DATA RELEASE APPLICATION

LIMITED AND IDENTIFIABLE EXTRACT

APPLICATION NAVIGATION

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
1/24/2024	V.01	Initial version drafted with client.	Mason Thaxton, Health Data Consultant
1/29/2024	V.02	Updated project purpose	Mason Thaxton, Health Data Consultant
2/6/2024	V.03	Initialed before app review	Mason Thaxton, Health Data Consultant
2/9/2024	V.04	Changes After App review	Mason Thaxton, Health Data Consultant
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DATA REQUESTOR DETAILS

General Project Details

Project Title:	Stabilizing the Individual Health Insurance Market
Application Start Date:	1/22/2024
Requested Project Delivery Date:	3/1/2024
Client Organization:	Michigan State University
Client Organization Address:	486 W Circle Dr, East Lansing, MI 48824
To be completed by CIVHC staff	
CIVHC Contact:	Mason Thaxton
Project Number:	24.39
Condensed Project Title:	Individual Insurance Market

Project Contacts

Project Contact Name:	Paul HS Kim
Title:	Assistant Professor and/or Dr.
Email:	kimpaul7@msu.edu
Phone Number:	(517)–355-1812
Analytic Contact Name:	Paul HS Kim
Title:	Assistant Professor and/or Dr.
Email:	kimpaul7@msu.edu
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Invoice Contact Name:	Belen Feight
Title:	Fiscal Officer, Economics
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Data Release Fee Signatory

Name:	Jan Wallace
Title:	IT Procurement Expediter
Email:	Wallac12@msu.edu

Data Use Agreement Signatory

Name:	Anne C. DiSante
Title:	Executive Director
Email:	disante@msu.edu

PROJECT SCHEDULE AND PURPOSE

Proposed Project Start Date[1]:	3/1/2024
Anticipated Project End Date:	3/1/2027
Proposed Publication or Release Date:	3/1/2027

1. Detail the 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.

> *This Project aims to study and evaluate different government policies addressed at stabilizing the individual health insurance market (in CO), with a particular emphasis on evaluating the impact of reinsurance policy. When ACA created the individual health insurance marketplaces in 2014, there were various policy measures in place to ensure a successful launch of a new insurance market. One such measure was a federal reinsurance policy that reimbursed insurers a percentage of enrollee's claims costs beyond a certain threshold, thereby decreasing both the cost and risk that insurers faced. This in turn could increase insurer participation, foster a competitive marketplace, and keep insurance premiums affordable. However, the federal reinsurance policy was phased out and removed by 2017. In part due to removal of such policies ever since its inception, the individual health insurance market was marked by volatility, huge premium increases and large number of insurer exits. Concerned about access to affordable insurance options for many individuals, state policy makers have been exploring and implementing different policies to address such concerns; one widely adopted policy is state reinsurance. However, there has been some debate among policy makers as to whether reinsurance is the most effective tool as some advocate for alternative policies like increasing direct-to-consumer subsidy.*
>
> *This project will examine the impact of i) removal of federal reinsurance policy that existed from 2014-2016 ii) implementation of CO's state reinsurance policy in 2020 iii) efficiency of reinsurance vs other policy measures. More specifically, we are interested in answering the following research questions:*
>
> > 1. *Evaluate the impact and efficiency of reinsurance policy that existed at the federal level from 2014-2016 and newly implemented by CO in 2020. The emphasis will be on how much of the expected reinsurance payments insurers pass onto the consumers. In particular we will focus on the heterogenous impact of the policies across different regions and insurers.*
> >
> > 2. *Why do insurers enter/exit certain regions? How does reinsurance policy impact the entry/exit decisions and thereby competition in the local insurance market? What can we do to promote insurer entry in regions where there are very few insurers and foster healthy competitive insurance market for ALL regions of CO?*

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[1] After all required documents have been signed and the Data Release Review Committee has approved the project, 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.

