

This form effective October 17, 2023

Section 1: General Information

Protocol Title: Effects of Price Transparency on Private Equity Acquisitions and Healthcare Prices: Evidence from Physician Groups and Outpatient Practices

Section 2: Key Study Personnel

Principal Investigator

Identify one Principal Investigator (PI) on this project and sign below.

- This person is responsible for the overall conduct of the research. For all students, fellows, and post-docs, this is your faculty advisor
- If you have more than one PI, <u>only choose one</u>
- By signing, the PI certifies to the following:
 - I have read and approved the protocol.
 - I will conduct this study as described in the approved protocol.
 - I assume responsibility for ensuring that my advisees are aware of the responsibilities as researchers
 - I will not begin the research until written approval is secured from the IRB. Note: Approval will not be provided unless <u>certification to conduct research with human subjects</u> for each researcher named on the protocol is current.
 - If any changes are anticipated, I will submit a <u>Request to Amend an Approved Protocol</u>, and I will not implement the changes until I receive approval from the IRB.
 - I ensure that the IRB will be immediately notified in the event of <u>unanticipated risks to</u> <u>participants</u>, <u>protocol deviations</u>, <u>or findings during the study that would affect the risks</u> of participation.

Name: Kate Bundorf	Department or School:	
	School of Public Policy	
E-mail Address: kate.bundorf@duke.edu NetID: mkb87		
Faculty Advisor Faculty Researcher Staff Other: Click or tap here to		
enter text.		
	Date : 7/10/2024	

n HEL			
Nanafura	Signature: Makely		

Duke Research Team

Please list the other Duke members of the research team AND indicate their role on the project. **Do not list non-Duke researchers.** These team members can be added in a later section.

Feel free to copy and paste, or delete the blocks as necessary.

All signatories agree to the following:

- By signing, the PI certifies to the following:
 - I have read and approved the protocol.
 - I will conduct this study as described in the approved protocol.
 - I assume responsibility for ensuring that my advisees are aware of the responsibilities as researchers
 - I will not begin the research until written approval is secured from the IRB. Note: Approval will not be provided unless <u>certification to conduct research with human subjects</u> for each researcher named on the protocol is current.
 - If any changes are anticipated, I will submit a <u>Request to Amend an Approved Protocol</u>, and I will not implement the changes until I receive approval from the IRB.
 - I ensure that the IRB will be immediately notified in the event of <u>unanticipated risks to</u> <u>participants</u>, <u>protocol deviations</u>, <u>or findings during the study that would affect the risks</u> of participation.

Name: Christopher Behrer	Department or School:		
	School of Public Policy		
E-mail Address: christopher.behrer@duke.edu	NetID : cb431		
🗆 Faculty 🗆 Undergraduate 🛛 Graduate student 🗆 Postdoc 🗆 Research associat			
Other : Click or tap here to enter text.			
Signature: Churtophu Boh	Date: 7/10/2024		

If there are more members of the research team, copy and paste the researcher information and signature block as needed.

Other Study Contacts

If there are additional personnel (e.g. a departmental staff member) who assist in protocol preparation and record keeping, and would like to be copied on correspondence from the IRB, please add them here.

IRB USE ONLY

This section is to be completed by IRB staff or IRB members only.

APPROVED as Exempt x Expedited or Full		
Hillys	7/23/24	
IRB Designee or IRB Member	Date	

Section 3: Departmental & Institutional Affiliations

3.1 Identify the department, institute, or center that you consider the home of the study.

Sanford School of Public Policy

3.2 Will you be collaborating with researcher(s) at other institution(s)?

□ Yes ⊠ No If <u>NO</u>, click the ∡ to close this section and hide questions specific to collaborating with researchers at other institutions.

Section 4: Funding Sources and Conflict of Interest

4.1 Please identify your funding source(s):

The Robert Wood Johnson Foundation Health Data for Action grant provides the data access but no monetary funding.

4.2 Are any of the above funding source(s) a U.S. Federal Agency or Department?

☐ Yes ⊠ No If <u>YES</u>, please append the grant application to this protocol request. The budget information can be omitted.

4.3 Are any of the above funding source(s) a component of the Department of Defense?

4.4 Do you have an outside interest (financial or otherwise) that is in any way related to this study?

 \Box Yes \boxtimes No

If YES, please explain.

n/a

Section 5: Research Question

5.1 What is your research question or the purpose of your research?

I propose to use Transparency in Coverage Data and the Colorado All Payer Claims Database (APCD) outpatient claims to investigate how private equity (PE) acquisitions of physician groups changed following federal price transparency regulations. I will study PE acquisitions before and after the Center for Medicare and Medicaid Services (CMS) Transparency in Coverage Rule ("price transparency") and investigate five related questions:

1) Did the number or size of PE acquisitions of physician practices change after price transparency?

2) After price transparency, were PE acquisitions of physician practices concentrated among low priced providers?

3) How did prices of acquired practices change following acquisition?

4) In Colorado, did PE acquisitions of physician practices become more concentrated among low priced providers after price transparency?

5) In Colorado, did price changes after PE acquisition change from before to after price transparency?

5.2 Provide background information about the research that will help the reviewer understand your project. Avoid discipline-specific jargon.

Private equity (PE) firms are investment partnerships which buy and manage companies, seeking to improve the value of the company via management or other changes, and then resell the company. PE firms have recently acquired large numbers of physician practices in the United States. The U.S. federal government also recently passed regulations requiring health insurance companies to post the prices that they have negotiated with all medical providers – including physician practices. This price information may allow PE firms to more easily identify physician practices that are charging low prices. PE firms may be especially interested in buying these practices because they may be able to increase the low prices to levels more similar to average prices in the relevant market. This project seeks to determine whether this occurred.

