

Non-Government Application for Massachusetts All-Payer Claims Data [Exhibit A]

I. INSTRUCTIONS

This form is required for all Applicants, except Government Agencies as defined in [957 CMR 5.02](#), requesting protected health information. All Applicants must also complete the [Data Management Plan](#), attached to this Application. The Application and the Data Management Plan must be signed by an authorized signatory of the Organization. This Application and the Data Management Plan will be used by CHIA to determine whether the request meets the criteria for data release, pursuant to 957 CMR 5.00. Please complete the Application documents fully and accurately. Prior to receiving CHIA Data, the Organization must execute CHIA's [Data Use Agreement](#). Applicants may wish to review that document prior to submitting this Application.

Before completing this Application, please review the data request information on CHIA's website:

- [Data Availability](#)
- [Fee Schedule](#)
- [Data Request Process](#)

After reviewing the information on the website and this Application, please contact CHIA at apcd.data@state.ma.us if you have additional questions about how to complete this form.

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. If you are requesting a fee waiver, a copy of the Fee Remittance Form and any supporting documentation must be uploaded to IRBNet.

II. FEE INFORMATION

1. Consult the most current [Fee Schedule](#) for All-Payer Claims Database data.
2. After reviewing the Fee Schedule, if you have any questions about the application or data fees, contact apcd.data@state.ma.us.
3. If you believe that you qualify for a fee waiver, complete and submit the [Fee Remittance Form](#) and attach it and all required supporting documentation with your application. Refer to the [Fee Schedule](#) (effective Feb 1, 2017) for fee waiver criteria.
4. Applications will not be reviewed until the application fee is received.
5. Data for approved Applications will not be released until the payment for the Data is received.

III. ORGANIZATION & INVESTIGATOR INFORMATION

Project Title:	Understanding the Ambulatory Utilization Trends within the Populations Served
IRBNet Number:	
Organization Requesting Data (Recipient):	Lahey Health System, Inc.
Organization Website:	www.lahey.org
Authorized Signatory for Organization:	Timothy O'Connor
Title:	EVP, CFO, and Treasurer
E-Mail Address:	Timothy.P.OConnor@lahey.org
Address, City/Town, State, Zip Code:	41 Mall Road, Burlington, MA 01805
Data Custodian: (individual responsible for organizing, storing, and archiving Data)	Shiby Thomas
Title:	VP, Ent. Data Whse. & Analy
E-Mail Address:	Shiby.Thomas@Lahey.org
Telephone Number:	781-744-5165
Address, City/Town, State, Zip Code:	41 Mall Road, Burlington, MA 01805
Primary Investigator (Applicant): (individual responsible for the research team using the Data)	Robert Murray
Title:	Manager, Strategic Analysis and Planning
E-Mail Address:	robert.p.murray@lahey.org
Telephone Number:	781-744-8597
Names of Co-Investigators:	Christopher Lucchesi, Wendy Hawkins, Melanie Stefanakis
E-Mail Addresses of Co-Investigators:	Christopher.a.lucchesi@lahey.org , Melanie.m.stefanakis@lahey.org , wendy.l.hawkins@lahey.org

IV. PROJECT INFORMATION

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

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

2. Provide an abstract or brief summary of the specific purpose and objectives of your Project. This description should include the research questions and/or hypotheses the project will attempt to address, or describe the intended product or report that will be derived from the requested data and how this product will be used. Include a brief summary of the pertinent literature with citations, if applicable.

1. Is there variation in utilization of healthcare resources based on various diseases managed across the communities served?

2. Is care provided in the most optimal care setting in the ambulatory arena?
3. Are there "gaps" of healthcare resources and opportunities to improve the healthcare outcomes of the population (i.e. assess screening rates).

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.

