CIVHC
CENTER FOR IMPROVING VALUE IN HEALTH CARE

Data Release Review Committee Meeting Notes October 4, 2023

Committee Member Attendees:	CIVHC Staff Attendees:	
☒ Ako Quammie (Contexture)	☒ Kelsey Foland	☐ Lucía Sanders
☒ Andy Woster (CCMCN)	☒ Amanda Kim	☒ Maggie Mueller
☒ Beth Martin (HCPF)	☐ Chris Dalton	☒ Martha Meyer
☒ Caleb Wright (Elevance Health)	☒ Danielle Evergreen	☒ Mason Thaxton
☒ Chris McDowell (Valley Health Alliance)	☒ Darcy Holladay Ford	☐ Paul McCormick
☐ Essey Yirdaw (Colorado Hospital Association)	☐ Dustin Moyer	☒ Pete Sheehan
☐ Jesse Villines (Craig Hospital)	☒ Eddy Costa	☐ Sauntice Washington
☒ Megan Denham (Georgia Tech)	☒ Hannah Witting	☒ Twanisha Parnell
☒ Nathan Wilkes (Headstorms, Inc.)	☒ Jennifer Carpenter	☒ Rachel Jardim
☐ Sheri Herner (Kaiser Permanente)	☒ Kristin Paulson	☒ Kimi Landry
	☐ LaDios Muhammad	☒ Val Garrison
	☒ Liz Mooney	

Agenda

Time	Opportunity Number	Project Title
10:30 AM	22.16	Duke University Improving Medication Adherence and Disease Control for Patients with Multimorbidity
11:00 AM	23.25	University of Wisconsin, Madison Provider Network, Hospital Systems, and Changes in Practice in Response to Regulations
11:30 AM	23.73	Duke University Effects of Negotiated Price Transparency Regulations: Evidence from Hospital Prices
12:00 PM	24.105.10.3	Division of Insurance Data Mart Premium Validation Use Case

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Data Release Review Committee Meeting Notes October 4, 2023

Presentation Time:	10:30 AM
Opportunity Number:	22.16
Requesting Organization:	Duke University
Project Title:	Improving Medication Adherence and Disease Control for Patients with Multimorbidity: The Role of Price Transparency Tools
CIVHC Presenter:	Eddy Costa, Senior Health Data Consultant
Project Presenter(s):	Caroline Sloan, MD, MPH Assistant Professor at Duke University
Extract Type:	Identifiable Extract
Finder File Included:	Yes

PHI Data Elements					
Available for Limited and Identifiable Extracts:			Available for Identifiable Extracts Only:		
	Requested	Approved		Requested	Approved
Member 5-Digit Zip Code	☒	☒	Member Name	☒	☒
Member Census Tract	☒	☒	Member Date of Birth (if requesting more than year only)	☒	☒
Member County	☐	☐			
Member City	☐	☐			
Member Eligibility Date	☐	☐	Member Street Address	☐	☐
Employer Tax ID	☐	☐	Member Geocoded Address	☒	☒
Member Dates of Service	☒	☒			

Committee Discussion and Questions:

- Previously presented at the October 2022 DRRC Meeting (no notes available for reference)
  - Adding Member Census Tract (justification included on page 8 of the application)
  - Expanding age range from 50+ to 18+ (justification included on page 3 of the application)

See attached transcript for discussion details.

Objections to Project Production	☒ No	☐ Yes
Committee Member	Basis for Objection	

Motions to Approve Project Production	☐ No	☒ Yes
First:	Nathan Wilkes	
Second:	Megan Denham	

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Data Release Review Committee
Meeting Notes
October 4, 2023

Final Decision: Approved for Production
No recommendations for changes to the Data Release Application or Data Element Selection Form.

-- Begin 22.16 --

10:35:06, Eddy Costa
...22.16, Improving Medication Adherence and Disease Control for Patients with Multi-Morbidity: the Role of Price Transparency Tools. I'm working with Caroline Sloan. She's assistant professor, division of general internal medicine, Department of Medicine, of Population Health Sciences at Duke University. I've been working with her for quite some time now. We have all the documentation and RV approvals where they need to be this particular request was actually approved October 5, 2022, and the project itself really lends to evaluate a price transparency tool specifically with University of Colorado, UC Health, and evaluation on how primary care providers, a large academic health system institution used widely available out of pocket medication, price transparency tools. So having said that, We're working with the UC Health on the Finder File. That's ready to go. Again, all the logistics are in place with the data transfer. Having said all that, we are reintroducing this project, if you will, and Dr. Sloan will give a high overview here shortly, because we wanted to add, we wanted to change your research age from 50+ to 18 and over and that is noted on page 3 of the application. You'll see the justification there. And then we thought that Census Tract information will help better inform her research and analysis. And that justification is found on page 8. As related to census tract information. Granted, throughout all the the paperwork and going through all the documentation, receive the census tract information disorder in the middle of the process of, of getting her project in play. So, we want to, bring this back to the Committeefor approval. And with that said, Kelsey, we can have Caroline join.

-- Caroline Sloan enters Zoom --

10:37:36, Kelsey Foland
Hi, Dr. Sloan. Thanks for joining us this morning. Glad you could be with us. Eddy just gave us a brief overview of the project in the addition, the additional information that you're requesting. You're welcome to go ahead and present the committee if you have any slides or any other presentation materials you can go ahead and share your screen.

10:38:34, Caroline Sloan
Excellent. Okay. Alright, so thanks for having me and listening to me again. I, so I'm presenting to you, and I'm sorry, the title of my project is Improving Medication Adherence and Disease Control for Patients with Multi-Morbidity: the Role of Price Transparency Tools. And it's a NIA [National Institute on Aging]-funded study.

So this presentation is for an amendment to a previous data release application. So, hopefully a lot of this will be a refresher for you and I know Eddy already gave you a little bit of information. The main changes I'm requesting to the previous request are to expand the population to patients who are aged 18 years and older. And then to include Census Tract/blocks to allow measurement of area deprivation index. So in the presentation I'll just give you a brief overview of the topic of my research and then I'll explain why the two amendments are necessary.

And so I think it'll be helpful. I promise this will be fast. I think it'll be helpful to describe a hypothetical patient that I might see in my primary care clinic just to give you an understanding of why I think this research topic is important. So this hypothetical patient, Miss Smith, has diabetes, heart failure and hypertension. For A1C, which is a measure of diabetes control, is above goal at 9% and she keeps having minor heart failure exacerbations. This is disconcerting to me because I've prescribed all the recommended medications. But today in clinic she tells me that actually one of the medications I recently prescribed to her an SGLt2-inhibitor is too expensive, and so to save money and make it last longer, she often skips it. And this predicament is actually fairly common in the US; about half of patients with diabetes for go care due to cost, some aspect of their care. And cost-related non-adherence can lead to worse outcomes: higher A1C in people diabetes, higher blood pressure, and people with hypertension, etc. And it also leads to higher readmission rates.

So the Real Time Benefit Tool (RTBT) is a new out-of-pocket medication cost estimator that's embedded in electronic health records. I'm here at Duke and we have access to this, but the University of Colorado has one of these tools as well, and it's pretty well established at UC Health. They've had it in place for about four years now.

And so during the, this is the way it works basically during the visit I could use the tool to estimate the drugs cost by clicking on the estimate button circled there. The RTBT then sends the order to our insurance plan and within a couple of seconds I get a cost estimate for the medicine I was gonna order and then a lower cost alternative that cost like a hundred dollars less per month to her. And so all I have to do is switch to this other medication and the patient saves about $1,200 a year and gets basically the same exact benefit medically.

So like I said, UC Health has had this tool, for about 4 years now, and it's compatible with all Medicare plans and 95% of private insurance plans in the state. So it can give real out-of-pocket costs that are individualized to patients. And so the objective of my study is to evaluate the association between use of the tool and, outcomes among middle age and older patients with diabetes and multi-morebidity. And by multi-morbidity, I mean people who have two or more chronic medical conditions. The main outcomes I'll be looking at are trends than A one C. And medication fill rates measured as proportion of days covered. And then out of pocket expenses for medications. So the reason I'm hoping to, have access to the Colorado all payer claims data is to evaluate the last two of these three outcomes. So we'll be looking at for a cohort of patients with diabetes and multi-morbidity whether their medication fill rates increase and out-of-pocket costs go down after their doctor used a an RTBT when ordering their medication.