Section 6: Secondary Data

Research involving <u>the study of existing data</u> may include individual records (e.g., academic, medical, financial), data sets, interview notes, biospecimens, online profiles and posts (e.g., social media), and audio- or video-recordings. These data could be available for purposes other than research, and may be provided with or without direct or indirect identifiers, including a key.

6.1 Will any of your data be provided by the North Carolina Educational Research Data Center (NCERDC)?

□ Yes ⊠ No If <u>YES</u>, append all the completed NCERDC forms to this protocol.

6.2 Do any of these existing data include (check all that apply):

- □ Medical records provided by Duke Health (clinic, department, or facility)
- Medical records provided by a non-Duke entity
- \Box Academic records
- □ Financial, credit, income, banking
- □ Data provided by a component of the DOD (Department of Defense)
- □ Specimens or biological samples from humans or animals
- \Box None of the above

6.3 Identify the datasets and the individuals and/or organizations providing the existing data.

Include the estimated number of records you will receive in each set.

Health insurance claims and patient eligibility file from the Colorado All Payer Claims Database, 600 million observations, Center for Improving Value in Health Care (CIVHC).

Publicly posted prices negotiated by insurance companies and required to be posted by Transparency in Coverage regulation. Hundreds of millions of observations. Serif Health.

6.4 Describe the variables included in the existing datasets. The description should include any direct identifiers (names, email addresses, images, or home addresses) and/or indirect identifiers (data points that, when combined, would allow someone to deduce the identity of the participants).

Variables broadly describe medical facilities, providers, patients, services and insurance plans. Specifically, variables include type, name, and location of facilities and type, name, work location, and national (DEA/Medicare) identifiers of providers. Patient variables include a member ID variable (indirect identifier linked to name), age, zip-code, race, ethnicity, gender, and diagnosis codes that describe various health conditions of the patient, and employer identification number. Variables describing services include type of service, date of services, cost, and payment. Insurance plan variables include plan types and insurance company.

6.5 Do you plan to connect or merge the existing data with the data you are collecting?

 \boxtimes Yes \Box No

I will collect dates of acquisitions of physician practices by PE firms and link these acquisitions to the claims data.

6.6 Describe the process or mechanism to obtain the existing data. For example, you may need to create an account, register a study, submit an application, or enter into an agreement (e.g., a data use agreement or DUA). The process or mechanism could also include a personal arrangement with a colleague to provide you with the data. Data are considered "public" if they are readily available for research purposes without making a formal request. That is, anybody can download the data with a simple click from an open, public-facing website without signing any kind of agreement. If your data are public, provide information about how they are obtained.

To access the data, I will submit an application and data management plan, and enter into a Data Use Agreement (DUA) with the Center for Improving Value in Health Care (CIVHC). The application is included in Appendix A, and the DUA that Duke has previously signed with CIVHC for another of my projects is included in Appendix B. Appendix C provides documentation that both Duke and CIVHC are willing to use the same DUA for this Project.

Include in the Appendices any documentation that explain or describe the process or mechanism for obtaining the data. Documentation may include an agreement, copies of confirmation emails from the data provider, or screenshots of a completed online data request application.

Important items to note:

- If the mechanism to obtain the data specifies requirements for how Duke must securely store or protect the data, the data meet Duke's "sensitive" <u>data classification standard</u>. The "Sensitive" Data Classification questions (Section 7) must be completed.
- If the mechanism to obtain the data requires an institutional signature, researchers may not sign on behalf of the university.
- 6.7 **Describe how Duke will receive the existing data.** For example, Duke researchers may need to download the data via a secure FTP service. If data will not be transferred to Duke please explain. For example, a data provider may require that Duke researchers remote into their internal servers to access the data.

Data will be downloaded from a secure portal to the Protected Network (PN) for Research, as it was for my prior project with data from the same source.

6.8 Who will have access to the existing data? If any non-Duke researchers will have access to the data, please identify them, and describe how they plan to access the data.

Christopher Behrer, PhD student.

6.9 Where will the existing data be stored when they are "at rest" (i.e., not in use)?

All identifiable data for this project will be stored on the Protected Network (PN) for Research, operated by Duke University Office of Information Technology (OIT).

Please review the <u>Developing Data Protection Plans</u> guide for a list of best practices and recommendations from the IT Security Office (ITSO). Note: Duke University has determined that <u>the use of non-Duke cloud services</u>, like Google Drive, Apple iCloud, and DropBox are not approved for official Duke use.

6.10 Where will the existing data be analyzed?

All identifiable data for this project will be analyzed on a virtual machine on the Protected Network (PN) for Research.

Please review the <u>Developing Data Protection Plans</u> guide for a list of best practices and recommendations from the IT Security Office (ITSO). Note: Duke University has determined that <u>the use of non-Duke cloud services</u>, like Google Drive, Apple iCloud, and DropBox are not approved for official Duke use.

6.11 Will the existing data, as described in 6.4 (above), include any identifying information, either direct or indirect?

 \boxtimes Yes \Box No

6.12 If the existing data includes any identifying information (direct or indirect), will the identifiers be removed from before or after you receive them?

 \Box Yes \boxtimes No \Box N/A - data do not include identifiers

If YES, describe the process for removing the identifiers, including when they will be removed and by whom. In some cases, a third-party may be required to remove identifiers from the data.

N/A

If NO, explain why the identifiers will not be removed.

Indirect identifiable information patient information includes the member ID, a deidentified variable constructed by the data source. Patient names are removed from the data before I receive them. The member ID and other indirect identifiers (age, gender, zip-code) are necessary for the analysis.