V. PUBLIC INTEREST

1. Briefly explain why completing your Project is in the public interest. Use quantitative indicators of public health importance where possible, for example, numbers of deaths or incident cases; age-adjusted, age-specific, or crude rates; or years of potential life lost. *Uses that serve the public interest under CHIA regulations 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.*

The increasing pressures for healthcare systems to provide to enhance the health and outcomes of the populations served. The ambulatory data will develop the following population health strategies:

- 1) Assess epidemiology trends in the communities served and understand if there is variation including utilization and site of care. The disease trends would be based on the diagnosis groups as developed by Lahey Health. The indicators would include measuring the population utilization rates based upon gender, age, race and payor and comparing the market geographies. The data measurements will be based on a population rate per 1,000 measuring utilization of visits, procedures and diagnostics and assess if outcomes were enhanced.
- 2) Measure prevention rates (population rate per 1,000) by city and town based on screening criteria utilizing the screening CPT codes. Communities with lower rates may provide an opportunity to develop tactics to enhance the health of the community by providing screening exams.
- 3) Assess if the appropriate healthcare resources are available in the communities served to manage patients across the care continuum. The data would provide an understanding across the care pathway as to whether there is a "gap" in healthcare resources within respective patient's communities. If not, where do the patients receive their care and is there an opportunity to provide the healthcare resources in or closer to their community.

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VI. DATA REQUESTED

The Massachusetts All-Payer Claims Database is comprised of medical, pharmacy, and dental claims and information from the member eligibility, provider, and product files that are collected from health insurance payers licensed to operate in the Commonwealth of Massachusetts. This information encompasses public and private payers as well as data from insured and self-insured plans. APCD data are refreshed and updated annually and made available to approved data users in Release Versions that contain five calendar years of data and three months of run-out. Data requests will be fulfilled using the most current Release Version. For more information about the most current APCD Release Version, including available years of data and a full list of elements in the release please refer to release layouts, data dictionaries and similar documentation included on [CHIA's website](#).

Data requests are typically fulfilled on a one time basis, however; certain Projects may require future years of data that will become available in a subsequent release. Applicants who anticipate a need for future years of data may request to be considered for a subscription. Approved subscriptions will receive, upon request, the same data files and data elements included in the initial Release annually or as available. Please note that approved subscription request will be subject to the Data Use Agreement, will require payment of fees for additional Data, and subject to the limitation that the Data can be used only in support of the approved Project.

1. List years of data requested (only list years available in the current Release Version): 2016

2. Please indicate below whether this is a one-time request, or if the described Project will require a subscription.

One-Time Request **OR** Subscription

3. Specify below the data files requested for this Project, and provide your justification for requesting each file.

Medical Claims

Describe how your research objectives require Medical Claims data:

The Medical Claims data will provide the information needed to assess the ambulatory trends and utilization of the population including: diagnosis codes, sites of services, procedure codes, charges and payments. The information can be compiled to develop utilization rates among the cities and towns served to further evolve patient outcome strategies and tactics.

Lahey Health to be compliant we are requesting the following financial fields to be excluded from the data set: MC110, MC089, MC062, MC063, MC064, MC065, MC066, MC067, MC095, MC096, MC097, MC098, MC099, MC114, MC116, MC121 and MC122.

Pharmacy Claims

Describe how your research objectives require Pharmacy Claims data:

<input type="checkbox"/> Dental Claims
Describe how your research objectives require Dental Claims data:
<input checked="" type="checkbox"/> Member Eligibility
Describe how your research objectives require Member Eligibility data: The Member file includes the demographic data elements needed to understand the epidemiology and utilization rates of the patient populations residing in the service area
Lahey Health to be compliant we are requesting the following financial fields to be excluded from the data set: ME049, ME050, ME111, ME112, ME113, ME114, ME115, ME116, ME120, ME121, ME122, ME123, ME131 and ME132.
<input type="checkbox"/> Provider
Describe how your research objectives require Provider data:
<input checked="" type="checkbox"/> Product
Describe how your research objectives require Product data:
The Product file will assist in measuring the current healthcare utilization use rates of the communities served by insurance coverage. The data can provide the needed information to assess the healthcare resources required to meet the goals of population health.

VII. DATA ENHANCEMENTS 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). All applicants receive the "Core" LDS, but may also request the data enhancements listed below for inclusion in their analyses. Requests for enhancements will be reviewed by CHIA to determine whether each represents the minimum data necessary to complete the specific Project objective.

For a full list of elements in the release (i.e., the core elements and additional elements), please refer to [release layouts](#), [data dictionaries](#) and similar documentation included on CHIA's website.

