CHIA.

center
for health
information
and analysis

Non-Government Application for Re-Use of Massachusetts All-Payer Claims Data Extract [Exhibit A: Data Application]

I. INSTRUCTIONS

This form is required for all Applicants, except Government Agencies as defined in 957 CMR 5.02, who wish to re-use Data received pursuant to a previously approved Data Application ("Extract"). **If the applicant requires data not presently held by its Organization the applicant should not use this form.** *Re-use of All-Payer Claims Database data is limited to data released in Limited Data Set format (i.e., Release Versions 4.0 and later).*

All attachments must be uploaded to IRBNet with your Application. All Application documents can be found on the CHIA website in Word and in PDF format or on IRBNet in Word format. If you submit a PDF document, please also include a Word version in order to facilitate edits that may be needed.

Applications will not be reviewed until the Application and all supporting documents are complete and the required application fee is submitted. *A Fee Remittance Form with instructions for submitting the application fee is available on the CHIA website and IRBNet. A copy of the Fee Remittance Form and any supporting documentation must be uploaded to IRBNet.*

II. ALL-PAYER CLAIMS DATABASE EXTRACT TO BE RE-USED

Project Title:	Evaluating Medicaid Accountable Care Models
Extract Number:	• Extract 398 for years 2014-2016 • Extract 434 for 2017 • Extract 433 for years 2018-2023
IRBNet Number:	1628804-1
Date of Data Use Agreement	3/2/2021

III. ORGANIZATION AND INVESTIGATOR INFORMATION

Project Title:	Perinatal Mental Health Screening and Healthcare Utilization in Massachusetts
IRBNet Number:	2281605-1
Organization Name:	**Trustees of Boston University**
Organization Website:	https://www.bumc.bu.edu/
Authorized Signatory for Organization	**William P. Segarra, JD, MPH**
Title:	Director, Industry Contracts & Agreements
E-mail Address:	industry@bu.edu
Address, City/Town, State, Zip Code	25 Buick Street, Suite #200, Boston, MA 02215
Primary Investigator:	Kerrin Gallagher
Title:	PhD Candidate
E-mail Address:	Kmg8@bu.edu
Telephone Number:	508-243-3683
Names of Co-Investigators:	Megan Cole Brahim
E-mail Address of Co-Investigators:	mbcole@bu.edu

IV. FEE INFORMATION

1. Consult the Fee Schedule for All-Payer Claims Database data and select from the following options:

☒ Researcher
☐ Other
☐ Reseller

2. Are you requesting a fee waiver?

☒ Yes
☐ No

3. Compete and submit the Fee Remittance Form. If requesting a fee waiver, submit a letter stating the basis for your request (if required). Please refer to the Fee Schedule (effective Feb 1, 2017) for fee waiver criteria. (Please note that fee must be paid in order to re-use the Data, even if no new extract of data is required upon application approval.)

V. PROJECT INFORMATION

1. What will be the use of the CHIA Data requested? [Check all that apply]

☐ Epidemiological	☐ Health planning/resource allocation	☐ Cost trends
☒ Longitudinal Research	☐ Quality of care assessment	☐ Rate setting
☐ Reference tool	☒ Research studies	☐ Severity index tool
☐ Surveillance	☒ Student research	☐ Utilization review of resources
☐ Inclusion in a product	☐ Other (describe in box below)	

N/A

2. Provide a summary of the specific purpose and objectives of your Project. This may include research questions and/or business use Projects.

The purpose of this project is to describe and examine perinatal mood disorders (including postpartum depression) burden, screening, healthcare utilization, and related outcomes, at both maternal care and pediatric sites of service in Massachusetts using the All-Payer Claims Database. A specific example would be to descriptively characterize postpartum depression screening patterns and treatment pathways at well-child visits versus postpartum visits. We will examine heterogeneity by child well-visit practice setting (e.g., pediatric-only practices, family practices, large academic medical centers, and community health centers) and to evaluate the effect of the 2016 Massachusetts Medicaid well-child visit screening reimbursement policy on documented postpartum depression screening rates at well-child visits and postpartum depression treatment outcomes among Medicaid patients using difference-in-differences.

3. Has an Institutional Review Board (IRB) reviewed your Project?

☒ Yes [*If yes, a copy of the approval letter and protocol must be included with the Application package on IRBNet.*]
☐ No, this Project is not human subject research and does not require IRB review.

4. **Research Methodology**: Applicants must provide either the IRB protocol or a written description of the Project methodology (typically 1-2 pages), which should state the Project objectives and/or identify relevant research questions. This document must be included with the Application package on IRBNet and must provide sufficient detail to allow CHIA to understand how the Data will be used to meet objectives or address research questions.