6.13 Would an inadvertent release of identifying data place individuals at risk of harm?

 \boxtimes Yes \Box No

Please elaborate. For example, explain why you are confident they are no risks, or if risks are possible, describe the risks and how they may be mitigated.

The data are medical claims, so the risk to individuals is a potential breach of confidentiality. I will mitigate these risks by storing the data on Duke's Protected Network (PN).

If an inadvertent release of identifying data may place individuals at risk of harm your data meet Duke's sensitive data classification. Please complete Section 15.

6.14 Do any of your data providers require that the data be returned or destroyed after you have completed your analysis?

 \boxtimes Yes \Box No

If YES, by what date will your data be returned or destroyed? 06/30/2026

6.15 Please indicate whether your research requires that you re-consent participants for the secondary use of their data. If you must re-consent participants, please explain how participants will be re-consented and include the consent process in the Appendices.

My research does not require that I re-consent participants.

Section 7: Sensitive Data Classification

This section should be completed if your study involves the collection or storage of data that meet Duke's "sensitive" <u>data classification standard</u>. Data are considered "sensitive" if an of an inadvertent disclosure of the data would pose risk of harm to participants or Duke is required to protect the data. Data are also considered "sensitive" if participants include minors and children.

- If an accidental release of the data will place participants at risk of harm, the data are classified as **sensitive**.
- If a data mechanism specifies how Duke must be securely store or protect the data, the data are classified as **sensitive**.
- If research participants include minors or children, the data are classified as **sensitive**.

Research oversight offices apart from the Campus IRB may need to conduct an ancillary review before the IRB can issue a protocol approval. Campus IRB staff will notify you in the event your research must undergo an ancillary review.

7.1 **Do your data meet Duke's "sensitive" data classification?** Data are considered "sensitive" if an accidental release of the data will place participants at risk of harm, if a data mechanism specifies how Duke must securely store or protect the data, or participants include minors or children.

 \boxtimes Yes \square No If <u>NO</u>, click the \checkmark to close this section and hide questions specific to data that meet Duke's sensitive data classification.

7.2 Identify the individuals who will have access to the data and describe their role in the project. If non-Duke individuals will also have access to the data, please clarify whether data access will be on their local storage or if they will remote in to a Duke server.

Christopher Behrer, MD/PhD student will have access to the data. He will conduct all analyses on virtual machine on the Duke Protected Network.

Kate Bundorf is a Duke faculty member and one of Christopher Behrer's dissertation committee members. She will not have direct access to the data, but will be shown deidentified, aggregate results.

7.3 Sensitive data must be <u>stored</u> securely. Select the ITSO-approved environment where you will <u>store</u> the data.

Duke's Box
Duke's Microsoft OneDrive
Duke's Qualtrics
Duke's Zoom

Duke University Protected Network ("PN") for Research

If data will not be <u>stored</u> on an ITSO-approved environment (above), where will they be <u>stored</u>? Be specific.

Data will be stored on the PN for Research, an ITSO approved environment.

Duke University has determined that <u>the use of non-Duke cloud services</u>, <u>like Google Drive</u>, <u>Apple</u> <u>iCloud</u>, <u>and DropBox are not approved</u> for official Duke use.

7.4 Sensitive data must be <u>analyzed</u> in a secure environment. Select the ITSO-approved environment where you will <u>analyze</u> the data.

⊠ Duke University Protected Network ("PN") for Research

- □ Data provider enclave (please specify: Click or tap here to enter text.)
- \Box Duke managed machine

If data will not be <u>analyzed</u> on an ITSO-approved environment (above), where will they be <u>analyzed</u>? Be specific.

Data will be analyzed on the PN for Research, an ITSO approved environment.

Duke University has determined that <u>the use of non-Duke cloud services</u>, <u>like Google Drive</u>, <u>Apple</u> <u>iCloud</u>, <u>and DropBox are not approved</u> for official Duke use.

7.5 Describe the devices (laptops, tablets, mobile phones, etc.) that will be used to collect, transfer, store, and/or analyze data.

Resources in the PN are technically configured and regularly maintained to comply with the University IT Security Office (ITSO) Server security standard and the ITSO Log standard. Network access to the infrastructure is over encrypted channels and all connections are logged. A valid Duke NetID and enrollment in Duke's multifactor authentication are required for access. Users must meet password strength requirements for accounts and personal computers according to Duke security guidelines.

The laptop that will be used to access the data was issued to Christopher Behrer by Duke Medical School and meets ITSO minimum security standards.

7.6 Describe how the devices identified in 15.5 (above) will be protected.

The laptop is password protected and two-factor authentication is required to access the PN for Research.

IT Security (ITSO) has identified <u>minimum security standards</u> that include encryption of the mobile device or laptop, application of security patches, installation and regular updates of antivirus, and a password-protected screensaver.

7.7 Who is your departmental or unit IT contact?

Research Computing IT Support (rescomputing@duke.edu)

7.8 Who is responsible for data security, including upgrades?

Research Computing IT Support (rescomputing@duke.edu)

Question 15.9 (below) must be answered if your data include direct and/or indirect identifiers. Refer back to Section 13, if necessary.

7.9 How will access to the identifying information be controlled? For example, identify any individuals responsible for authorizing access to identifying information.

Only Christopher Behrer and OIT staff will have access to the virtual machine on the PN for research where the identifying information will be stored. Access will require two factor authentication.