1. Specify below which enhancements you are requesting in addition to the "Core" LDS, provide your justification for requesting each enhancement.

Geographic Subdivisions

The geographic subdivisions listed below are available for Massachusetts residents and providers only. Select one of the following options.

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

requesting the five digit zip code to identify utilization of care to the communities served. Analysis will not measure to the individual patient level but aggregated to identified community regions serviced by Lahey Health. The variation among the communities served has been identified using the CHIA Casemix data and has evolved strategies to provide the appropriate resources needed to improve the outcomes of the population. We will apply the same methodology utilizing the APCD in the ambulatory setting.

Date Resolution

Select one option from the following options.

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

The date detail field's inclusion of month would allow to assess any seasonal trends to allocate appropriate healthcare resources.

National Provider Identifier (NPI)

Select one of the following options.

<input type="checkbox"/> Encrypted National Provider Identifier(s) (standard)	<input checked="" type="checkbox"/> Decrypted National Provider Identifier(s)***
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*** If requested, provide justification for requesting decrypted National Provider Identifier(s). Refer to specifics in your methodology: The decrypted provider file will allow Lahey Health to assess utilization rates of our system providers and peer groups which will be linked to our internal physician database. As a system we can understand and benchmark utilization patterns and the access of the providers in the community.

VIII. MEDICAID (MASSHEALTH) DATA

1. Please indicate whether you are seeking Medicaid Data:

- Yes
 No

2. 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 MassHealth Data, please describe, in the space below, why your use of the Data meets this requirement. *Your description should focus on how the results of your project could be used by the Executive Office of Health and Human Services in connection with the administering the MassHealth program.* Requests for MassHealth 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 MassHealth program. CHIA cannot release MassHealth Data without approval from MassHealth. This may introduce significant delays in the receipt of MassHealth Data.

The communities served by Lahey Health member hospitals and physician providers include the population covered by Medicaid. The Medicaid data can provide a better understanding of the current utilization trends of the total Medicaid population in the community. Assess where there are opportunities to provide the resources needed to manage the most optimal outcomes in the appropriate care setting.

IX. DATA LINKAGE

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.

Diagnosis codes grouped to clinical service lines as identified by Lahey Health Clinical Leaders and zip codes to regional definitions. NPI of physician providers would be linked to the Lahey Health Internal Physician database.

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.

The linkage is deterministic.

5. If yes, attach or provide below a complete listing of the variables from all sources to be included in the final linked analytic file.

- 1) Lahey Health Physician file linking on the physician's NPI number.
- 2) Lahey Health ICD9 and ICD10 diagnosis file linking on the diagnosis codes to the principle and secondary diagnosis codes of the APCD file.
- 3) Lahey Health regional definitions linked to the patient's zip code.

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

The linked data set will only pull the diagnosis, zip code and physician groupings from the internal Lahey data definition crosswalks into the APCD dataset. The linked APCD dataset will only be stored on secure Lahey Health servers and accessed by computers that are encrypted based on Lahey Health's data management plan.

X. PUBLICATION / DISSEMINATION / RE-RELEASE

1. Do you anticipate that the results of your analysis will be published or made publically available? If so, how do you intend to disseminate the results of the study (e.g.; publication in professional journal, poster presentation, newsletter, web page, seminar, conference, statistical tabulation)? 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 result in the display of a cell less than 11.

The data will only be provided to Lahey Health colleagues at an aggregated level and individual patient data would not be shared.

2. Describe your plans to use or otherwise disclose CHIA Data, or any Data derived or extracted from such Data, in any paper, report, website, statistical tabulation, seminar, or other setting that is not disseminated to the public.

Our intention is to utilize the data for internal purposes only and would not be provided to any outside parties.

3. What will be the lowest geographical level of analysis of data you expect to present for publication or presentation (e.g., state level, city/town level, zip code level, etc.)? Will maps be presented? If so, what methods will be used to ensure that individuals cannot be identified?

Data will be analyzed at the individual(s) zip code for internal purposes only.

