

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:	Will the Academic Innovations Collaborative Increase the Value of Primary Care and Improve Providers’ and Trainees’ Experiences?
Extract Number:	
IRBNet Number:	758957-1
Date of Data Use Agreement	November 30, 2015

III. ORGANIZATION AND INVESTIGATOR INFORMATION

Project Title:	The impact of Massachusetts Cost control legislation on prices and competition
IRBNet Number:	1304066-1
Organization Name:	Harvard T.H. Chan School of Public Health
Organization Website:	Hsph.harvard.edu
Authorized Signatory for Organization	Wendy Chan
Title:	Associate Director, Sponsored Programs Administration
E-mail Address:	wchan@hsph.harvard.edu
Address, City/Town, State, Zip Code	Landmark Center, 401 Park Drive, 3 rd Floor East, Boston, MA 02215
Primary Investigator:	Meredith Rosenthal
Title:	C. Boyden Gray Professor of Health Economics and Policy
E-mail Address:	mrosenth@hsph.harvard.edu
Telephone Number:	617-432-3418
Names of Co-Investigators:	Anna D. Sinaiko
E-mail Address of Co-Investigators:	asinaiko@hsph.harvard.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. Complete 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]

- | | | |
|---|--|--|
| <input type="checkbox"/> Epidemiological | <input type="checkbox"/> Health planning/resource allocation | <input checked="" type="checkbox"/> Cost trends |
| <input type="checkbox"/> Longitudinal Research | <input type="checkbox"/> Quality of care assessment | <input type="checkbox"/> Rate setting |
| <input type="checkbox"/> Reference tool | <input checked="" type="checkbox"/> Research studies | <input type="checkbox"/> Severity index tool |
| <input type="checkbox"/> Surveillance | <input type="checkbox"/> Student research | <input type="checkbox"/> Utilization review of resources |
| <input type="checkbox"/> Inclusion in a product | <input type="checkbox"/> Other (describe in box below) | |

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

The aims of this study are to:

1. Evaluate the impact of Massachusetts' price transparency mandates on health care prices (allowed amounts) and patient flows (including market shares).
2. Evaluate the impact of increasing adoption of tiered and narrow network plans on prices and market shares.
3. To describe recent changes in vertical and horizontal provider consolidation in Massachusetts over time.
4. Examine the interaction between provider consolidation (both vertical and horizontal) and efforts to steer patients to lower cost/higher value providers (i.e., price transparency and tiered/narrow network plans).

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.*

This project will provide evidence on the impact of market-based policies that provide missing information and re-align patient and physician incentives with regard to prices in Massachusetts. Moreover, it will contribute to our understanding of how provider consolidation is affected by prices in Massachusetts and whether price transparency and other steering mechanisms (i.e. tiered and narrow networks) counteract the effects of consolidation. The end goal is to use this information to inform the design and targeting of future policy to reduce spending while improving the value of health care choices.

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

Describe how your research objectives require Medical Claims data:

The Medical Claims data will be used to examine the impact of the Massachusetts Cost Control Legislation and related trends in benefit design (tiered and narrow networks) on health care prices, patient flows, and other measures of health care competition in Massachusetts. We need the best estimate of the total amount paid to conduct this analysis because these data are critical to analyzing the price and cost implications of these policies. Medical claims data also allow us to measure utilization and patient volume across providers, which we will use to analyze whether the legislation changed patient flows, provider market share, or practice patterns by providers.

<input type="checkbox"/> Pharmacy Claims <input type="checkbox"/> 2011 <input type="checkbox"/> 2012 <input type="checkbox"/> 2013 <input type="checkbox"/> 2014 <input type="checkbox"/> 2015
Describer how your research objectives require Pharmacy Claims data:
<input type="checkbox"/> Dental Claims <input type="checkbox"/> 2011 <input type="checkbox"/> 2012 <input type="checkbox"/> 2013 <input type="checkbox"/> 2014 <input type="checkbox"/> 2015
Describer how your research objectives require Dental Claims data:
<input type="checkbox"/> Member Eligibility <input type="checkbox"/> 2011 <input type="checkbox"/> 2012 <input type="checkbox"/> 2013 <input type="checkbox"/> 2014 <input type="checkbox"/> 2015
Describer how your research objectives require Member Eligibility data:
<input type="checkbox"/> Provider <input type="checkbox"/> 2011 <input type="checkbox"/> 2012 <input type="checkbox"/> 2013 <input type="checkbox"/> 2014 <input type="checkbox"/> 2015
Describer how your research objectives require Provider data:
<input type="checkbox"/> Product <input type="checkbox"/> 2011 <input type="checkbox"/> 2012 <input type="checkbox"/> 2013 <input type="checkbox"/> 2014 <input type="checkbox"/> 2015
Describer how your research objectives require Product data:

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.