So far, a large number of patients who get care at UC Health have received out-of-pocket cost estimates. So you can see here some preliminary results from data that we've already looked at in the UC Health EHR: 137,000, medication orders wsed a cost estimate. And then you can see the breakdown, by patients enrolled in Medicare, commercial insurance, and people with diabetes.

So one question I was asked to touch on is, how does this project meet CIVHC's triple aim criteria and I do think it touches on all 3 of the criteria of improving patient experience of care, improving population health and reducing the per capita cost of health care. The vast majority of patients, around 80 to 85% of patients, want to talk about costs with their doctors so that they can anticipate what those costs are going to be and discuss the financial trade-offs of various treatment options. And cost conversations about customer decisions have been shown to lead to more trusting doctor patient relationships, lower costs, and improved adherence to treatment plans, as well as increased overall satisfaction. And so my hope is that access to real time information about medication costs will improve all of these outcomes. And once the project is complete, I'm hoping to use my results to inform the development of an intervention to improve implementation of UC Health's cost estimator tool. And my goal is to increase use of the tool in primary care offices throughout the health system so that as many call routins as possible can have access to accurate cost estimates when making important decisions about their care.

So now that you know a little bit more about the project, I just want to explain the justification for the 2 amendments I made to my application. So first, expanding the population to age 18 years and older. So my grant is funded by the National Institute on Aging, and when I submitted the application, I limited the population to 50 and above because that's kind of what I figured the National Institute on Aging was looking for. But the NAH actually has, fairly new, policy to increase, recruitment of patients across the lifespan. So basically they're discouraging having age cutoffs at arbitrary ages. And their intent is basically to ensure that research is as inclusive as possible and that research findings are therefore as applicable as possible to as many people as possible. And so the population I'm most interested in researching are people who have multiple chronic conditions. Most of those patients do tend to be older, but in preliminary studies I found that, you know, 10-15% of patients with multi-morpidity or multiple chronic conditions are under 50 are between ages 18 and 50. And so to be as inclusive as possible, I decided that it would be better to have a population that goes from 18 and above. And then, the second amendment that I want to make, including Census Tract or census blocks in the data set. I'll be evaluating the impact of the tool, the cost estimator tool on medication fill rates and out-of-pocket costs and clinical outcomes. And I want to be able to control for potential socioeconomic confounders. And the Area Deprivation Index (ADI) is a really great way to control for a lot of socioeconomic and demographic factors. It kind of conglomerates a lot of socioeconomic data into one index. But in order to determine what that index is for a person, I need to know what Census Tract they live in. So that's the justification for the Census Tract. And I think that's it. Just wanna give a special shout out and thank you to Eddy who has helped me a lot in preparation for today. So take any questions if you have any.

10:47:08, Eddy Costa
Thanks, Caroline. Really quick as a footnote. And Kelsey correct me if I'm wrong. The triple aim, quadruple aim, is not synonymous. So we removed that language, if you will at CIVHC. So just little side note there.

10:47:29, Kelsey Foland

Yeah, no problem. Thank you, Dr. Sloan, for that presentation. I'm gonna open this up to the committee. I saw a lot of head nods from a few of you. But does anyone have any questions for Dr. Sloan?

-- Pause --

Okay, great. Dr. Sloan, thanks so much for taking the time to. Meet with us today. We're gonna let you go. Eddie will follow up with you after our meeting today. Thanks for taking the time.

-- Caroline Sloan exits the Zoom meeting --

10:48:10, Kelsey Foland
Alright, I will open it up for discussion amongst Committee members. Questions, comments, concerns?

10:48:23, Megan Denham
The only question I had was with the age of 18. Will she be able to pull that? Will that with those data be available from the same system or would that be in the pediatric versus the adult world?

10:48:36, Eddy Costa
When you say same system, Megan, what do you referring to? Are you referring to the APCD or referring to the finder file referring to, UC health data?

Megan Denham
UC Health data.

10:48:45, Martha Meyer
Yes, it will be.

10:48:50, Megan Denham
Thank you.

10:48:51, Martha Meyer
And that's a great question, Megan, because it's not any different for us as being the CO APCD. The only thing that we have the separate files is the only thing that we have the separate files is a CMS fee for service. And they're probably not in there.

10:49:14, Nathan Wilkes
I said, I have a general question, I guess, about the tool. Is it actually, the interface, is it just the physicians that are using it or is this kind of data also exposed to the patients as well so they can say hey this is... I'm just looking for some background how it currently operates.

10:49:35, Eddy Costa
Yeah, had you asked me last year in 2022 and I have a stronger answer for you, Nathan, but for my understanding no this is all for clinical use and for administrative/executive use if you will. I tell you that you pull their own data,

they do pull reports using this tool. Hopefully this will help enhance what they're already doing as it relates to looking at costs.

10:50:13, Pete Sheehan
Just a thought on that. And I don't know the answer to this question. You know, HCPF implemented a prescriber, prescription tool a couple of years ago and I don't know if the tools you using is the exact same as the one that HCPF implemented or not. I know, Beth, I don't know if you've got any insight into that but just a question I had while I was listening to the presentation as well.

10:50:42, Beth Martin
Don't have other insight into it. This seems like a pretty straightforward use of the tool to, you know, of the data to examine how the tool is playing out.

10:51:01, Ako Quammie
Yeah, I do like two things. First thing I like is the fact that, first off, apologies for, joining late, but, I do like the fact that there is that previous data that she had to show that there is some value. And then of course expanding to all age all age ranges is great.

10:51:28, Eddy Costa
Hey Nathan, I stand corrected. The patient does, through the UC Health app, they are able to get an estimate, if you will. They have language in there around understanding and knowing your cost ahead of your appointment. You provide a CPT code given to the patient by their provider, etc. And from there they can retrieve an estimate. So I stand corrected on that.

10:51:56, Nathan Wilkes
So I guess sort of a follow up to that. Kinda curious how it works cause having...there's a lot of disconnect between what the cost generally are on the, you know, the estimates are versus what reality is depending on the patients out-of-pocket costs already and they met their deductible and that sort of thing. So I've seen in the past cases where the real the real costs are way different than the expected cost and it swings both ways. I just curious what the how accurate that tool is and how useful it is. And then as a follow on to that, are they able to discriminate or pull in that information about deductibles and out of pockets to help, I guess, filter analyze their results or they just looking at sort of that front end tool itself?

10:53:05, Martha Meyer
I do believe, Eddy, that we she is getting all the cost data. So, but remember cost data, it has't changed, but it's going to say for that particular claim this was the patient's portion. It won't reflect how it their greater policy but I don't think that's what you're asking you're asking if...will she look at the patient the impact on the at the patient level?

10:53:39, Nathan Wilkes
Yeah, I mean, there's just a lot of a lot of factors that go into can I afford this medication or not kind of thing, right?

10:53:45, Caleb Wrignt
Yes, say nothing about pharmacy incentives to coupons to provide the rebates that the insurers are gonna get where the insurer may actually have you take a more expensive drug is less expensive to for them to provide it. I mean, I, yeah, I think there's a lot of value in the analysis post, but there's a lot of data missing that, I don't know. I'm not saying I'm opposed to giving this a go. I am saying I don't think it's gonna be as fruitful as she anticipates.

10:54:25, Eddy Costa
Given the length of time that we've got this application to where it is now and all the discussions that have transpired over the year, there's going to be another iteration of data that should receive, based off the initial analysis that she conducts. To your point, Caleb and Nathan, yeah, this isn't a fool proof. They, UC Health sends us a finder file. She conducts her analysis and we answer hypothesis, right? We have answers to her questions and her aims. That's, that's, that's not gonna happen. So the hope is for her to conduct her analysis, get some of her questions answered and then dig maybe dig a little deeper based on what both of you have already mentioned.

10:55:09, Nathan Wilkes
And I think my questions are less about what her questions are and more about are those conditions are those inputs part of the prescriber tool algorithms? So yeah, I think it's a good idea.

10:55:26, Andy Woster
I was gonna piggyback on that. I mean. I like the idea of the project. You can't control for all of the limitations. I think the one thing that I was thinking about is a lower cost alternative is not always a clinically more effective or has the same clinical efficacy, right? So who's making those decisions? Are they being tracked anywhere that could be controlled for? Potentially and you know, to to the same sort of questions that that Nathan you were asking is what's the logic on efficacy that's built in when they're sort of producing for you or surfacing for you an alternative medication that you could prescribe just because it's a lower cost. All that said, I like the project.