VI. PUBLIC INTEREST

1. Briefly explain why completing your Project is in the public interest. *Uses that serve the public interest under CHIA regulation include, but are not limited to: health cost and utilization analysis to formulate public policy; studies that promote improvement in population health, health care quality or access; and health planning tied to evaluation or improvement of Massachusetts state government initiatives.*

Through this project, we are hoping to better quantify perinatal mood disorder screening and healthcare utilization in the state. For example, by being able to describe and analyze the effects of the well-child visit screening policy on Massachusetts Medicaid enrollees, we can hopefully highlight how the policy has positively affected the state and potentially identify any shortcomings that could be mitigated by policy or changes in clinical practice.

VII. DATASETS REQUESTED

The Recipient will use Data included in the Extract referenced above for use in this Project; no new Data will be released under this Application.

1. Specify below the dataset(s) and year(s) of data requested for this Project, and provide your justification for requesting *each* dataset.

☒ **Medical Claims**
☐2011 ☐2012 ☐2013 ☒2014 ☒2015
Describer how your research objectives require Medical Claims data:
Medical claims will be used to identify our population of interest (people who have recently given birth), capture screening encounters at postpartum and well-child visits, and mental health utilization surrounding postpartum depression.
Note: the dataset being re-used also includes years 2016-2023.
☒ **Pharmacy Claims**
☐2011 ☐2012 ☐2013 ☒2014 ☒2015
Describer how your research objectives require Pharmacy Claims data:
Pharmacy claims will be used to capture perinatal mood disorder pharmaceutical treatments, including antidepressants such as selective serotonin reuptake inhibitors, serotonin–norepinephrine reuptake inhibitors, and tricyclic antidepressants.
Note: the dataset being re-used also includes years 2016-2023.

☐ **Dental Claims**
☐2011 ☐2012 ☐2013 ☐2014 ☐2015

Describer how your research objectives require Dental Claims data:

N/A: not included in extract.

☒ **Member Eligibility**
☐2011 ☐2012 ☐2013 ☒2014 ☒2015

Describer how your research objectives require Member Eligibility data:

Member eligibility is necessary to capture insurance information, which allows to specify the treatment and comparison groups of this study. It also has key demographic information that is necessary, such as age, gender, zip code, and enrollment dates.

Note: the dataset being re-used also includes years 2016-2023.

☒ **Provider**
☐2011 ☐2012 ☐2013 ☒2014 ☒2015

Describer how your research objectives require Provider data:

The provider data will be used for identifying what type of practice care occurred at, which we will be examining to identify well-child visits versus OB/GYN and other maternal care visits.

Note: the dataset being re-used also includes years 2016-2023.

☒ **Product**
☐2011 ☐2012 ☐2013 ☒2014 ☒2015

Describer how your research objectives require Product data:

We will need to use the Product Type in our analysis in order to control for enrollment in the MassHealth ACO, which has further incentives for screening for perinatal mood disorders at maternal visits.

Note: the dataset being re-used also includes years 2016-2023.

2. If there are datasets that are included in the Extract that ***are not*** required for this Project indicate below.

☐ Medical Claims   ☐ Pharmacy Claims   ☐ Dental Claims   ☐ Member Eligibility
☐ Provider   ☐ Product

3. If there are datasets included in the Extract that are not required for this Project, describe below how those datasets will be segregated and protected from use in this Project.

N/A

VIII. DATA ELEMENTS REQUESTED

State and federal privacy laws limit the release and use of Data to the minimum amount of data needed to accomplish a specific Project objective.

All-Payer Claims Database data is released in Limited Data Sets (LDS). Applicants receive the "Core" LDS, but may also request additional elements listed below for inclusion in their analyses. Requests for additional elements will be reviewed by CHIA to determine whether each represents the minimum data necessary to complete the specific Project objective.

1. Specify below which elements you are requesting in addition to the "Core" LDS and provide your justification for requesting each element.

Geographic Data

The geographic sub-divisions listed below are available for Massachusetts residents and providers only. Choose one of the following geographic options. *[Extracts with 5 digit zip code, have been filter to remove all claims that include a substance abuse diagnosis or treatment.]*

☐ 3-Digit Zip Code (standard)	☒ 5-Digit Zip Code***
***If requested, provide justification for requesting 5-Digit Zip Code. Refer to specifics in your methodology: The 5-digit zip code will be extremely helpful for linking mothers and infants in the data. Additionally, zip code will allow us to use zip code-level sociodemographic data to understand our population and control for this in our models.	