Appendices: Study Documents and Consent Processes

In this section, please include all study documents and consent processes that are a part of this research protocol:

- Study documents include recruitment and screening, research materials (instruments, measures, stimuli, and survey, interview and focus group questions), data use and materials transfers agreements, documentation of local review/approval, etc.
- Consent processes include informed consent forms and scripts, parental permission and child assent, and releases for recordings and images, etc.

Appendix A: Application for Data



Data Release Application

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)
6/12/2024	V.01	Initial version drafted with client.	Kimi Landry, Research/Eval Analyst
7/10/2024	V.02	Revised version drafted with client.	
	V.03		
	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:	Effects of Price Transparency on Private Equity Acquisitions and Healthcare Prices: Evidence from Physician Groups and Outpatient Practices		
Application Start Date:	6/12/2024		
Requested Project Delivery Date:	9/1/2024		
Client Organization (legal name):	Duke University		
Client Organization Address:	2080 Duke University Road Durham, NC 27708		
To be completed by CIVHC staff			
CIVHC Contact (full name, complete title):	Kimi Landry		
Project Number:	24.515.1		
Condensed Project Title:	HD4A Duke D128546		

Project Contacts

Project Contact Name:	Christopher Behrer, MA
Title:	PI/PhD Student at Duke
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Phone Number:	412-551-5464
Analytic Contact Name:	Kyle Mulligan
Title:	Research Computing Data Security Specialist
Email:	kyle.mulligan@duke.edu
Phone Number:	774-287-0333



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Invoice Contact Name:	Zach Johnson
Title:	Director of Finance & Strategic Planning
Email:	zach.johnson@duke.edu
Phone Number:	919-613-7378
Data Release Fee Signatory:	Keith Hurka-Owen
Title:	Executive Director, Office of Research Support
Email:	kpho@duke.edu
Phone Number:	919-681-8687
Data Use Agreement Signatory:	Keith Hurka-Owen
Title:	Executive Director, Office of Research Support
Email:	kpho@duke.edu
Phone Number:	919-681-8687



Custom De-Identified Extract

Project Schedule and Purpose

Proposed Project Start Date ¹ :	6/12/2024
Anticipated Project End Date:	6/14/2026
Proposed Publication or Release Date:	6/14/2026

 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.

The project aims to investigate the impact of federal price transparency regulations on the behavior of private equity (PE) firms in acquiring physician groups and outpatient practices, as well as the subsequent effects on healthcare prices. Recent price transparency regulations were designed to control healthcare costs by providing consumers with price information, thereby inducing price competition among providers and lowering prices. However, this price information is universally available and may be used by other actors in the healthcare market, such as PE firms, in ways that could generate unintended effects. Specifically, the research seeks to determine whether PE firms are using the transparency data to identify low-cost providers as profitable acquisition targets and then leverage the price information to negotiate higher prices post-acquisition. This investigation is crucial for understanding potential unintended consequences of price transparency regulations on healthcare markets and prices.

Individual research questions:

- i. Did the number or size of private equity (PE) acquisitions of physician practices change after price transparency?
- ii. After price transparency, were PE acquisitions of physician practices concentrated among low-priced providers?
- iii. How did prices of acquired practices change following acquisition?
- iv. In Colorado, did PE acquisitions of physician practices become more concentrated among low-priced providers after price transparency?
- v. In Colorado, did price changes after PE acquisition change from before to after price transparency?

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

Overview: The study will utilize the Colorado All Payer Claims Database (CO APCD) outpatient claims data in combination with other datasets to investigate the impact of price transparency on private equity (PE) acquisitions of physician groups and outpatient practices. The methodology involves interrupted time series (ITS) and difference-in-differences (DiD) approaches to analyze changes over time and differences between groups, respectively.

Data Sources:

- CO APCD Outpatient Claims Data: To track pricing and service utilization patterns for outpatient practices.
- 2. Transparency in Coverage Data: To provide the context of price transparency regulations.
- CMS' Provider Enrollment, Chain, and Ownership System (PECOS) Data: To identify ownership changes and link practices to PE firms.
- Kaiser Health News PE Acquisition Data: To provide detailed information on PE acquisitions.



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Methodological Steps

1. Data Collection and Integration

- Compile Data: Gather CO APCD outpatient claims data, Transparency in Coverage Data, PECOS data, and PE acquisition data from Kaiser Health News.
- Merge Datasets: Integrate these datasets to create a comprehensive dataset that links PE
 acquisitions with outpatient practice pricing and ownership information.

2. Identify Key Variables

- Dependent Variables: Number and size of PE acquisitions, prices of services provided by acquired practices, concentration of acquisitions among low-priced providers.
- Independent Variables: Implementation of price transparency regulations, practice characteristics (e.g., size, location, specialty).

3. Interrupted Time Series (ITS) Analysis

- Objective: To examine trends in the number and size of PE acquisitions before and after the implementation of price transparency regulations.
- Procedure:
 - Define the intervention point (July 2022) when price transparency regulations took effect.
 - Use ITS to analyze changes in the trends of PE acquisitions over time, comparing pre- and post-intervention periods.

4. Difference-in-Differences (DiD) Analysis

- Objective: To compare changes in prices and acquisition patterns between practices acquired by PE firms and those that were not, pre- and post-price transparency.
- Procedure:
 - Identify treatment group (practices acquired by PE firms) and control group (practices not acquired by PE firms).
 - Apply DiD to assess the impact of price transparency on pricing and acquisition concentration among low-priced providers, comparing pre- and post-intervention periods across both groups.

5. Specific Analyses for Research Questions

- 1. Change in Number or Size of PE Acquisitions (RQ1):
 - o Use ITS to analyze trends in the number and size of acquisitions over time.
 - Compare these trends before and after the price transparency regulation implementation.
- 2. Concentration Among Low-Priced Providers (RQ2 and RQ4):
 - o Identify low-priced providers using baseline pricing data.