10:56:18, Kelsey Foland
It sounds like we've got a pretty positive response. Are there any objections to these additions?

-- Pause --

Okay, great.

10:56:30, Nathan Wilkes
Other question, I'm not sure if I saw what conditions are they looking for, or are they just looking to determine comorbidity? Is there a grouping?

10:56:45, Andy Woster
I think it was only diabetes. Among they were looking at diabetes outcomes outcomes among the population with multi-morbity, is the way I understood it.

10:57:06, Kelsey Foland
Do I have a motion to approve this to move into production with these additions?

10:57:13, Nathan Wilkes
I would approve that.

10:57:15, Kelsey Foland
And do I have a second?

10:57:18, Megan Denham
Second.

-- End 22.16 --

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Data Release Review Committee Meeting Notes October 4, 2023

Presentation Time:	11:00 AM
Opportunity Number:	23.25
Requesting Organization:	University of Wisconsin, Madison
Project Title:	Provider Network, Hospital Systems, and Changes in Practice in Response to Regulations
CIVHC Presenter:	Eddy Costa, Senior Health Data Consultant
Project Presenter(s):	Victoria Zhang, University of Wisconsin
Extract Type:	Identifiable Extract
Finder File Included:	No

PHI Data Elements					
Available for Limited and Identifiable Extracts:			Available for Identifiable Extracts Only:		
	Requested	Approved		Requested	Approved
Member 5-Digit Zip Code	☒	☒	Member Name	☐	☐
Member Census Tract	☐	☐	Member Date of Birth (if requesting more than year only)	☒	☐
Member County	☐	☐			
Member City	☐	☐			
Member Eligibility Date	☐	☐	Member Street Address	☐	☐
Employer Tax ID	☐	☐	Member Geocoded Address	☐	☐
Member Dates of Service	☒	☒			

Committee Discussion and Questions:

- Previously presented at the August 2023 DRRC Meeting with objections from Committee members:
  - Caleb Wright: Open-ended request that does not meet minimum necessary requirements
  - Ako Quammie: Large amount of identifiable data requested for a long period of time
  - Essey Yirdaw: Needs more specificity.
- Only one change has been made to the Data Release Application modifying Project End Date changed from December 31, 2033, to December 31, 2028.

  See attached transcript for discussion details.

Objections to Project Production	☒ No	☐ Yes
Committee Member	Basis for Objection	

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Motions to Approve Project Production	☐ No	☒ Yes
First:	Andy Woster	
Second:	Beth Martin	

Final Decision: Approved for Production pending Data Release Application and DED corrections/modifications

Data Release Application changes before production:

- Type of Output Requested (Part 1, pg. 3)
  - Uncheck 'Identified Data Set'
  - Check 'Limited Data Set'
- Data Needs (Part 1, pg.4) – Change question 2 response from 'Yes' to 'No'
- Data Element Selection Member-level Detail (Part 2, pg.1)
  - Uncheck 'DOB'
  - Remove 'Patient DOB' justification bullet point

Data Element Selection Form changes before production:

- Unselect line 220 (Member_DOB from the Member table)
- Unselect line 242 (Member_DOB from the Member_Composite table)
- Add to Filter tab the need for Age at Time of Service

-- Begin 23.25 --

10:57:19, Kelsey Foland
Great. Thank you so much. We will go ahead and move on to the next one then Eddie I've got Victoria in our waiting room already

10:57:28, Eddy Costa
Oh, perfect. Thanks. So this, next one was presented to August DRRC. This is 23.25, Provider Networks Hospital Systems and Changes in Practice Response to Regulation. Victoria is with the University of Wisconsin. She has a couple of publications out there already and has done a number of different launch 2 little studies, if you will, examining the evolution of formal and informal networks. And this is a project where she wants to look at the quality of health care delivery outcomes, look at different perspectives as it relates to quality healthcare outcomes beyond system level, macro level or individual level approaches, really focusing on provider networks and the interactions of those networks as it relates to the systems that these providers are in. Having said that, I, we didn't make any changes to this particular request and I'm asking of the Committee, and I've been doing this for a while and this is probably one of the first times and I've actually brought back an application. With little or no changes. So bear with me as we work through this. The change that we did make was I think, Caleb or Nathan, you had a concern about the length of time in which Dr. Zhang would have the data. We decreased, and I, incorrectly in the Word document, put the wrong year, but if you look at the Word document for 23.25, the project start date changed from September to December of 2028, and we used the 5-year timeframe because that's normally the time that we provide analysts, if you will, or clients or partners to conduct their research digest the data. And then provide their analysis. So, so we did decrease that timeframe from 2033 to 2028. And I forgot who brought that up last time. But that was the only change. And with this application and with this project, Dr. Zhang is getting, yes, a lot of data. But after discussions internally with CIVHC analysts and some of our researchers, I wanted to bring this back and ask that the Committee really looked through the lens of a longitudinal research, right, evolutionary type study and analysis or inferential type analysis is what basically Victoria, Dr. Zhang, is doing with this with this data as it relates to the hypothesis and the provider. And studying provider networks. Specifically as it relates to some of the responses to the regulatory mandates that are out there. So I'm gonna I'm gonna leave it at that. Dr. Zhang does have a presentation, but I'm hoping that makes sense to everybody and if not please ask questions or let me know if that's not clear.

11:00:58, Kelsey Foland
And for reference on this one real quick if you don't have previous notes available to you, we had documented formal objections from Caleb, Ako, and Essey on this one. Based on concerns around meeting the minimum necessary requirements, the length of time that she asked to hold the data, and the amount of identifiable data that she was requesting. We've got Dr. Zhang in the waiting room ready to come on. Are there any questions or comments before we bring her in?

11:01:35, Caleb Wright
It just still feels like we're sort of like ignoring the minimum necessity

commentary. Like she points to previous research that I doubt anybody has any knowledge of as a reason to leave this wide open and has made no attempt to limit it in any way. Like there's plenty of places you can cut claims out that aren't gonna be influential to this, any sort of regression analysis. So I don't know, other than shortening the length of time she has it, it still feels like a minimum necessity risk to me, but I'm curious to hear it directly from her.

11:02:15, Eddy Costa
Yeah, great. And thank you, Caleb. And so she'll present and And let's talk through those and what that looks like. If If that makes sense, you know, if there are some parameters that need to be discussed, let's discuss them with her and figure out what she's willing to take out, if you will. I think that's a really good point and Caleb, thank you for the calling out the 10 years of data. We talked at length with her about this and about how we could reduce the amount of data she's getting.

11:02:51, Martha Meyer
And I want to point us to talking to her about what a network analysis, because this is where she landed with me, is that a network analysis is, we need that she needs to see the whole picture to see people, people being patient, visit providers and health systems change over time. And that was her reasoning for the length of time. When we were starting, we were pressing her as like, can we reduce this? Because this is a lot of PHI out there and we are stewards of this data. So that was her response. And so if we can get her maybe to give some more context to get a comfort level that we are being good stewards and to understand a network over time which is the context or the evolution that at Eddie talks about, that's why she needed the full 10 years of data. So, look forward to hearing what she has to say about Zel and what your questions are.

11:03:57, Kelsey Foland
And as we go through this, Committee members, if you have ideas about any specific suggestions for her, feel free to share that with her as well. And if If it comes to us not being comfortable moving word, then we'll handle that when we get there. But I will go ahead and bring her into the wait and in from the waiting room.

-- Victoria Zhang enters Zoom --

11:04:31, Eddy Costa
Yeah, and while she's joining, I mean, we added age 18 and up, I think as a parameter. But we've tried to vet this out, to the smallest detail, if you will. Ages 18 above as, again, as a minimum necessary parameter which you know take it take it as you wish. Let's, you know, let's open up Dr. Zhang and hopefully we can vet this out.

11:05:09, Kelsey Foland
Hi, Dr. Zhang. Thanks so much for joining us again today. The Committee is familiar with this one since we just presented back in August. You if you have any presentation materials or any slides you'd like to share you're welcome to share your screen at this time.

11:05:31, Victoria Zhang

Okay, so let me share my screen. So thank you for having me again. I did a really short brief introduction last time in August but for those of you if we haven't met before, my name is Victoria Zhang, and I'm an Assistant Professor at University of Wisconsin, Madison. And I have these slides up. I think I have just two slides. The first one will be just Again, giving you an overview of this project because last time when I presented it was back in August, so it's been a little bit of time. But the second slide will be addressing what I understand to be one of the biggest concerns and questions you have from the last meeting, which is why do we need longitudinal data to examine my research question. So just two slides and then I would love to take any questions at the end.