3. *Study potential negative impact of reinsurance policy in increasing overall cost of care by limiting health care cost containment by insurers. i.e. Does limiting risk that insurers face like reinsurance policy lead to increased health care expenditure due to decreased insurers' incentive to contain costs? If so, what types of claims (medical procedures and/or drugs) are most impacted?*

4. *Given the above findings, compare other policies that the government can use such as (but not limited to) increasing direct-to-consumer subsidy with that of reinsurance policy. More specifically, for a fixed government expenditure what's the optimal policy that can benefit the consumers the most?*

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 answer the above questions using the CO APCD the following way:

1) Given the distribution of claims in the individual market and the specific parameters of the reinsurance policy, we will estimate the expected cost of the reinsurance program (or for the insurers, expected cost reimbursements). We will compare these numbers from the estimated reduction in insurance premiums to compute how much of the expected cost reimbursements do insurers pass on to consumers via reduction in premiums. We want to compute this measure across different regions and across different insurers.

2) We will first compare the distribution of claims that insurers face across different regions and compare this against the how competitive the local insurance market is. Next, given the estimated cost savings from reinsurance policy in 1) we will estimate the impact of the resinruance policy on the entry/exit of insurers to different geographical markets in CO (county level). We will evaluate if the regions that resulted in greater cost reimbursement for insurers led to more entry in those regions, and leading to more even distribution of insurers' presence across the state.

3) We will compare changes in insurers' individual market claims before and after the reinsurance policy with insurers' group market claims where they don't face reinsurance. That is we will compare the differences in differences between insurers' individual vs. group claims before and after the reinsurance policy, paying particular attention to claims that fall under the reinsurance parameters. We will investiage this for average claims as well as specific procedures that insurers are more likely to have an impact through their cost containment programs.

4) Taking into account the above findings, we will estimate a economic/statistical model of both the demand and supply of health insurance market in CO. We plan to estimate a discrete choice model of demand for individual health insurance using market shares of insurance products as well as incurred claims of individuals, allowing for substantial heterogeneity across individual demographics as well as correlation between demand and health care expenditure. Given the demand model and using claims data, we will be able to model a flexicible cost function of insurers that will be a function of both insurance

charactersitics (including premiums) and enrollee characteristics. Furthermore, we will model insurer competition with entry/exit decisions as well as plan offerings/price-setting behavior. Using these models, we'll evaluate for a fixed government spending, how different counterfactual policies (e.g. ex-ante risk-adjustment transfers, reinsraucne, direct-to-consumer subsidies, etc.) will impact availability of plan (and insurer) offerings, affordability of insurance premiums and overall cost of care across different regioins in CO.

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

The project will first, and foremost inform policy makers how different policies aimed at stabilizing the individual health insurance market (such as reinsurance policy) will affect the market. Policy makers in many states including CO have increasingly implemented different measures to stabilize the individual health insurance market. Despite the widespread implementation of such policies, there hasn't been much rigorous study to determine the effectiveness of such policy and more importantly how it compares to alternative policy options. This project will determine how such policies may differentially affect i) premiums faced by the CO residents ii) insurance options available to CO residents across various regions and populations within the state iii) the fiscal cost of government policies. This will she dlight on what the best policy to provide access to adequate and affordable insurance coverage to CO residents is.

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

One of the main goals of the project is to study policies that will provide adequate and affordable health insurance coverage to the CO residents. As a result, it aims to find ways to lower insurance premiums faced by individuals and thereby lower their health care expenditure. Second, by studying policies to provide increased access to insurance coverage, it aims to increase the number of individuals with adequate insurance, and thereby allowing them to receive the necessary health care and improving the health of those individuals. Lastly, we study insurer's cost-containment behavior and study policies to ensure the private incentives are aligned with the public interest of lowering the overall cost of healthcare. We directly study whether certain policies will more (or less) likely lead insurers to lower healthcare costs.

5. Health equity is 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.

One of the key aspects of the project is to study the heterogeneous impact of the aforementioned policies to different geographic regions within the state. It is well-known that there's a large disparity in access to healthcare across geographic regions (e.g. the urban-rural disparity). Given that health insurance is one of the first steps to access healthcare, studying disparity in access to and affordability of health insurance options directly contribute to health equity in the state. Using the methodology mentioined above, we will study whether certain

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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.

policies are not just better in terms of improving the average resident but whether they reduce the disparity in access to health insurance across different demographics and regions in CO.