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- Use DiD to compare the concentration of PE acquisitions among low-priced providers before and after price transparency, both nationally and specifically in Colorado.
- 3. Price Changes Following Acquisition (RQ3 and RQ5):
 - o Track pricing data for practices pre- and post-acquisition.
 - Use DiD to compare price changes in practices acquired by PE firms versus those not acquired, considering pre- and post-intervention periods.

Summary

The study will leverage CO APCD data, combined with other relevant datasets, to apply robust statistical methods (ITS and DiD) to answer critical questions about the impact of price transparency regulations on PE acquisitions and healthcare pricing. By carefully integrating and analyzing these datasets, the study aims to provide comprehensive insights into how transparency regulations influence market dynamics and pricing strategies in the healthcare sector.

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

The project aims to provide significant benefits to Colorado residents by enhancing their understanding of the impacts of price transparency on healthcare costs and private equity (PE) acquisitions. By shedding light on how price transparency regulations affect the pricing of outpatient practices and physician groups, the research will help residents make more informed healthcare decisions. Additionally, identifying any unintended consequences, such as PE firms targeting low-cost providers and raising prices, will inform policymakers and guide more effective regulation. The study's findings will also support improved healthcare cost control by recommending policies that ensure transparency regulations achieve their intended goals without being exploited. Empowering residents with detailed pricing information will enable betterinformed consumer choices and help them select providers based on comprehensive data. By addressing cost barriers and maintaining competitive pricing, the project aims to enhance access to affordable healthcare. Furthermore, through education and outreach efforts, the project will foster an informed public dialogue about healthcare costs and policy implications, ensuring that residents are well-equipped to navigate the healthcare market effectively.

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

The project aims to enhance healthcare quality, increase value, and improve health outcomes for Colorado residents by leveraging price transparency regulations. By identifying the impact of

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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private equity (PE) acquisitions on healthcare practices, the study can inform best practices and regulatory measures to maintain high standards of care. Enhanced price competition, driven by transparency, can reduce costs while maintaining quality, thus increasing healthcare value. The findings can also promote value-based care models and cost-efficiency strategies. Ensuring access to affordable care through competitive pricing will enable more residents to receive necessary healthcare services, leading to better health outcomes. Empowering consumers with transparent pricing information will allow informed decision-making, further contributing to improved health outcomes across the state.

 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.

The project "Effects of Price Transparency on Private Equity Acquisitions and Healthcare Prices: Evidence from Physician Groups and Outpatient Practices" contributes significantly to addressing health equity in Colorado through its focus on how price transparency regulations impact healthcare access and affordability, especially for underserved populations. By investigating the effects of private equity acquisitions on healthcare prices, the study aims to prevent potential price hikes that could disproportionately affect vulnerable communities. Transparent pricing information empowers all residents, including those from disadvantaged backgrounds, to make informed healthcare decisions and choose cost-effective providers, thereby promoting equitable access to high-quality care. The project's findings will inform policy recommendations aimed at safeguarding affordability and quality, ensuring that healthcare benefits are distributed equitably across socioeconomic groups. By advocating for policies that support low-cost providers and mitigate negative impacts of PE acquisitions, the project strives to create a healthcare environment that fosters equity and improves health outcomes for all Colorado residents.

 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.

Plan to develop manuscripts to submit for publication in academic journals, presentations which will be given to academic and possibly policy audiences, and blog posts or policy briefs intended for policy audiences, RWJF, and CIVHC.



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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.

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?

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 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.



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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?

External Databases on PE Acquisitions (Kaiser, Capital IQ, PitchBook, Preqin, and SDC Platinum), Transparency in Coverage Dataset (TiC)

Who will perform the data linkage?

Christopher Behrer

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

NPI and/or provider/facility name and address.

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

Data on PE acquisitions, TiC data



Custom De-Identified Extract

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 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 requesting more than year only) 		
Member Street Address Member Latitude and Longitude			
Employer Tax ID			
Provide detailed justification for the inclusion of all PHI data selected above, and explain how its inclusion meets the Minimum Necessary Requirement. ³			
I request dates of service because I plan to study changes in prices over time, before vs after acquisitions of physician practices by private equity (PE) firms. To assign a price for a service to before vs after an acquisition, I need the date of services.			
I request member zip code in order to study whether PE acquisitions and price changes have disparate impacts on certain communities, e.g. rural zip codes or zip codes with a large population share of socioeconomically disadvantaged groups. Finally, a potential effect of an acquisition is that a patient has to switch providers due to cost, I would like to be able to compute the change in distance travelled to access care if patients switch providers.			

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.



Custom De-Identified Extract

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	\boxtimes	2020	⊠ 2021	\boxtimes	2022	⊠ 2023 ⁶
Claim Type(s)								
	Inpatient Facility		\boxtimes	Outpatient Facility		\boxtimes	Professiona	d
	Pharmacy			Dental				
Financial Detail by Line Item								
	🛛 Charged An	nount	\boxtimes	Allowed An	nount	\boxtimes	Plan Paid A	mount
	🛛 Plan Pre-Paid Amount		\boxtimes	🗵 Member Copay		\boxtimes	Member De	eductible
	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 not fully adjudicated.