Dates

Choose one option from the following options for dates:

☐ Year (YYYY) (Standard)	☐ Month (YYYYMM) ***	☒ Day (YYYYMMDD) *** [for selected data elements only]
*** If requested, provide justification for requesting Month or Day. Refer to specifics in your methodology: The full date will better allow us to understand the timing of hospital admissions, which is necessary for looking at birth events and other inpatient hospital admissions. We will also need this information on the product dates to best understand enrollment.		

National Provider Identifier (NPI)

Choose one of the following options for National Provider Identifier(s):

☐ Encrypted National Provider Identifier(s) (standard)	☒ Decrypted National Provider Identifier(s)***
*** If requested, provide justification for requesting decrypted National Provider Identifier(s). Refer to specifics in your methodology: We will be using the National Provider Identifiers to attribute a physician to a type of practice (e.g., pediatric clinic or community health center), which is necessary for our outcomes.	

2. If there are data elements that are included in the Extract that ***are not*** required for this Project indicate below.

☐ 5-Digit Zip Code   ☐ Month (YYYYMM)   ☐ Day (YYYYMMDD)   ☐ Decrypted National Provider Identifier(s)

3. If there are data elements included in the Extract that are not required for this Project, describe below how the data elements will be segregated and protected from use in this Project.

> *N/A*

IX. MEDICAID DATA

1. Is Medicaid Data included in the Extract?

☒ Yes
☐ No

2. Indicate whether you are seeking to use Medicaid Data for this Project:

☒ Yes
☐ No

3. Federal law (42 USC 1396a(a)7) restricts the use of individually identifiable data of Medicaid recipients to uses that are directly connected to the administration of the Medicaid program. If you are requesting Medicaid Data, please describe, in the space below, why your use of the data meets this requirement. Requests for Medicaid data will be forwarded to MassHealth for a determination as to whether the proposed use of the data is directly connected to the administration of the Medicaid program. This may introduce significant delays in the receipt of Medicaid Data. ***Recipient may not use the Medicaid data for the new Project until Recipient is notified of MassHealth approval.***

> The purpose of this project is to evaluate screening and healthcare utilization for perinatal mood and anxiety disorders, which affect many new parents enrolled in Medicaid. For example, we will be studying postpartum depression screening at well-child visits, which was incentivized through a MassHealth Medicaid payment policy to reimburse pediatricians for conducting these screenings. This research will allow us to understand impacts around this policy on new mothers in the state.

4. If the Extract contains Medicaid Data and you are not seeking to use Medicaid Data for this Project, or this Application is not approved by MassHealth, describe below how Medicaid Data will be segregated and protected from use in this Project.

> *N/A*

X. DATA LINKAGE AND FURTHER DATA ABSTRACTION

Data linkage involves combining CHIA Data with other data to create a more extensive database for analysis. Data linkage is typically used to link multiple events or characteristics within one database that refer to a single person within CHIA Data.

1. Do you intend to link or merge CHIA Data to other data?
　　☒ Yes
　　☐ No linkage or merger with any other data will occur

2. If yes, please indicate below the types of data to which CHIA Data will be linked. [Check all that apply]
　　☐ Individual Patient Level Data (e.g., disease registries, death data)
　　☒ Individual Provider Level Data (e.g., American Medical Association Physician Masterfile)
　　☐ Individual Facility Level Data (e.g., American Hospital Association data)
　　☒ Aggregate Data (e.g., Census data)
　　☐ Other (please describe):

3. If yes, describe the dataset(s) to which the CHIA Data will be linked, indicate which CHIA data elements will be linked and the purpose for each linkage.

> We will be using individual provider level data, namely the Massachusetts Registration of Provider Organizations (RPO), to link provider information. This gives us critical insights into provider practice setting and specialty, which is necessary for our analysis.
>
> We will also be using aggregate zip code-level US Census Bureau American Community Survey (ACS) data to understand to the sociodemographic makeup of our population, as this dataset includes zip-code level information such as percentage of residents living at poverty level, and we can control for this in our models.
>
> It is important to note that neither of these are patient-level data.

4. If yes, for each proposed linkage above, please describe your method or selected algorithm (e.g., deterministic or probabilistic) for linking each dataset. If you intend to develop a unique algorithm, please describe how it will link each dataset.

> APCD to the MA-RPO: we will use a m:1 merge using NPI as the unique identifier.
> APCD to the ACS: we will use a m:1 merge using 5-digit zip code as the unique identifier.

5. If yes, please identify the specific steps you will take to prevent the identification of individual patients in the linked dataset.