So this project examines very broadly the role of formal and informal provider networks on physicians practices as well as health care delivery outcomes in the state of Colorado. This will be a multi-year longitudinal study because it will help us understand the evolution of formal and informal networks and how they shape the quality of care. More on this on the next slide on the keyword evolution, which is why I would need longitudinal data to study this. But more broadly why I am doing this research question is that it really adds a new perspective to understanding quality of care. So if you know, like if you look at the literature on health care delivery outcomes, most of the focus has been on system level. So for instance, how do hospital characteristics shape the quality of healthcare outcomes? Now there's also a line of work on individual level approaches as well. So for instance, how do the characteristics of the physician, their specialty, their training, etc, shape healthcare delivery. But what I'm saying in this project is that a missing perspective and a less studied perspective is to look at the interactions between these two different dimensions, to look at the interactions between professionals. And the systems that they are embedded in. And this is actually a super new and very exciting interdisciplinary area that has just started to gather more and more academic attention. And it really also has significant policy implications. So in the first projects I had on physician networks, it was actually rewarded a NIHR one grant which allowed us to engage publish in top to your publications such as JAMA. Jaime of psychiatry and it also speaks to the management audience and was published in top tier management journals such as ASQ as well as it's covered by media such as US news. So understanding the interplay between these formal and informal networks will really help add a new perspective to what is missing in the literature and in policy space. And so what I'm really excited about bringing is that this will be one of the first projects to employ a networks approach to understand what characteristics and what factors of these networks shape healthcare delivery outcomes in Colorado. And that is the unique contribution that I am hoping to bring with this project.

So this slide essentially, I hope will answer some of your questions about why do I need a long span of longitudinal data on social networks and here are some of the key reasons. The first one is that in order for me to have a clear identification strategy, a clear causal identification to show policymakers, that a change in network actually really affect a change in health care delivery outcomes and not the other way around. Or, that it's not a spurious correlation because of some other unseen factors, you really need a clear identification strategy. So I will be exploiting quasi-exogenous changes such as hospital mergers and acquisitions and physician movements across different networks over time. And so these data will

need to be aggregated. So for instance, there may be hospital mergers in 2018 and 2019 and 2017. These will need to be aggregated over time in order it's for me to be aggregated over time in order it's for me to have enough sample size for these quasi-exogenous changes. So the first reason is that I need a longer span of data to be able to capture these changes over time. And specifically, I will need to compare outcomes using a difference in differences design, of health care delivery outcomes that are that happened before these shocks as well as after these shocks have occurred. You will have to have these longitudinal data over time in order to compare how a change in the network structure or the formal network has affected healthcare delivery outcomes. So that's the third point here. And the final one last point I want to mention is that meaningful change really takes time. Right, so once the shock or policy shock or a network shock has occurred researchers actually need longer span of data to be able to capture and to understand the longer term effects of these changes. So it's not just having like a month of data right immediately before the change or immediately after the change that will that helps you see the longer, the bigger picture. So to really understand whether these changes are the effect of these changes are more long-lasting and to capture these meaningful changes I really need data over time. So I think that that is I'm actually earlier than 10 min. Which is great. That means I get, more time to answer your questions. So, please feel free to jump in and let me know if you have any other questions that I can help answer. Thank you so much for your attention.

11:13:31, Kelsey Foland
Thank you, Dr. Zhang. Committee members, I will open it up to you for any questions or other discussions with Dr. Zhang about this project.

11:13:44, Caleb Wright
So when we reviewed it last time, we had 3 questions. One was sort of the why, why do we need the PHI level, that level of identifiable data. You address the length, which was question 2. And then, you know, 3, why not a little bit of specificity? And I understand again, you want to sort of see the universe to understand what your questions may be, but, again, understanding that universe seems very possible without specific patient identifiers.

11:14:31, Victoria Zhang
When you say the PHI data are you referring like can you talk a little bit more about which dimension that the data that I'm, requesting, so that I can better answer your question?

11:14:34, Caleb Wright
My understanding is identifiable both that data set, right? So you're getting a bit of everything.

11:14:40, Victoria Zhang
So at the patient, like all the patients, I don't need the patient data at all. Like everything about that is going to be de-identified. And I'm guessing that what you're saying is that why do I need hospitals the name of the hospitals? Is that the question?

11:14:57, Caleb Wright

Okay. Well, it is, but maybe it's my misunderstanding. I thought I looked the, and saw this was a an identifiable data set and if it is.

11:15:06, Kelsey Foland
Yeah, so Dr. Zhang, the, what is considered PHI data under HIPAA is the request for member 5 digits of code member dates of service and complete date of birth.

11:15:24, Victoria Zhang
So the, let me answer that one by one. So the first one, can you, do the zip code level? The zip code level stuff and the data of birth. As well as, what is the last dimension?

11:15:40, Eddy Costa
Yeah, member 5 digit zip, date of birth. We also have dates of service.

11:15:53, Victoria Zhang
So for the zip code level data, I want to be able to exploit movements that would be like movements of patients or of physicians. So like for me, the more important thing is the zip code level for the physician, not the patient. But one way of getting at that is to look at patients', the zip code level for the patient that the physician is seeing. So that's that relates to back to my first empirical strategy of exploiting changes in physicians. So it's like physician movements across hospitals, across regions as a quasi-exogenous shock to examine network effects. Does that answer the first piece of the question? So for the date of birth, I really, I think I'm fine with just getting like the age of the patient rather than specifically date of birth. But that was just what I specify. I like there was an option and I selected that, but I actually don't need bread date of birth as long as I have the patient's age that we find because that would be a control like an important control in the model for the patient panel for a given physician.

11:17:14, Kelsey Foland
So, apologize to clarify for our documentation you're saying date age at time of service?

11:17:24, Victoria Zhang
Yes, at time of I thought I recall but I could be wrong that I had a we had a conversation Eddie and I was like I don't actually need that if that helps us. Yes. And the data, service is needed because I want to capture physician changes in their practices over time. And so I would be aggregating this at different levels, for instance, at the year level, that would be the most general level or at the month level that would be so and then in order to do that I would need to know at what date did they do engage in this practice or prescribe this prescription. So that's the first. Does that answer your question on PHI?

11:18:10, Caleb Wright
I think it does. I mean, at a high level, I feel like there hasn't been enough conversation about what's truly needed and identified versus not. And that goes a long way to my sort of feeling in favor or not of the overall response. But thank you.

11:18:26, Eddy Costa
Yeah, just really quick. We met this application out, through various, stages, within our internal process. So, every, Data elemental request on part one and part 2 has been vetted. You know, if we're taking, obviously, Dr. Zhang, we can, we're taking out age of time of service, we can talk about others. If you look at the application, there's bulleted information on why we've also selected what we selected to include diagnosis procedure codes patient age yea end, gender, etc, just as a FYI.

11:19:10, Kelsey Foland
Megan, did you have something?

11:19:11, Megan Denham
Yeah, I wanted to, can we go back to the zip code question? I wasn't, I wasn't totally clear. So I understood what you're saying for the, on the provider side, but as far as the patients. Are you planning on doing any kind of analyses looking at the distance that patients are having to travel after, mergers and acquisitions, things like that? Is, is that one of the things that you're wanting to look at as well or is it purely looking at the health systems and providers?

11:19:36, Victoria Zhang
It's really looking at the health care system of providers. Like for me, as long as I have all the level information to as important controls for how the physicians are prescribing that's enough. I don't wanna like mess with any hip hop sensitive data on that front. It's really I'm requesting these data in order to have good enough measures for physician practices.

11:20:04, Megan Denham
Okay, thank you.

11:20:06, Victoria Zhang
Yeah. But I also wanna like, go back to Caleb's question to just make sure that I've answered all of your question because I think you had two other questions before besides the PHI data question, is that correct?

11:20:26, Caleb Wright
I was just saying that there were 3 things sort of listed. One was this PHI. Should it be identified? Not identified if it wasn't identified. Can you articulate the need? Which sort of sounds like the need isn't there. Second question was just longevity, which you went into and that. I'm comfortable with that response and in general it makes sense. The other one was specificity in terms of, you know, and in my mind this kind of goes back to the first question right if you were going to get into Identified information, I would want it. I would be hopeful that there'd be a more specific area of focus like in your initial analysis and like initial response you kind of mentioned a persuading specific drug or whatever, but if we're not doing that, then I don't feel as strongly about the third item. So. I don't know.