Custom De-Identified Extract

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



Custom De-Identified Extract

Other claim specification:

I request two sets of claims:

1. All outpatient facility claims (claim type = 2)

2. All professional claims at outpatient facilities ((claim type = 3) AND (place of service in (11,13,14,17,19,20,22,31,32,34,49,50,53,55,56,57,58,62,65,72,81))

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:				
I request all ages. Prior academic work studying private equity acquisitions has focused on adult outpatient practices and hospitals, I am not aware of research studying acquisitions of outpatient pediatric practices. I do not filter out those under 18 years old so that I can fill this gap in the literature.				
☑ 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, <u>Census Tract,</u> etc.):				



Custom De-Identified Extract

Value-Add Data Elements

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

Specify here



Custom De-Identified Extract

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 <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.

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: 7/10/2024
- 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.



Custom De-Identified Extract

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:	11/8/2023
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 <u>CMS Cell Size Suppression Policy</u>, 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 ______ based on the <u>Anticipated Project End Date</u>.



Custom De-Identified Extract

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
Kyle Mulligan	Senior IT Analyst	Duke University
Christopher Behrer	Principal Investigator, data analyst	Duke University
Ryan McDevitt	Advisor	Duke University
Kate Bundorf	Committee Member	Duke University
Manoj Mohanan	Advisor	Duke University
James Roberts	Advisor	Duke University
Emily Cuddy	Advisor	Duke University

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



Custom De-Identified Extract

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.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:	



Custom De-Identified Extract

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:		

APCD DUA #<u>23.73</u> DUKE UNIVERSITY

DATA USE AGREEMENT

AGREEMENT FOR USE OF COLORADO ALL PAYER CLAIMS DATA

This Data Use Agreement ("Agreement" or "DUA") is made and entered as of July1,2023 (the "Effective Date") by and between the Center for Improving Value in Health Care ("CIVHC"), in its capacity as the APCD Administrator, and **Duke University** (hereinafter, the "Receiving Organization").

This Agreement addresses the conditions under which the APCD Administrator will disclose and the Receiving Organization may obtain, use, reuse, and disclose the APCD data file(s) or reports specified in this Agreement and/or any derivative file(s) (collectively, the "Data" or "APCD Data"). This Agreement supersedes any and all agreements between the parties with respect to the use of APCD Data. The terms of this Agreement can be changed only by a written modification to this Agreement or by the parties adopting a new agreement. The parties agree further that instructions or interpretations issued to the Receiving Organization concerning this Agreement, or the Data specified herein, shall not be valid unless issued in writing by the APCD point-of-contact or the APCD signatory to this Agreement.

1. <u>Project and Data Release Application.</u> This Agreement pertains to the following projects entitled: "Effects of Negotiated Price Transparency Regulations: Evidence from Hospital Prices" as described in the Data Release Application ("Application") approved by the APCD Administrator and incorporated into this Agreement as Exhibit 1.

2. <u>Requested Data Elements or File.</u> This Agreement pertains to access to the data elements specified in Exhibit 3 through an electronic interface or to the following specialized data file created in accordance with the specifications contained in the Application: 23.73 Duke University.

3. <u>Permitted Data Uses and Purposes.</u> The Receiving Organization will not use or disclose the Data for any other purpose or in any other way than the purpose and uses described in this Agreement.

4. <u>Safeguards.</u> The Receiving Organization agrees to establish appropriate administrative, technical, and physical safeguards to protect the confidentiality of and prevent unauthorized use of or access to the Data. The Receiving Organization acknowledges that the use of unsecured telecommunications, including the Internet, to transmit individually identifiable, or deducible, information derived from the APCD Data is prohibited. Further, the Receiving Organization agrees

that the Data must not be physically moved, transmitted, or disclosed in any way from or by the site indicated in the Receiving Organization's Data Management Plan without written approval from the APCD Administrator unless such movement, transmission, or disclosure is required by law.

5. <u>Inspections.</u> The Receiving Organization agrees to grant access to its personnel, facilities, and the Data to the authorized representatives of the APCD Administrator at the site indicated in the Receiving Organization's Data Management Plan for the purpose of inspecting to confirm compliance with the terms of this Agreement.

6. <u>Cell Suppression Policy.</u> The Receiving Organization agrees that any use of APCD Data in the creation of any document (manuscript, table, chart, study, report, etc.) concerning the specified purpose must adhere to APCD cell size suppression policy. This policy stipulates that no cell (*e.g.*, admittances, discharges, patients, services, others) with less than eleven observations may be displayed. Also, no use of percentages or other mathematical formulas may be used if they result in the display of a cell displaying less than eleven observations. Individual level records may not be published in any form, electronic or printed. Reports and analytics must use complementary cell suppression techniques to ensure that cells with fewer than eleven observations cannot be identified by manipulating Data in adjacent rows, columns or other manipulations of the report. Examples of such data elements include, but are not limited to geographic location, age if > 89, sex, diagnosis and procedure, admission/discharge date(s), or date of death.

7. <u>Identification of Individuals.</u> Except as provided in the protocol described in detail in [Exhibits 1 and 2, referencing Section #10 of this document], which has been reviewed and expressly authorized by the APCD Administrator, the Receiving Organization will not attempt to identify individuals in the APCD data or to link records included in the APCD data to any other individually identifiable source of information.

8. <u>Results and Reports.</u> The Receiving Organization agrees to provide the APCD Administrator with a copy of any results derived from the APCD Data and information regarding the outcome of the project, as it is described in the Application. The Receiving Organization must obtain review from the APCD Administrator of any reports or outputs prior to distribution outside the named project team to ensure that said reports or outputs meet the conditions of a.-c. below. Distribution includes but is not limited to: peer review, submission to any federal or state agency, presentation of findings, or synopsis of research. The APCD Administrator will review the report within six weeks of receipt to confirm: a. The Receiving Organization's compliance with minimum cell size and complimentary cell suppression rules;

b. That the report or output has incorporated appropriate protections to prevent inferential identification; and

c. That the report or output is consistent with the project description contained in the Receiving Organization's Application, as approved.

