geography.

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

Non-CO-APCD data elements that will appear in the new linked file include aggregated population characteristics, aggregated insurance plan characteristics, and provider characteristics described above.

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9

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 Tax ID		
☐ Member FIPS Code ☐ Member Census Tract ☐ Me		☐ Member <u>Census Block</u>		
☐ Member Census Block Grou	p			
Available for Identifiable extrac	ts only (see also <u>Identifiable Dat</u>	a 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				
We request the member 5-digit zip code and city to quantify the distance to a provider and define the set of providers that a member may visit to seek medical care within the state. We request the member dates of service to understand how insurance payments to providers vary over time – for example, how such payments vary with respect to the timeframe of network regulations or hospital mergers. We request the member eligibility dates and dates of birth to determine the age at which a member becomes eligible for insurance, which would allow us to measure the difference in premiums faced by otherwise similar individuals for each plan. This would then allow us to measure the extent to which differences in plan pricing affect insurance take-up.				

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.

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10

Line(s) of Busir	ness							
	 ⊠ 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	\boxtimes	2016	\boxtimes	2017
	⊠ 2018	□ 2019		2020	□ 2021		2022		2023 ⁶
Claim	n Type(s)								
	⊠ Inpatier	nt Facility	\boxtimes	Outpatient	Facility	\boxtimes	Professiona	ı	
	⊠ Pharma	су		Dental					
Finar	ncial Detai	l by Line Item							
	⊠ Charged	d Amount	\boxtimes	Allowed Ar	nount	\boxtimes	Plan Paid A	mou	nt
	⊠ Plan Pre	e-Paid Amount	\boxtimes	Member Co	орау	\boxtimes	Member De	educ	tible
	⊠ Membe	er Coinsurance	\boxtimes	Total Mem	ber 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 not fully adjudicated.

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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/Patio	ents	
		patient groups, specify that filter file with this application for large	
	Ages:		
	☐ 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 pr	ocedure(s) (list CPT, HCPCS, DRG	, ICD, and/or CDT codes):
	Within these geographical area	s (list county, zip code, <u>Census T</u>	act, etc.):
Value	e-Add Data Elements		
		Related Group Codes (MS-DRGs) osis Related Group Codes (3M A	
	Medicare Repricer (availableFields from the American Col	at the claim line level) mmunity 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 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.
Identifia	able Data Use Approval
	requesting <u>Identifiable</u> information, approval from an <u>Institutional Review Board (IRB)</u> or a <u>pard</u> is required before such data can be released.
	Not applicable; the Client Organization is requesting a Limited Extract.
Approva	l Type
\boxtimes	IRB Approval
	Privacy Board Approval
Approva	l Type
	Approval request not yet submitted. Anticipated submission date:
	Approval request submitted and under review. Anticipated project approval date:
\boxtimes	Approval already received.
Approva	I 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:	
Date Approved by CIVHC:	

Client Acknowledgements and Signatures

Change Agent Index

CIVHC can publicly share the Client Organization's name in its Change Agent Index ?	
⊠ Yes	
□ No	

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 7/31/2029 based on the <u>Anticipated Project End Date</u>.

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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
Jinglin Wang	Doctoral student	New York University

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

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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.01	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:	Jinglin Wang
Title:	Key Account Manager	Title:	Doctoral Student
Date:		Date:	

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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.00	Presented at CIVHC Application Review
V.00	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:		Name:	
Title:		Title:	
Date:		Date:	