11:21:20, Victoria Zhang
If we're not doing specific of like prescribing opioids. So like really that is

just one dimension and one approach for me to look at these physician practices.

11:21:34, Caleb Wright
Sure.

11:21:34, Victoria Zhang
Because they are really clear guidelines of what you physicians should or should not be doing. But I see my research proposal as a more broader. It's not really about. Just about understanding opioid prescribing or bundle prescribing, but at the more broader level how these systems of things and of formal and informal networks interact. And for like these more specific questions. I have these I have a couple of really specific questions outlined in my proposal, I'm happy to follow up with that or just share them. If we have time at the end, I wanna be able to hear from others as well. But thanks so much for your questions.

11:22:18, Caleb Wright
Oh, thank you. I'm sorry to talk over others. So thanks, guys.

11:22:22, Nathan Wilkes
I have a few questions. There's a couple of, and this may just be a little bit of, definition, I think. But can you there's a term high risk professional practices can you elaborate on what that means?

11:22:40, Victoria Zhang
Yeah, of course. So the example that I just gave you, opioid prescribing provides a great example actually. So more broadly speaking, I will be looking at guidelines prescribing guidelines for specific physician practices and that looking at whether physicians, how much physicians are over that guideline. And label that as high risk practices and this is also following the literature's labeling of these high risk practices. So to give you an example in the realm of opioid prescribing, for instance, I will be looking at the CDC 2016 Opioid Prescribing Guideline where they specify that over 90 milligram, where they specify that over 90 milligram like MME per day of opioids, where they specify that over 90 milligram like MME per day of opioids should just be avoided for physicians. And so any of the physician behaviors, days, months, years where these dosages are over these specified thrust thresholds will be labeled as high risk practices. So there it will both be a dummy variable of what or not you were over 90 or not as well as a continuous variable of how much you are actually over that. So that's just one example of high risk practice that I want to explore.

11:24:12, Nathan Wilkes
Alright, another question I had and there's a lot of talk about networks and this study to me I see kind of two phases one is using the data to understand and define the networks and then applying those networks to the analysis of things like the high risk practices. It that, am I correct in that?

11:24:33, Victoria Zhang
Are you asking if that's what my application is or?

11:24:37, Nathan Wilkes

No, I'm just, I'm just kinda understanding the workflow. I guess the real question I have is understanding how, what kind of algorithm I assume you're using some clustering algorithms based on patient encounters to define the informal networks. Maybe you can elaborate on that, but the side, sub question to that is on the formal networks and what you mentioned, you know, looking at, corporate M and A practices, mergers acquisitions, that sort of thing. Is that the extent of your definition of formal networks or are there other things going on there?

11:25:22, Victoria Zhang
You know, two great questions. The first one I labeled as, like, what is the definition? What is the algorithm to identify these informal networks based on patient encounters? So I will there was a, you know, like, to identify these informal networks based on patient encounters. So I will, there was a, like, pretty recent study study by Bar that uses patient sharing from these encounters to generate professional networks between physicians. And they were they did it in for hospitals in Massachusetts they did a really large sample of this. And they were able to validate that these, patient sharing encounters or these encounters that generate patient sharing are actually, also, like also there is also exchanges of professional ties and professional information in these networks. So that is our building off of that work. I will be using patient sharing between providers as an approach to measure informal networks. I will also say that I, I think more recently just in the past 5 years, we've seen this approach being adopted more and more and more in healthcare services the future. And so it's been like pretty widely validated. I will also be using some computational approaches, including community detection algorithms in order to detect these clusters of informal physician networks. And it's really interesting because these informal clusters could actually vary from the formal networks or the formal groups that physicians are actually practicing. And so you could see physicians who are formally in the one practice they may be actually referring patients with or interacting with somebody who is outside of their formal network. So it's like, yes, so computational methods to do, community detection. So that's the first question, like definition and algorithms. Your second question is about the definition of formal networks. And for this, I will be relying on like formal just formally, formal organizational structure and organizational hierarchies. So for instance, one hospital would be one type of formal network. So I want to look at the interplay between the formal, these foremost organizational structures speaking as an organizational theorist, as well as the, with the informal networks where physicians are referring and sharing patients with one another. But you raise a really good point because there are other types of formal networks that I want to also exploit. Which is these insurance networks that physicians are contracted to. So. Like, yeah, that's just like another type of formal network that was like sort of imposed upon the physician or that was sort of imposed upon the physician or that's like that has nothing or has very much less to do with the physician or that's like that has nothing or has very much less to do with the how physicians are actually interacting with their colleagues but there are really important and interesting questions to study about what happens once physicians are removed from these formal insurance networks. What happens with their informal networks? And how does that actually change prescribing practices? That's a really long thanks for your patience.

11:29:07, Nathan Wilkes
Yeah, thanks. No, that's a good answer. I appreciate your interest in the provider networks. I wish you good luck in getting accurate data there.

11:29:20, Eddy Costa
Thanks, Nathan. Really quick. Kelsey, I'm gonna make a just some clarity on some things so

11:29:27, Kelsey Foland
Okay, we're very short time.

11:29:29, Eddy Costa
Yep. Yeah, I wanna vet this out really quick. So for the Committee and Victoria, it sounds like, member information has less of a bearing on this on your project Victoria. So we're gonna remove age at time of service. We're gonna remove, number 5.

11:29:48, Kelsey Foland
No, Eddie, we're gonna remove complete date of birth and in lieu of that use age at time of service.

11:29:54, Eddy Costa
Alright, thank you Kelsey. So that change the type of data set from a identifiable data set to a limited data set. I'll make that change in app and then. I heard conversation around member 5 digit zip. Is that needed, Victoria?

11:30:18, Victoria Zhang
Yes, I just answered in the I I hope that it was a clear answer because I wanna look at changes, like movements of physicians. And in one way, like 3-digit zip code would be too, like wouldn't be fine-grained enough information to, for, exploit.

11:30:34, Eddy Costa
Perfect. Thank you. And dates of service?

11:30:39, Victoria Zhang
Yes, because I want to look at, okay, alright.

11:30:45, Eddy Costa
Thank you. That's all I have.

11:30:49, Kelsey Foland
Okay, I want to have a little bit of a more discussion with committee. Victoria, we're gonna let you go.
Thank you so much for joining us again today and for answering all of these questions from the Committee. This was very helpful.

11:31:05, Victoria Zhang
Well, thank you so much for having me again. I hope you all have a good rest of your day.

-- Victoria Zhang exits Zoom --

11:31:17, Kelsey Foland
Okay. In the interest of time, are there objections to moving this project into production when taking into consideration that we are modifying this from an identifiable to a limited extract with the removal of full date of birth?

11:31:42, Andy Woster
I will say from my perspective, I share the same concern that Caleb expressed and I know that we talked about last time with how broad the project is. And I'm willing to forego that here because my limited understanding of the methods shouldn't be a barrier to the project moving forward. If I'm historically used to seeing very specific, hey, we're only going to look at this class of drugs or hey, we're only going to look at this class of drugs just because I'm not familiar with the the methodology, I don't feel like that should be a barrier to them. Moving forward with their with their research though. If they're telling me they're an expert in the field and that this is the information that they need to do to assess networks rather than specific opioid prescribing, which I think is another hiccup that we got into last time because that data may not even be there, then I don't have a hesitation necessarily about moving it forward. I'll get over my own hangups about being taught hypotheses and so forth 30 years ago.

11:32:53, Nathan Wilkes
Yeah, I would say my comments is I go back to what I said about this seems like a two-phase thing. The first phase being, using the broad data, the, you know, the more dimensions you have, the better you're going to be at defining your clusters, which then you apply to answering the questions that they have about how does this impact outcomes. So I see why you would need such a broad approach up front. Because there's those two sides to that.

11:33:30, Ako Quammie
Yeah. And, and then my commentary is switching it from a identified to a limited data set does help. I, the first time as well got tripped up on, her, Buprenorpherine, I can never say that word. So I won't try it again. And so my limiting factor would have been, are there any non B-word, you know, diagnosis that you could use to create your cohorts and your control group, but I think I missed the fact in the first part where she said it's actually all and that's kind of where my, you know, license to hunt with PHI comments came from. So I think the fact that it is a limited data set, it is still a lot of data, and to Nathan's point it is two-phase, so you cast your net and then you hone in.