9. <u>Additional Projects.</u> Use of the same Data for a project other than the one described in this Agreement must be approved through a separate application process. The Receiving Organization understands and agrees that original or derivative Data file(s) cannot be reused or further disclosed without prior written approval from the APCD Administrator.

10. <u>Exhibits.</u> The parties mutually agree that the following are part of this Agreement:

Exhibit 1: Approved Application for to the Release and Use of Colorado APCD Data

Exhibit 2: Receiving Organization's Data Management Plan

Exhibit 3: List of Requested Data Elements

Other_

11. <u>Reporting and Treatment of Unauthorized Uses or Disclosures of Data.</u> The Receiving Organization will report any unauthorized use or disclosure of the Data to the APCD Administrator within two days. In the event that the APCD Administrator determines or has a reasonable belief that the Receiving Organization has made or may have made a use, reuse, or disclosure of the APCD Data that is not authorized by this Agreement, or another written authorization from the APCD Administrator, the APCD Administrator may, at its sole discretion, require the Receiving Organization to perform one or more of the following, or such other actions as the APCD Administrator, in its sole discretion, deems appropriate:</u>

a. promptly investigates and report to the APCD Administrator the Receiving Organization's determinations regarding any alleged or actual unauthorized use, reuse, or disclosure;

b. promptly resolve any issues or problems identified by the investigation;

c. submit a formal response to an allegation of unauthorized use, reuse, or disclosure;

d. submit a corrective action plan with steps designed to prevent any future unauthorized uses, reuses, or disclosures; and

e. return all Data or destroy the Data it has received under this Agreement.

The Receiving Organization understands that as a result of the APCD Administrator's determination or reasonable belief that unauthorized uses, reuses, or disclosures have taken place, the APCD Administrator may refuse to release further APCD Data to the Receiving Organization for a period of time to be determined by the APCD Administrator.

12. Indemnification. Receiving Organization will indemnify, defend, and hold CIVHC harmless from any and all claims, losses, liabilities, damages, judgments, fees, expenses, awards, penalties (including civil monetary penalties), and costs (including reasonable attorneys' and court fees and expenses) arising out of or related to any breach of this Agreement by Receiving Organization, or any breach or alleged breach of APCD Data arising from Receiving Organization's breach, or failure to perform, pursuant to this Agreement. If the APCD Administrator, in its sole discretion, determines that the risk of harm created by such a breach or alleged breach of APCD Data requires notification of affected individuals and/or other remedies, the Receiving Organization agrees to carry out such remedies under the direction of and without cost to the APCD Administrator.

13. <u>Antitrust Compliance and Indemnification.</u> Receiving Organization agrees to treat APCD Data confidentially, as specified in this Agreement, and not to use, or enable any other parties to use, the APCD Data for anticompetitive or other unlawful purposes, including but not limited to price-fixing, market or customer allocation, service or output restriction, price stabilization, or any other agreement or coordination among parties that in any way restricts or limits competition. Receiving

Organization also agrees to indemnify and hold CIVHC harmless for any antitrust liability, damages, judgments, fees, expenses, awards, penalties (including civil monetary penalties), and costs (including reasonable attorneys' and court fees and expenses) arising from or relating in any way to the APCD Data, or that in any way involve use of the APCD Data. Such indemnification shall include, but not be limited to, payment by Receiving Organization of any fines, penalties, or damages of any sort, including but not limited to compensatory, treble, punitive, or any other damages, fines, or penalties assessed against CIVHC for any antitrust violation arising from or relating in any way or any part to the APCD Data or use of the APCD Data, as well any and all of CIVHC's related legal fees, costs, and/or other expenses incurred in or arising from the matter.

Receiving Organization further agrees that it shall not attempt to identify, "reverse engineer," decompile, or in any other way attempt to discern the identities of specific parties that have been deidentified in the APCD Reports, nor shall Receiving Organization try to translate, convert, adopt, alter, modify, enhance, add to, delete, or tamper with any APCD Data or in any other way attempt to calculate or determine specific parties' prices from the APCD Data.

14. <u>Project Workforce.</u> All of the Receiving Organization's employees, contractors, and clients must adhere to the requirements contained in the Application and this Agreement. Any person or entity that processes or receives the Data and its agents must be obligated, by contract, to adhere to the terms of this DUA and agree to follow the Data privacy, security, and protection requirements, prior to being granted access to APCD Data. The following named individuals, and only these individuals, will have access to the APCD Data. The Receiving Organization will notify the APCD Administrator when an individual leaves the project. The Receiving Organization will obtain written approval from the APCD Administrator for any additions to this list, prior to granting such individuals with access to APCD Data.

Name	Role	Organization
Christopher Behrer	Primary researcher, data analyst and project manager	Duke University
Manoj Mohanan	Advisor	Duke University
Ryan McDevitt	Advisor	Duke University
M. Kate Bundorf	Advisor	Duke University
James Roberts	Advisor	Duke University

15. <u>Data Retention and Destruction.</u> The Receiving Organization agrees to notify the APCD Administrator within 30 days of the completion of the Project Purpose (as specified in Section I of the Application) if the project is completed before the Last Day of the Data Retention Period (as specified in the Project Schedule). Upon such notice or the Last Day of the Data Retention Period, whichever occurs sooner, the Receiving Organization agrees to destroy all APCD Data, in accordance with the

methods established by the "Guidance to Render Unsecured Protected Health Information Unusable, Unreadable, or Indecipherable to Unauthorized Individuals," as established by the U.S. Department of Health and Human Services (HHS). The Receiving Organization may request an extension of the Data Retention Period by submitting a written request that includes justification to the APCD Administrator.