> MA-RPO: physician NPI; physician specialty; primary care physician status; primary site of practice
>
> ACS (5-digit zip code level): median family income; percent of households below the poverty level; percent of residents who are: White, Black, Hispanic, speak a primary language other than English, high school education or less; urban vs. rural classification

XI. PUBLICATION / DISSEMINATION / RE-RELEASE

1. Describe your plans to publish or otherwise disclose CHIA Data, or any data derived or extracted from CHIA Data, in any paper, report, website, statistical tabulation, seminar, conference, or other setting. Any and all publication of CHIA Data must comply with CHIA's cell size suppression policy, as set forth in the Data Use Agreement. Please explain how you will ensure that any publications will not disclose a cell less than 11, and percentages or other mathematical formulas that will result in the display of a cell less than 11.

> This analysis will be published in my dissertation through Boston University. Additionally, I plan to publish accompanying manuscripts on the analysis in peer reviewed journals and abstracts at conferences.
>
> While we do not anticipate any outcomes to be smaller than 11, however if it does occur we would not report that number and indicate insufficient sample size. A SAS macro that suppresses cell sizes lower than 11 will be applied as well.

2. Do you anticipate that the results of your analysis will be published and/or made publically available? If yes, describe how an interested party will obtain your analysis and, if applicable, the amount of the fee, that the third party must pay.

> Yes, we anticipate these results would be made available. If queried, we would be happy to share code or aggregate results. However, we would not share the data.

3. Will you use CHIA Data for consulting purposes?
   - ☐ Yes
   - ☒ No

4. Will you be selling standard report products using CHIA Data?
   - ☐ Yes
   - ☒ No

5. Will you be selling a software product using CHIA Data?
   - ☐ Yes
   - ☒ No

6. Will you be reselling CHIA Data in any format?
   - ☐ Yes
   - ☒ No

If yes, in what format will you be reselling CHIA Data (e.g., as a standalone product, incorporated with a software product, by a subscription, etc.)?

N/A

7. If you have answered "yes" to questions 4, 5 or 6, please describe the types of products, services or studies.

N/A

8. If you have answered "yes" to questions 4, 5, or 6, what is the fee you will charge for such products, services or studies?

N/A

XII. APPLICANT QUALIFICATIONS

1. Describe your previous experience using claims data. This question should be answered by the primary investigator and any co-investigators who will be using the Data.

Kerrin Gallagher:
I am an experienced claims data analyst. In the private sector, I worked for a technology company (Boston Health Economics, now known as Panalgo) that offered a claims data analysis software. After that, I worked for HealthCore (now known as Carelon), a subsidiary of Anthem Blue Cross Blue Shield. We leveraged their claims data to conduct post-marketing safety studies requested by the Food and Drug Administration. Currently, I am a graduate research assistant where I actively use the Massachusetts APCD on Dr. Megan Cole Brahim's studies. The first is TEAM UP, where we use this data to evaluate the program's effectiveness on improving pediatric mental health at community health center primary care settings. The second is the Massachusetts ACO project where we look to evaluate the effects of the MassHealth ACO on maternal mental health.

Megan Cole Brahim: "Dr. Cole is an Associate Professor in the Department of Health Law, Policy, and Management at Boston University School of Public Health and co-director of the BU Medicaid Policy Lab. She is also co-director of research & evaluation for the TEAM UP Scaling and Sustainability Center. She is a health services researcher who uses causal inference methods to study Medicaid policies, health care delivery reforms, and health insurance, and how these things affect quality of care, access to care, and equity of care. Most of this work centers on Medicaid enrollees

and other low-income, safety-net populations, especially those served by federally qualified health centers (FQHCs), with a focus on mental health, maternal health, and child health. Her work leverages large datasets, including national Medicaid claims data; All Payer Claims Data (APCD); electronic health record (EHR) data; and national and statewide patient survey data." (https://www.bu.edu/sph/profile/megan-cole-brahim/)

2. **Resumes/CVs**: If not submitted with a prior approved Application, when submitting your Application package on IRBNet, include résumés or curricula vitae of the principal investigator and co-investigators. (These attachments will not be posted on the internet.)

XIII. USE OF AGENTS AND/OR CONTRACTORS

Please note: By signing this Application, the Organization assumes all responsibility for the use, security and maintenance of the CHIA Data by its agents, including but not limited to contractors.