11:34:34, Eddy Costa
Yeah, the buprenorphine was used as an example, Ako, but thank you for your comments. And this this project started out as a de-identified data set just FYI and this was probably about a year ago.

11:34:46, Martha Meyer
And it's short for Bupe. And so you can use that. And what it's interesting, to Beth Martin's comment last time, it is in the data. That is just a side thoughyt,

which I thought was fascinating because it's not been sequestered.

11:35:08, Megan Denham
I'm still a little unclear about her plan with zip codes and members. It sounded like she didn't need the member information, but then when she explained it, she didn't need the member information, but then when she explained it second time, she did not need the member information, but then when she explained it second time, she did. But, other than that, I mean, for this kind of research, but then when she explained it second time, she did. But, other, other than that, I mean, for, this kind of research, it's just, she needs to be able to cast a broad net. So, so it, it seems, reasonable to me, but getting just clarity on that of zips for patients or not. I think would be good.

11:35:41, Caleb Wright
I agree completely, and I don't want to be repetitive. All the comments just came across were what was in my brain and articulated better than I would have, so thank you.

11:35:53, Kelsey Foland
Okay, so I'm not hearing any formal objections to moving this forward with these changes. Do I have a motion to approve then?

11:36:06, Andy Woster
I'll make that motion.

11:36:08, Kelsey Foland
And a second?

11:36:09, Beth Martin
I'll second.

11:36:12, Kelsey Foland
Great. All right, Eddie, you can let Victoria know that we will be moving forward. This was great. Thank you all for discussing this one further. We had some good learnings out of this one too. So this was all very helpful.

-- End 23.25 --

CIVHC
CENTER FOR IMPROVING VALUE IN HEALTH CARE

Data Release Review Committee Meeting Notes October 4, 2023

Presentation Time:	11:30 AM
Opportunity Number:	23.73
Requesting Organization:	Duke University
Project Title:	Effects of Negotiated Price Transparency Regulations: Evidence from Hospital Prices
CIVHC Presenter:	Eddy Costa, Senior Health Data Consultant
Project Presenter(s):	Christopher Behrer
Extract Type:	Limited Extract
Finder File Included:	No

PHI Data Elements					
Available for Limited and Identifiable Extracts:			Available for Identifiable Extracts Only:		
	Requested	Approved		Requested	Approved
Member 5-Digit Zip Code	☒	☒	Member Name	☐	☐
Member Census Tract	☐	☐	Member Date of Birth (if requesting more than year only)	☐	☐
Member County	☐	☐			
Member City	☐	☐			
Member Eligibility Date	☐	☐	Member Street Address	☐	☐
Employer Tax ID	☒	☒	Member Geocoded Address	☐	☐
Member Dates of Service	☐	☐			

Committee Discussion and Questions:

- Previously presented at the August 2023 DRRC Meeting
  - Committee approved the release of requested PHI Data Elements 'Member 5-Digit Zip Code' and 'Employer Tax ID'
  - Project was approved for production pending modification to the Data Release Application: Unselect Inpatient under the Data Inclusion Criteria / Claim Type(s) section
- Eddy Costa: Inpatient claims are required, but justification has been added and limitations have been built in where possible.

See attached transcript for discussion details.

Objections to Project Production	☒ No	☐ Yes
Committee Member	Basis for Objection	

CIVHC
CENTER FOR IMPROVING VALUE IN HEALTH CARE

Data Release Review Committee
Meeting Notes
October 4, 2023

Motions to Approve Project Production	☐ No	☒ Yes
First:	Nathan Wilkes	
Second:	Chris McDowell	

Final Decision: Approved for Production
No recommendations for changes to the Data Release Application or Data Element Selection Form.

-- Begin 23.73 --

Kelsey Foland
All right, Eddy, we've already got Chris in the waiting room.

11:36:36, Eddy Costa
Yeah, thanks, Kelsey. This is, another project that we're bringing back. Chris Behrer, a MD PHD candidate at Duke University, his mentor, Kate Bundorf has a lot of publications out there as well around hospital price transparency rule and better understanding shop for care tool and how it's impacted different market outcomes. I'm not gonna in the interest of time. I'm not gonna reintroduce the project in the sense that Chris has a presentation and then in the word doc that is attached you'll see that we were asked to remove all in patient claims however we he does need to include all inpatient claims and and the document justifies that and we also are try to limited this data set by meeting the minimum necessary and limiting the minimum necessary and limiting, outpatient claims and, by meeting, the minimum necessary and limiting, outpatient claims and, facility and professional. And then we list, some service codes as well, in the DESF. So having said that, Kelsey, and if there are any questions for me, will that Chris in?

11:38:00, Kelsey Foland
Okay, yeah, let me go ahead and bring him in and then we can. We've not any follow up discussion after that.

11:38:07, Eddy Costa
And similar to Victoria and University of Wisconsin. Longitudinal analysis yes it's a lot of data but again we're bringing this back in the sense that we feel that you need the data to accomplish the research and answer his aims.

--Christopher Behrer enters--

11:38:26, Kelsey Foland
Hi Chris, thanks so much for joining us. Thanks for your patience. I know I had you sitting in the waiting room for a little bit. You are welcome to take over now if you have anything to share. Go ahead and share your screen.

11:38:54, Christopher Behrer
Alright, so thank you very much for having me back to clarify my project. This project is looking at the effect of price transparency regulations on hospital prices. So I'll just do a one slide overview of the project. And then talk about the data questions that were brought up last time and how I'm thinking about this. So the primary research question is what are the effects of mandated price transparency on hospital prices? After that primary question, I'll try to dig into mechanisms of those effects. And then follow on effects of any price changes due to price transparency on consumers employers and insurance. To do that, I will conduct several analyses. I will compare changes and prices for hospital services tat we're added to Colorado Shop for Care Tool versus services not added to the tool before and after the was published. So this is just a classic diff and diff when something, when there's information released about certain prices, we expect there to be a change, but to control for underlying trends, we will have a control group

of other prices not added to the tool. Next analysis is kind of a similar diff an d diff as well, but tere on the CMS is national policy. So here are all again, use the shop for care tool and the fact that because of the shopper character, prior to CMS's price transparency regulation, there was information available in Colorado for some services, but not for others. So we would expect CMS as policy to have a larger effect on the services for which there was no information before then on services for which there was already some information. So in this analysis, I'll compare the effects of CMS's policy between those 2 groups. And then the final 2 steps are taking advantage of kind of an idiosyncrasy of the regulation, for a jurisdiction reasons, CMS felt that they could write the rules such that it did not apply to ambulatory surgical centers but did apply to hospital education departments. This is mostly due to the fact that hospital and patient departments operate under the same license as hospitals and their inpatient departments, but ASCs are a different license. So this just gives me another different diff that's arguably somewhat cleaner where I'm studying one policy that happens at one time and it affects HPDs does not affect ASCs. And there are a set of services that are conducted at both places. So by comparing changes in prices for the same services that HOPD is affected by the policy versus the change over time for those same services that A is not affected by the policy, this gives me another difference and differences estimate of the effect of the policy. And finally, we think that all of these possible prices and consumer choices of hospitals happen in a somewhat complex choice architecture and negotiation process. So I will use several models from the economics literature to study how patients choose hospitals, how they choose insurance plans and how hospitals and insurers negotiate over prices. And that'll give me a lot more power to talk about. Mechanisms. And if we see price changes for certain prices, what does that suggest happening kind of in these negotiations that are actually determined? So, what does this mean for the data that I'm requesting and your thoughts and recommendations from the, my prior presentation? So, a piece of this, is the recommendation to unselect. Inpatient under data inclusion criteria. I have a concern with that, which is that the goal of this project is primarily to study hospital prices. I do have this piece, but ASC is nature PDUs, which I'll talk about, but the primary goal is to study hospital prices because hospital prices were the primary kind of subject of Cm's rule was intended to reduce hospital basis. So to do so, I need all inpatient claims and I can talk in more detail about why I need all of those claims. If there are specific questions. But I think that my biggest concern is just that. If I were to unselect inpatient, I really wouldn't be able to conduct the research as proposed and conduct the core analysis the project. So just to kind of be explicit about the data that, in my mind, I would need to carry out the research as proposed. I would need all inpatient claims, which I think can be done by. Selecting-in claims from hospitals and emergency departments by place of service code. I'd like to include selected outpatient claims by selecting in claims from HOPDs, ASCs, birthing centers, and urgent care centers by using the place of service codes for those 4 places of service. So this incorporates a suggestion that I heard last time in our discussion to use a place of service code restriction to limit the outpatient claims that I request because the analyses that I propose to conduct without patient claims is really comparing these unique places of service that provide the same services where one is subject to the regulation and the other is not. So I kind of discuss the HOPD versus ASC. Building centers and urgent care centers are 2 other places of service that are not affected by the regulation but