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. Answer the following:

Who will receive the Member Match File?
Please specify here.

What data elements will be required in the Member Match File?
Please specify here.

Control Group

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

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

☒ No
☐ Yes. Consult with your CIVHC Contact about completion of an additional Data Element Selection form for your Control Group.

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)?
Please specify here.

Who will perform the data linkage?

CIVHC
CENTER FOR IMPROVING
VALUE IN HEALTH CARE

What identifying data elements will be used to perform the data linkage?
Please specify here.

What non-CO APCD data elements will appear in the new linked file?
Please specify here.

CENTER FOR IMPROVING
VALUE IN HEALTH CARE

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

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 Census Tract	☒ Member County
☐ Member City	☒ Member Eligibility Date	☐ Employer Tax ID
☒ Member Dates of Service		

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 Geocoded Address

Provide detailed justification for the inclusion of all PHI data selected above.[3]

Member County: This is a key variable we need to link each member to the county-specific external data on the list of available insurance coverage options for the member and the premiums that one is facing.

Member Dates of Service: Given the member's healthcare spending, we need to study when a member will be in which phase of their insurance coverage i.e. are they in the deductible phase, before or after their out of pocket max phase. We need the date of service to infer and compute what would've happened if the member were subject to a different insurance coverage and what portion of the cost would be member-liable vs. payer (insurer)-liable. Furthermore, we need to figure out when a claim is subject to reinsurance cost reimbursement for the insurer and as such we need to know the order in which the claims occurred.

Member's Plan Effective/Termination Date: Similar to the member dates of service, we need to know when the member's insurance coverage started and ended in order to know the phase of insurance coverage the member was in. This is especially relevant, if a member enrolls in an insurance plan for only parts of the year and/or switches plans in the middle of the year. To compute the expected reinsurance costs/reimbursments that the insur is liable, we need to attribute a given member's claims to the appropriate insurer (payer) only when the member was covered under the insurance plan. As a result, we need to know when the effective dates of the coverage were.

Line(s) of Business

☒ Commercial Payers

☐ Health First Colorado (Colorado's Medicaid and CHP+ programs)[4]

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[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.
[4] Medicaid-only data requests must be approved by the Colorado Department of Health Care Policy and Financing.

☐ Medicare Advantage
☐ Medicare Fee for Service (FFS)[5]

Year(s) of Data

| ☐ 2012 | ☐ 2013 | ☒ 2014 | ☒ 2015 | ☒ 2016 | ☒ 2017 |
| ☒ 2018 | ☒ 2019 | ☒ 2020 | ☒ 2021 | ☒ 2022 | ☒ 2023[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

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):
Please specify here.
Procedure(s) (list CPT, HCPCS, DRG, ICD, and/or CDT codes):
Please specify here.
Drug(s) (list pharmacy NDC and/or HCPCS codes):
Please specify here.
Facility Type(s):
Please specify here.
Facilities (list NPIs and/or Pharmacy IDs):
Please specify here.
Facilities within these geographical areas (list county, zip code, Census Tract, etc.):
Please specify here.
Provider Type(s):
Please specify here.
Provider(s) (list NPIs):
Please specify here.
Providers within these geographical areas (list county, zip code, Census Tract, etc.):

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[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. Consult with your CIVHC Contact to find out what data is available at the time of your request.

Please specify here.
Specific payers (minimum of five):
Please specify here.
Other claim specification:
Please specify here.

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:		
Please specify here.		
☐ At the time of service.	☐ At year end	☐ By another anchor date: Please specify here.
With these ICD Diagnosis Code(s):		
Please specify here.		
Who have had the following procedure(s) (list CPT, HCPCS, DRG, ICD, and/or CDT codes):		
Please specify here.		
Within these geographical areas (list county, zip code, Census Tract, etc., in keeping you're your selected Protected Health Information):		
Please specify here.		