The Extract includes Medicaid datasets. Medicaid Data is currently in the final stages of its original use. When and if the publication, for which the Medicaid Data is being utilized for, gets accepted into an academic journal, the Medicaid Data will be systematically destroyed from the server.

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.]*

<input checked="" type="checkbox"/> 3-Digit Zip Code (standard)	<input type="checkbox"/> 5-Digit Zip Code***
***If requested, provide justification for requesting 5-Digit Zip Code. Refer to specifics in your methodology:	

Dates

Choose one option from the following options for dates:

<input type="checkbox"/> Year (YYYY) (Standard)	<input type="checkbox"/> Month (YYYYMM) ***	<input checked="" type="checkbox"/> Day (YYYYMMDD) *** [for selected data elements only]
*** If requested, provide justification for requesting Month or Day. Refer to specifics in your methodology:		

Some quality measures, like overuse, cannot be measured granularly enough at the monthly level and we instead need to be able to know the date of service in order to conduct appropriate time series analyses.

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:**

To analyze the effects of tiered networks and price transparency in MA we will need to identify physician within the larger organizations with which they are affiliated.

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.

For this project we only need 3 digit zip codes and we will collapse 5 digits to 3 digits, deleting all 5 digit zip codes.

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.

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.

Medicaid Data is currently in the final stages of its original use. When and if the publication, for which the Medicaid Data is being utilized for, gets accepted into an academic journal, the Medicaid Data will be systematically destroyed from the server.

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): We will link claims to the MHQP Massachusetts Provider Database so we can describe health systems – including changes in scope (horizontal consolidation) and structure (vertical consolidation) and patient movement between systems.

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 link claims to the MHQP Massachusetts Provider Database so we can describe health systems – including changes in scope (horizontal consolidation) and structure (vertical consolidation) and patient movement between systems.

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.

Deterministic (match based on NPI).

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

Our analysis seek only to identify aggregate patterns in the data – changes in patient flows across health systems and the implications for total cost of care. All data will be maintained on a secure server and our output will be in the form of tabulations and regression coefficients. The linked data will not increase the granularity of the data – it will result in the unit of analysis moving up to a higher (more aggregated) level and thus move away from identification. That is, patients will be attributed to Partners, for example, rather to an individual outpatient clinic at BWH.

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.

We intend to publish aggregate findings from our analyses, which will include data on changes in price variation over time. We will not disclose any patient-level data. Our output will not include descriptive analysis of small cells of any kind – we are focused on large health systems and markets (geographic areas such as Health Service Areas). Cell sizes will be in the thousands or hundreds of thousands. Moreover, the focus of the work is on the change in market share across providers and average amounts paid to those providers – these will be captured by regression coefficients.

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.

Our results will be published in the peer-reviewed literature. Abstracts of these papers will be publicly available and complete manuscripts will be available based on the journals usual policies (through individual and institutional

subscription; some are made free on-line after a period of time). Reprints will be available for free from the authors upon request.

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.)?

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

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?

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.

Dr. Rosenthal has overseen the analysis of MA APCD data for the purposes of evaluating a primary care redesign intervention in Massachusetts. That analysis also linked the APCD to the MHQP MPD. The proposed project will evaluate the impact of Massachusetts' Cost Control legislation and their interaction on health care prices, patient flows, and other measures of health care competition. Drs Rosenthal and Sinaiko have experience conducting related research on the design and impact of health policy reforms that seek to alter patient and provider behavior, including

pay for performance, tiered network health plans, high-deductible health plans and price transparency initiatives. Both have substantial experience analyzing large, medical claims data across multiple health plans and conducting empirical analysis similar to those that will be conducted in this study.

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)	
Printed Name :	

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 #	