4. Will you be using CHIA Data for consulting purposes?

- Yes
 No

5. Will you be selling standard report products using CHIA Data?

- Yes
 No

6. Will you be selling a software product using CHIA Data?

- Yes
 No

7. Will you be using CHIA Data as in input to develop a product (i.e., severity index tool, risk adjustment tool, reference tool, etc.)

- Yes
 No

8. Will you be reselling CHIA Data in any format not noted above?

- Yes
 No

If yes, in what format will you be reselling CHIA Data?

9. If you have answered "yes" to questions 5, 6, 7 or 8, please describe the types of products, software, services, or tools.

10. If you have answered "yes" to questions 5, 6, 7 or 8, what is the fee you will charge for such products, software, services or tools?

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.

The principle investigator and three co-investigators experience and background include current and previous experiences in the local healthcare industry including both academic and community hospitals, group practice and insurance company. The colleagues knowledge of understanding the healthcare needs of the communities served is based on their span of knowledge in the area of quality improvement, strategy and healthcare finance.

2. **Resumes/CVs:** 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

By signing this Application, the Agency assumes all responsibility for the use, security and maintenance of the CHIA Data by its agents, including but not limited to contractors. The Agency must have a written agreement with the agent of contractor limiting the use of CHIA Data to the use approved under this Application as well as the privacy and security standards set forth in the Data Use Agreement. CHIA Data may not be shared with any third party without prior written consent from CHIA, or an amendment to this Application. CHIA may audit any entity with access to CHIA Data.

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:	N/A
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, 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 Organization's location, off-site server and/or database?

- Yes
- No

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, a separate Data Management Plan **must** be completed by the agent or contractor.


[INSERT A NEW SECTION FOR ADDITIONAL AGENTS/CONTRACTORS AS NEEDED]

IVX. 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 any third party to which it grants access.

Applicants approved to receive CHIA Data will be provided with Data following the payment of applicable fees and upon the execution of a Data Use Agreement requiring the Organization to adhere to processes and procedures designed to prevent unauthorized access, disclosure or use of data.

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:	Timothy O'Connor
Title:	EVP, CFO and Treasurer

Attachments

A completed Application must have the following documents attached to the Application or uploaded separately to IRBNet:

1. IRB approval letter and protocol (if applicable), or research methodology (if protocol is not attached)
 2. Data Management Plan; including one for each agent or contractor that will have access to or store the CHIA Data at a location other than the Organization's location, off-site server and/or database
 3. CVs of Investigators (upload to IRBnet)

APPLICATIONS WILL NOT BE REVIEWED UNTIL THEY ARE COMPLETE, INCLUDING ALL ATTACHMENTS.

[INSERT IRB approval letter and protocol, or research methodology]

XIV. Research Methodology

Lahey Health

The data methodology to be utilized will include a matrix of diagnosis codes, procedure codes and zip codes to assess current utilization and potential healthcare resources needed to serve the population in the community, acute and post acute setting. The key data elements in the APCD will be assigned to the Lahey Health community regions, clinical disease categories and procedural definitions to provide a comprehensive understanding of current healthcare utilization of the population served. Next steps would include summarizing the healthcare utilization of the population within the communities served to assess the following:

1. Outpatient E&M visits by principle diagnosis at a rate per 1,000 of the population.
2. Screening and diagnostic procedure testing at a rate per 1,000 of the population.
3. Procedural patient volumes including surgery, diagnostics and ancillaries at a rate per 1,000 of the population.
4. Lahey Health Physician Providers rate of procedural volume

As directed by clinical and physician leaders for opportunities to enhance outcomes of the populations served the first step is to define the patient cohort based on a combination of the patient zip code, principle diagnosis and/or procedural utilization. The patient cohort will have two or more criteria to define the population to assess current utilization incorporating but not limited to zip code, ICD9/10 diagnosis code and ICD9/10 procedure code. Regions with higher or lower utilization rates as compared to similar communities can provide next steps strategically to provide the most effective health care resources to enhance the healthcare of the population.

Regions – are based on the zip codes for Lahey Health Member Hospitals and physician location service areas.

Service Line Diagnosis and Procedure Definitions – are based on the ICD9 / 10 diagnosis and procedure codes managed by the various Lahey Health Clinical Services.