When retention of the Data is no longer justified and/or required by law, the Receiving Organization agrees to destroy the Data and send a completed "Certification of Project Completion & Destruction or Retention of Data" form (Appendix 1 to this Agreement) to the APCD Administrator within 30 days. The Receiving Organization agrees not to retain any APCD Data, or any parts thereof, or any derivative files that can be used in concert with other information to identify an individual, either directly or indirectly, after the aforementioned file(s) and Data are destroyed unless the APCD Administrator grants written authorization. The Receiving Organization acknowledges that such date for retention of Data is not contingent upon action by the APCD Administrator.

16. <u>Term and Termination</u>. The APCD Administrator or the Receiving Organization may terminate this Agreement at any time for any reason upon 30 days written notice. Upon notice of termination by either party, the APCD Administrator will cease releasing Data to the Receiving Organization under this Agreement and will notify the Receiving Organization to destroy all Data. This Agreement will remain effective in its entirety until the completed "Certification of Project Completion & Destruction or Retention of Data" has been received by the APCD Administrator. Sections 11, 12, 13, and 15 of this Agreement shall survive termination of the other provisions of this Agreement.

By signing this Agreement, the Receiving Organization agrees to abide by all provisions set out in this Agreement.

SIGN	ATURES:	
	For the CO APCD:	For Receiving Organization:
	Signature: Pite Sheehan	Signature: Kalle Name Com
	Name: Pete Sheehan	Name: Keith Hurka-Owen
Title	: VP of Client Solutions & State Initiatives	Title: Executive Director, Office of Research Support
Date	10/5/2023	Date: 08/18/23

Appendix C: Correspondence

From:	Melissa Sharp <msharp@civhc.org></msharp@civhc.org>
Sent:	Monday, June 10, <u>2024</u> 4:41 PM
To:	Christopher Behrer <christopher.behrer@duke.edu></christopher.behrer@duke.edu>
Cc:	Liz Mooney <lmooney@civhc.org>; Kimi Landry <klandry@civhc.org></klandry@civhc.org></lmooney@civhc.org>
Subject:	Response Needed: CIVHC documents DUA For HD4A
Importance:	High

Hello Christopher, I hope you had a nice weekend.

I have attached the previously used DUA for DUKE and CIVHC, which we are able to use going forward. Please let us know after you have reviewed if any changes are needed.

We are here to help if you have any questions or need assistance with this document.



From:	Christopher Behrer <christopher.behrer@duke.edu></christopher.behrer@duke.edu>
Sent:	Tuesday, June 11, <u>2024</u> 10:34 AM
To:	Shannon Walker, Ph.D. <shannon.y.walker@duke.edu></shannon.y.walker@duke.edu>
Subject:	DUA for new CIVHC project
Importance:	High

Hi Shannon,

You previously helped me prepare the attached DUA for a research project using data from CIVHC. I have received a data access award from the Robert Wood Johnson Foundation that provides access to a different extract of data from CIVHC. From Duke's perspective, can the same DUA be used for this project?

Thanks, Christopher		
From:	Shannon Walker, Ph.D. <shannon.γ.walker@duke.edu></shannon.γ.walker@duke.edu>	
Sent:	Wednesday, June 12, <u>2024</u> 11:52 AM	
To:	Christopher Behrer <christopher.behrer@duke.edu></christopher.behrer@duke.edu>	
Subject:	RE: DUA for new CIVHC project	
Hi Chris.		
Maybe It w	ill likely depend on CIVHC. Ask them if you need a data use agreement.	
Thanks, Shannon		

From:	Christopher Behrer
Sent:	Wednesday, June 12, <u>2024</u> 1:00 PM
То:	Shannon Walker, Ph.D. <shannon.y.walker@duke.edu></shannon.y.walker@duke.edu>
Subject:	RE: DUA for new CIVHC project

Hi Shannon,

Yes. I need a DUA. CIVHC is okay with me using this one again.

Thanks,

Chris

From:	Christopher Behrer <christopher.behrer@duke.edu></christopher.behrer@duke.edu>
Sent:	Tuesday, June 18, <u>2024</u> 1:25 PM
To:	Shannon Walker, Ph.D. <shannon.y.walker@duke.edu></shannon.y.walker@duke.edu>
Subject:	RE: DUA for new CIVHC project

Hi Shannon,

I wanted to check in on this. Can I use this prior DUA that Duke signed with CIVHC for my prior project for my upcoming project?

Thanks, Christopher

From:	Shannon Walker, Ph.D. <shannon.y.walker@duke.edu></shannon.y.walker@duke.edu>
Sent:	Tuesday, June 18, <u>2024</u> 12:15:53 PM
To:	Christopher Behrer <christopher.behrer@duke.edu></christopher.behrer@duke.edu>
Subject:	RE: DUA for new CIVHC project

Sorry, I thought I replied to this. You need to check with the company. It will depend on the data they are giving you so they should decide.

Shannon

From: Christopher Behrer <christopher.behrer@duke.edu> Sent: Tuesday, June 18, <u>2024</u> 4:28 PM To: Shannon Walker, Ph.D. <shannon.y.walker@duke.edu> Subject: Re: DUA for new CIVHC project

Hi Shannon,

I have checked with the company; they would like to use this DUA. Is that acceptable from Duke's perspective?

Thanks, Christopher

From: Shannon Walker, Ph.D. Sent: Tuesday, June 18, <u>2024</u> 5:42 PM To: Christopher Behrer Subject: RE: DUA for new CIVHC project

Yes, it is.