that provide services that are also provided in hospitals. So for example, comparing prices for deliveries at birthing centers versus prices for deliveries to hospitals kind of has the same flavor of difference difference as the HOPD versus ASC. What this does do is excludes all other opiation claims except imaging, which is the final piece. And in this here is Just motivated by the fact that the Shop for Care Tool will also included imaging prices. It wasn't just about services at hospitals. It also included price information for a number of outpatient imaging procedures. So I would just like to analyze that data as defined by CPT goes to selecting and just CPT code claims that are for imaging. And this is really just to provide another evaluation of the Shop for Care Tool, which I hope would be valuable to Colorado and policymakers there, because it was an important state policy, intervention and It seems like this is a data source that would allow me to provide an evaluation of that state policy. So these are kind of. The 3 pieces of data that I, 3 sets of claims. That I think I need to carry out the research described in this project. But at this point I'm happy to take any questions. Feedback or comments and I'll go back here to this description because that's like what everybody cares about. And I do have a few more slides that I can go into more detail about. Why I need these sets of claims for the analysis I wanna conduct, but I'll pause here and see if there are questions.

11:46:35, Kelsey Foland
Thanks Chris. I'll open it up to the committee for any additional questions.

11:46:45, Nathan Wilkes
Alright, I got a couple. How do you, let's see. So in determining the mechanisms, whether that's, you know, patient driven or I shudder to use of the term consumer. Cause they're patients consumers, but versus the provider/insurer negotiations. How do you differentiate the scope and scale those mechanisms and is it intended to inform future policy decisions or just looking retroactively retrospectively on the on the changes due to the current transparency regulations?

11:47:24, Christopher Behrer
Sure, so I'll answer the second question. Which is like, it will be analyzing policy retroactively, but it's intended to inform potential future changes to this place transparency policy or other price transparency policies. I think that whether it is hospitals negotiating hospitals and insurance companies negotiating differently or Patients choosing differently, I think matters in terms of how those policies are designed. There was some concern in the discussion of all these price transparency regulations that disclosing every single bilaterally negotiated price might lead to collusion. And so there was this suggestion that maybe we should just disclose summary statistics. So I can study whether or not the summary statistics are enough to kind of move consumer choice without affecting the hospital/insurer negotiation by looking at the Shop for Care Tool. So that would inform whether or not we need to shift to kind of a more Shop for Care Tool-like policy where it's summary statistics of prices versus a CMS-like policy where it's huge list of every single price. Those are different versions of a price transparency policy. And I have the opportunity in this project to study with the different effects of each of those, which could guide modifications. Like I said, that this policy going forward. I think that it also could guide things like potentially anti trust regulation if we're finding that. Really the effects are all about this hospital

and share negotiation. I think there's concerns in throughout the health policy community and regulatory space that there's growing concentration both of insurers and of hospital systems that might require some kind of regulation due to that consolidation and pricing power. I'm so in this study if I find that the mechanism is primarily through effects on that negotiation that would inform potential future policy on like I said anti-trust regulation. In terms of how I do it. So this is one of the reasons why I need all patient claims. So that this very simple, illustration of the method is just saying, Like before the policy, nobody knows any prices in the simplest world and we can consider a high price hospital on a low price hospital that are like the same quality rating and are right next to each other. So all consumers see is that these hospitals are right next to each other and they're the same quality. They don't see the price at all. So we would, and again, a simple model of consumer choice, expect consumers to go kind of equally to each if what they're thinking about is distance quality. Because that's all they can see. After the price transparency policy, consumers can now see prices and one of them is a high price hospital one is low price hospital. So if we see a shift in market share where a lot more consumers are going to the low price hospital. After the policy change that would suggest that consumers are responding and using this price information. That's it. Again, like a very simplified version of the analysis that I would conduct that. Models of consumer types of hospitals consider a huge array of factors. But that's the core comparison. And then in terms of price negotiations of hospitals and This really comes down to do you start to see shifts in like every price. Like, well, so what I just described was a shift in market share, which doesn't actually have to involve any lowering of any specific hospitals price. So to look at whether or not this is affecting hospital and share negotiations, I will actually look at those specific price levels rather than the market share of consumers across different hospitals. So if we start to see those price levels drop in affected services versus not affected services. That suggests that this policy is somehow changing the negotiation between hospitals and chairs because those negotiated prices are changing. Is that clear or is there are there pieces of that that I should expand on?

11:51:33, Nathan Wilkes
Good for me. A couple other quick questions maybe. Yeah, so how do, are you accounting for confounding external factors that could be affecting prices? Or or even yeah Provider networks that the patients have could be one thing that prevents you from using one hospital over another or those part of the calculus.

11:51:54, Christopher Behrer
Yes, so in the consumer choice model of hospitals, for example, whether or not the hospital is in that work is definitely an attribute that I would model the consumer is considering. In terms of confounding factors. I think that I will basically I'll control for everything that I can possibly control for in terms of observables. At its core kind of all of our social science, causal inference methods have an assumption of like, this is a valid counterfactual for the world that we don't observe. Like we only observe the world in which Cm's policy happened. We only observe the world in which the shopper character was. For the gave price information for the services that it did. So there's always a concern about potential violations of that assumption that these are good counterfactuals, for example, that ASCs are a good counterfactual for HOPD prices. There's sort of

nothing that anybody can do about that. What I can do is like I said control for everything that I can. So I'll be controlling for COVID. I'll be controlling for kind of district hospital zip code like fixed effects, which is just to absorb anything that is kind of constant within a geographic location over time. Anything that is constant within a hospital over time. So yeah, I definitely appreciate that kind of these. Few variables that I'm mentioning or not everything that go into the consumer decision or the price negotiation. They're just the ones that e think are most directly affected by information and I'll be controlling for everything else.

11:53:34, Nathan Wilker
Alright, thank you.

11:53:39, Ako Quammie
So I have 2 quick questions. First question is to, the Civic team. Is in the output of the data that is sent, do we know whether or not a whether or not that person is covered or not via the health plan?

11:54:07, Martha Meyer
Let me make sure I understand this. So the member eligibility file includes the Payer Alias, and he would see that change over time and in addition to that there is an in-network flag indicator.

11:54:29 Ako Quammie
Okay. Alright, thank you. That is, yeah, you, you put it a whole lot better than I did. So then, the second question is just related to volume and of the data. So not necessarily concern about the years, but, would there be a way to limit the data to, for example, high cost or high volume diagnosis categories? So instead of looking at all, you know, the top DRGs I see that you've got. For outpatient imaging on the screen you've got the list of CPT codes would there be a way to to target particularly maybe high cost DRGs as opposed to the entire ocean?

11:55:34, Christopher Behrer
So for for the outpatient imaging, I think that. Possibly I could look at a subset of those CPT codes that are high cost ones. I would wanna make sure that I have all of the CPT codes that were included in the shop for care tool and then a set of comparable CPT codes not included in the school. I think you're Probably more concerned about selecting the universe of inpatient claims. And so the reason that I'm requesting all of them is because of the analysis that I would like to conduct of the hospital/insurer negotiation. So we kind of think about hospital doesn't insurers negotiating all these prices but As you're all aware, there are thousands of these prices. And a hospital is going to care a lot more about the price that they're negotiating if it is a service that they provide at a very high volume. And an insurer is going to care a lot more about the price that they're negotiating ff it does a service that they pay for at a very high. So we would expect there to be different effects based on whether or not is a high volume or low volume service for either the hospital or the insurer. And kind of this is where the state of the economics literature like the frontier is and analyses of these bargaining problems. We really want to be stratifying our analyses by like how much each party like I'm saying cares like what does the financial impact of a renegotiation of like a new replacement price, probably going to be much, much more important to a

hospital then the negotiation of some much less frequent service. And to establish that like how much do they care about this service, I need the incidents of that service, both like the volume and the total revenue generated by that service, but I also need the hospitals total revenue to be able to say like, knee replacements are 5% of your total revenue for this year. You should care about this. 5 times more than a service that is only 1% of your revenue. So the reason that I've requested all is so that I can kind of compute for each agent in this bargaining problem. How much do you care about this service as measured by this services fraction of your total revenue or total cost if you're the insurance company?