Provide the following information for all agents and contractors who will have access to the CHIA Data. [*Add agents or contractors as needed.*]

AGENT/CONTRACTOR #1 INFORMATION	
Company Name:	
Company Website:	
Contact Person:	
Title:	
E-mail Address:	
Address, City/Town, State, Zip Code:	
Telephone Number:	
Term of Contract:	

1. Describe the tasks and products assigned to the agent or contractor for this Project and their qualifications for completing the tasks.

2. Describe the Organization's oversight and monitoring of the activities and actions of the agent or contractor for this Project, including how the Organization will ensure the security of the CHIA Data to which the agent or contractor has access.

```

```

3. Will the agent or contractor have access to or store the CHIA Data at a location other than the Organization's location, off-site server and/or database?

     ☐ Yes
     ☐ No

4. If yes and a Data Management Plan for this agent or contractor is not part of the Data Use Agreement, a separate Data Management Plan **must** be completed by the agent or contractor.

AGENT/CONTRACTOR #2 INFORMATION	
Company Name:	
Company Website:	
Contact Person:	
Title:	
E-mail Address:	
Address, City/Town, State, Zip Code:	
Telephone Number:	
Term of Contract:	

1. Describe the tasks and products assigned to the agent or contractor for this Project and their qualifications for completing the tasks.

```

```

2. Describe the Organization's oversight and monitoring of the activities and actions of the agent or contractor for this Project, including how the Organization will ensure the security of the CHIA Data to which the agent or contractor has access.

```

```

3. Will the agent or contractor have access to or store the CHIA Data at a location other than the Applicant's location, off-site server and/or database?

     ☐ Yes

☐ No

4. If yes and a Data Management Plan for this agent or contractor is not part of the Data Use Agreement, a separate Data Management Plan **must** be completed by the agent or contractor.

XIV. ATTESTATION

By submitting this Application, the Organization attests that it is aware of its data use, privacy and security obligations imposed by state and federal law *and* confirms that it is compliant with such use, privacy and security standards. The Organization further agrees and understands that it is solely responsible for any breaches or unauthorized access, disclosure or use of CHIA Data, including, but not limited to, any breach or unauthorized access, disclosure or use by its agents.

The Organization's use of the Data for this Project will be governed by the executed Data Management Plan(s), Data Use Agreement, and any Amendment thereto.

By my signature below, I attest: (1) to the accuracy of the information provided herein; (2) that the requested Data is the minimum necessary to accomplish the purposes described herein; (3) that the Organization will meet the data privacy and security requirements described in this Application and supporting documents, and will ensure that any third party with access to the Data meets the data use, privacy and security requirements; and (4) to my authority to bind the Organization.

Signature: (Authorized Signatory for Organization)	*William P. Segarra, MA, JD, MPH*
Printed Name :	William P. Segarra

Attachments
A completed Application must have the following documents attached to the Application:
☒ 1. IRB approval letter and protocol (if applicable)
☒ 2. Research Methodology (if protocol is not attached)
☒ 3. CVs of Investigators (if not submitted previously)
☒ 5. Data Use Agreement

==Applications will not be reviewed until they are complete, including all attachments. Applicant may not use the Extract for this Project until CHIA approval and the execution of an amendment to the Recipient's Data Use Agreement.==

TRACKING TABLE (to be completed by CHIA staff only)	
Complete Application Received	
Application Fee Received	
Data Privacy Committee Review	
Data Release Committee Review	
Linkages Approved (as described)	
Executive Director Approval	
Data Fee Received	
Data of First Audit	
IT Extract #	

Attachment #1 – IRB Approval Letter & Protocol or Research Methodology

Attachment #2 – Data Management Plan(s)

Gallager_CHIA_Non-Government-Re-Use-APCD-Application

Final Audit Report

2025-05-28

Created:	2025-05-28
By:	Julie Sewell (jpsewell@bu.edu)
Status:	Signed
Transaction ID:	CBJCHBCAABAAiAYSSNJIbYVrXpHlOL5kYfbg7mk918oX

"Gallager_CHIA_Non-Government-Re-Use-APCD-Application" History

Document created by Julie Sewell (jpsewell@bu.edu)
2025-05-28 - 1:26:04 PM GMT- IP address: 128.197.108.143

Document emailed to William Segarra (segarra@bu.edu) for signature
2025-05-28 - 1:27:46 PM GMT

Email viewed by William Segarra (segarra@bu.edu)
2025-05-28 - 1:47:10 PM GMT- IP address: 174.196.195.250

Document e-signed by William Segarra (segarra@bu.edu)
Signature Date: 2025-05-28 - 1:47:23 PM GMT - Time Source: server- IP address: 174.196.195.250

Agreement completed.
2025-05-28 - 1:47:23 PM GMT