Value-Add Data Elements

Indicate which (if any) of the following value-add options you would like included with this extract:

- ☐ Medicare Severity Diagnosis Related Group Codes (MS-DRGs)
- ☐ 3M All Patient Refined Diagnosis Related Group Codes (3M APR DRGs)
- ☐ Medicare Repricer
- ☐ Fields from the American Community Survey:

Please specify here.

ADDITIONAL DOCUMENTATION

Data Element Selection Form

The Data Release Application must be accompanied by a completed Data Element Selection Form to be reviewed internally and by the Data Release Review Committee. 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.

Data Release Application
Limited and Identifiable Extract

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

State of Approval

☐ Approval request not yet submitted.
Anticipated submission date: Click or tap to enter a date.

☐ Approval request submitted and under review.
Anticipated project approval date: Click or tap to enter a 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 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.

☐ Submitted to CIVHC on Click or tap to enter a date.
☐ Approved by CIVHC on Click or tap to enter a date.

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 suppression rules, 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 Click or tap to enter a date based on the Anticipated Project End Date.

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.

Name	Role	Organization
Paul HS Kim	Principal Investigator	Michigan State University
Anran Li	Collaborating Researcher	Northwestern University
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Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
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[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 Extract

Data Release Application Version Approvals

Checkpoint 1: Preparation for CIVHC's internal Application Review Meeting

The Client Organization has reviewed and confirms that V.02 of this Data Release Application represents the correct details to meet the project objectives.

CIVHC Sign-Off		Receiving Organization Sign-Off	
Initials:	MT	Initials:	PK
Name:	Mason Thaxton	Name:	Paul HS Kim
Title:	Health Data Consultant	Title:	Assistant Professor
Date:	2/6/2024	Date:	2/6/2024

Checkpoint 2: Preparation for presentation to the Data Release Review Committee

The Client Organization has reviewed and confirms that V.04 of this Data Release Application represents the correct details to meet the project objectives.

CIVHC Sign-Off		Receiving Organization Sign-Off	
Initials:	MT	Initials:	PK
Name:	Mason Thaxton	Name:	Paul HS Kim
Title:	Health Data Consultant	Title:	Assistant Professor
Date:	2/26/2024	Date:	2/12/2024

Checkpoint 3: Final approval to begin project production

The Client Organization has reviewed and confirms that V.   of this Data Release Application represents the correct details to meet the project objectives.

CIVHC Sign-Off		Receiving Organization Sign-Off	
Signature:		Signature:	
Name:	Click or tap here to enter text.	Name:	Click or tap here to enter text.
Title:	Click or tap here to enter text.	Title:	Click or tap here to enter text.
Date:	Click or tap to enter a date.	Date:	Click or tap to enter a date.

Data Release Application
Limited and Identifiable Extract

Data Element Selection Form Version Approvals

Checkpoint 1: Preparation for CIVHC's internal Application Review Meeting

The Client Organization has reviewed and confirms that V.03 of the Data Element Selection Form represents the correct details to meet the project objectives.

CIVHC Sign-Off		Receiving Organization Sign-Off	
Initials:	MT	Initials:	PK
Name:	Mason Thaxton	Name:	Paul HS Kim
Title:	Health Data Consultant	Title:	Assistant Professor
Date:	2/6/2024	Date:	2/6/2024

Checkpoint 2: Preparation for presentation to the Data Release Review Committee

The Client Organization has reviewed and confirms that V.04 of the Data Element Selection Form represents the correct details to meet the project objectives.

CIVHC Sign-Off		Receiving Organization Sign-Off	
Initials:	MT	Initials:	PK
Name:	Mason Thaxton	Name:	Paul HS Kim
Title:	Health Data Consultant	Title:	Assistant Professor
Date:	2/26/2024	Date:	2/12/2024

Checkpoint 3: Final approval to begin production

The Client Organization has reviewed and confirms that V.   of the Data Element Selection Form represents the correct details to meet the project objectives.

CIVHC Sign-Off		Receiving Organization Sign-Off	
Signature:		Signature:	
Name:	Click or tap here to enter text.	Name:	Click or tap here to enter text.
Title:	Click or tap here to enter text.	Title:	Click or tap here to enter text.
Date:	Click or tap to enter a date.	Date:	Click or tap to enter a date.