11:58:07, Nathan Wilkes
So just, paying off of Ako's comment, I think. We're not talking about the ocean of everything that's under a charge master doesn't the shot for care tool already self-limited to the lagoon of you know 300 common services?

11:58:24, Christopher Behrer
So no in that. I'm not looking just at the services included in the shop per care tool. I'm comparing those services to the services that were not included in the shop for character. So I need both shop for character services and not shop for

11:58:42, Eddy Costa
And that's probably one of the biggest reasons why we're bringing this back. Thank you, Nathan. And, that was taken into consideration to high cost, high volume.

11:58:53, Martha Meyer
It's, it's, the counterfactual argument that that Chris brought up earlier, we what we what shouldn't have been affected. The counterfactual or you know in that in a case control it really is our controls So you can dice, pull apart what should have been affected and what shouldn't have been affected. But we don't know what was affected if we don't know what wasn't affected.

11:59:31, Kelsey Foland
Chris, did you have any questions?

11:59:33, Christopher Behrer
No, I just really appreciate the opportunity to clarify and I'm happy to answer any questions about why I'm requesting what I am.

11:59:52, Chris McDowell
Yeah, I I think it's obvious but I just have to ask it. Facing versus claims and what you're actually paid that's kind of the focus here is that is that right? The actual paid versus what charges charges versus paid. That's always been. The, that people get caught in, when they try to talk about price transparency, because these transparency tools are great, but The prices aren't necessarily reflective of the actual payment. And I think that's what you're saying with the claims, is that right?

12:00:24, Christopher Behrer
So the I mean, I think that's a feally important point for how we think about what price transparency regulations are effective. So a lot of prior pressure and

regulations were you have to post your charge master basically and we don't really think that that would be very effective. But this CMS is hospital price transparency rule that was implemented in 2021 was you have to post the negotiated price. So the policy was supposed to make that price that actually matters, the price that you'll actually pay, totally freely available information. I think that so from like a theoretical standpoint, like this is the right price for people to be thinking about. And the question is, Good posting that right price matter. I think there's a policy question in your question as well, which is CMS is telling these hospitals that they're supposed to be posting these negotiated prices and they all posted a whole bunch of prices. With the claims, I can check whether they like complied with CMS's policy are the prices that they posted actually the prices and the claims. So that's kind of like a side. And analysis of this project, but like. The primary goal is if we give consumers the actual price that they should be paying attention to, what does that do?

12:01:53, Chris McDowell
Yeah, to the discount is, is the, lurking under the water. You know, they post the price, but what they actually get paid is the real story. And how do we bring the actual paid to that price level? You know, one of the one things we've been working on, I find this fascinating, this is such a great research project is you know what's the average amount they get paid per code whether it's United or Medicaid? What's the actual, they actually get paid? What's that average? The mean That to me seems like that should be the price. I don't know. That's just my thoughts.

12:02:31, Christopher Behrer
Yeah, there's there's a lot of wrinkles there that I can talk about for hours. But I think that those are important points that I'll try to be getting at in this research.

12:02:45, Kelsey Foland
Great. Thank you so much for all the discussion. Chris, we're going to let you go. Eddie will follow up with you after today's meeting. And we have a little more discussion with the committee.

12:02:57, Christopher Behrer
Okay, thank you very much.

--Christopher Behrer exits Zoom--

12:03:02, Kristin Paulson
Chris McDowell just wanted to chime in real quick. Sorry, when I'm very covety and home. That, that information is actually looking by code. With that reimbursement numbers that negotiate, reimbursement is actually available on our provider payment tool on the website. I've seen. So yeah, you can dive into a little bit of that. With that tool, just want to point that out.

12:03:32, Kelsey Foland
Okay, so, when this was presented back in August, the concerns were, about asking to remove. All inpatient data from the application. Based on what we heard today. Are there any objections to leaving this application as is?

12:03:54, Megan Denham
I don't see how the research could be done without. Having that data. So that means no, no objections from me. Yeah.

12:04:08, Kelsey Foland
It doesn't it doesn't look like I've got objections elsewhere Do I have a motion to approve this for production?

12:04:19, Nathan Wilkes
So moved.

12:04:21, Chris McDowell
Second.

12:04:21, Kelsey Foland
Great. Thank you so much. Okay, Eddie, good news for you today. And so we will be moving all 3 of those projects forward. And we'll move on to our final presentation of the DOI use case.

12:04:39, Eddy Costa
Thank you committee for your time and review and dialogue. Really appreciate it. Have a great rest of the week.

-- End 23.73 --

CIVHC
CENTER FOR IMPROVING VALUE IN HEALTH CARE

Data Release Review Committee Meeting Notes October 4, 2023

Presentation Time:	12:00 PM
Opportunity Number:	24.105.10.3
Requesting Organization:	Division of Insurance
Project Title:	Data Mart Premium Validation Use Case
CIVHC Presenter:	Amanda Kim, Director of State Initiatives
Project Presenter(s):	Kate Davidson
Extract Type:	Limited Extract
Finder File Included:	No

PHI Data Elements					
Available for Limited and Identifiable Extracts:			Available for Identifiable Extracts Only:		
	Requested	Approved		Requested	Approved
Member 5-Digit Zip Code	☒	☒	Member Name	☐	☐
Member Census Tract	☐	☐	Member Date of Birth (if requesting more than year only)	☐	☐
Member County	☐	☐			
Member City	☐	☐			
Member Eligibility Date	☐	☐	Member Street Address	☐	☐
Employer Tax ID	☐	☐	Member Geocoded Address	☐	☐
Member Dates of Service	☐	☐			

Committee Discussion and Questions:

- CO APCD's collection of premium information from payers began July 2022
- Premium data needs to be validated by the Division of Insurance before it can be used in any analysis
- Requesting to add Member 5-Digit Zip Code to the Data Mart to support premium validation

Objections to Project Production	☒ No	☐ Yes
Committee Member	Basis for Objection	

Motions to Approve Project Production	☐ No	☒ Yes
First:	Nathan Wilkes	
Second:	Chris McDowell	

Final Decision: Choose an item.
No recommendations for changes to the Data Release Application or Data Element Selection Form.

-- Begin 24.105.10.3 --

12:04:46, Kelsey Foland
Thanks, Eddy. Amanda, you are welcome to take over.

12:04:50, Amanda Kim
Okay. Hello, everyone. Hi, I am back, Kate Davidson, with the Division of Insurance and I are back. Again, today for a new use case for the data mart and this one relates to premium rates. So I believe in July of last year we started collecting premium information from payers. And before we can use that information in any analytics, we need the Division of Insurance to validate that that premium information submitted is accurate and aligns with the information that is submitted directly to them from the payers. And in order to do that, the Division of Insurance will need 5 digit zip for members because rates are set by zip code.

12:05:55, Kelsey Foland
Thanks, Amanda. I'm gonna go ahead. Kate has been in our waiting room. I'll go ahead and bring her in.

--Kate enters--

12:06:13, Kelsey Foland
Hi, Kate. Thanks for joining us again today. Amanda just gave the committee a quick summary about the additions to Dana Mark that we're looking at, you are welcome to take over.

12:06:26, Kate
Sure, so, this is pretty simple. It's really just asking for zip code so that we can map to county and then to the DOI rating regions in order to validate the premiums that are being submitted. Premiums vary in the ACA based off of age and geography and so in order to make sure that those premiums are correct and to tie them to the individual plans where we have the premium amounts, I need to use that zip code to then map up to that larger geographic area.

12:07:02, Kelsey Foland
Any questions from the committee members for Kate? Pretty easy one. Okay. Kate, thanks so much for joining us. We will have a little bit more discussion. And man will follow up with you on this one.

12:07:22, Kate
Okay, great. Thank you all. Bye.

--Kate exits--

12:07:28, Kelsey Foland
Alright. Quick! Any objections?

12:07:38, Nathan Wilkes
I'm a big, I'm a big fan of health plan, regulation and oversight.

12:07:51, Kelsey Foland
Awesome. Do I have a motion to approve?

12:07:54, Nathan Wilkes
So moved.

12:07:54, Chris McDowell
Second.

12:08:11, Amanda Kim
Thank you all. After your, consideration. Appreciate being able to provide an easy application for your consideration.

-- End 24.105.10.3 --