

Application for Massachusetts Case Mix and Charge Data (Non-Government) [Exhibit A – Data Application]

I. INSTRUCTIONS

This form is required for all Applicants, Agencies, or Organizations, hereinafter referred to as “Organization”, except Government Agencies as defined in [957 CMR 5.02](#), requesting protected health information. All Organizations must also complete the [Data Management Plan](#), and attach it to this Application. The Application and the Data Management Plan must be signed by an authorized signatory. 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](#). Organizations 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 casemix.data@state.ma.us if you have additional questions about how to complete this form.

The Application and all attachments must be uploaded to [IRBNet](#). All Application documents can be found on the [CHIA website](#).

Information submitted as part of the Application may be subject to verification during the review process or during any audit review conducted at CHIA’s discretion.

Applications will not be reviewed until the Application and all supporting documents are complete and the required application fee is received.

A [Fee Remittance Form](#) with instructions for submitting the application fee is available on the CHIA website. If you are requesting a fee waiver, a copy of the Fee Remittance Form and any supporting documentation must be uploaded to IRBNet. Please be aware that if your research is funded and under that funding you are required to release raw data to the funding source, you may not receive CHIA Data.

II. FEE INFORMATION

1. Consult the most current [Fee Schedule](#) for Case Mix and Charge Data.
2. After reviewing the Fee Schedule, if you have any questions about the application or data fees, contact casemix.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:	Market Demand Study of the needs of patients living in Massachusetts who travel to and from Connecticut for their health care.
IRBNet Number:	1655392-1
Organization Requesting Data (Recipient):	Hartford HealthCare Corporation
Organization Website:	https://HartfordHealthCare.org
Authorized Signatory for Organization:	Jeff Flaks
Title:	President and Chief Executive Officer
E-Mail Address:	Jeffrey.Flaks@hhchealth.org
Telephone Number:	860-263-4100
Address, City/Town, State, Zip Code:	1 State Street Hartford, CT 06105
Data Custodian: (individual responsible for organizing, storing, and archiving Data)	Evan Schmidt
Title:	Senior Director, Strategy and Business Development
E-Mail Address:	Evan.Schmidt@hhchealth.org
Telephone Number:	860-972-4658
Address, City/Town, State, Zip Code:	1 State Street Hartford, CT 06105
Primary Investigator (Applicant): (individual responsible for the research team using the Data)	Evan Schmidt
Title:	Senior Director, Strategy and Business Development
E-Mail Address:	Evan.Schmidt@hhchealth.org
Telephone Number:	860-972-4658
Address, City/Town, State, Zip Code:	1 State Street Hartford, CT 06105
Names of Co-Investigators:	James Shimer
E-Mail Addresses of Co-Investigators:	James.Shimer@hhchealth.org

IV. PROJECT INFORMATION

IMPORTANT NOTE: Organization represents that the statements made below as well as in any study or research protocol or project plan, or other documents submitted to CHIA in support of the Data Application are complete and accurate and represent the total use of the CHIA Data requested. Any and all CHIA Data released to the Organization under an approved application may ONLY be used for the express purposes identified in this section by the Organization, and for no other purposes. Use of CHIA Data for other purposes requires a separate Data Application to CHIA written request to CHIA, with approval being subject to CHIA's regulatory restrictions and approval process. Unauthorized use is a material violation of your institution's Data Use Agreement with CHIA.

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

- | | | |
|---|---|---|
| <input type="checkbox"/> Epidemiological | <input checked="" type="checkbox"/> Health planning/resource allocation | <input 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 type="checkbox"/> Research studies | <input type="checkbox"/> Severity index tool (or other derived input) |
| <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) | |

The CHIA data requested will inform Hartford HealthCare's strategic planning for its northern Connecticut market which is along the entire border between the two states. As our health system continues to bring care closer to the communities, our intent is to understand how many patients are traveling between borders and for what services so that we can appropriately recruit and provide services to those who need them. The CHIA data will help provide Hartford HealthCare with important details of patients that are traveling between borders, including age, location, primary diagnosis, and utilization. This could also help Hartford HealthCare continue relationships with health systems in Massachusetts, such as Baystate, where there is currently one of our LIFESTAR helicopters helipads and base.

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.

As described above, this data will help Hartford HealthCare understand patients traveling between borders. From our internal data and Connecticut data, we are able to understand patients that leave Massachusetts and travel into Connecticut for care, however, it is a blind spot for patients that are leaving the state. As we continue to develop our ambulatory practices and offerings, understanding what patients leave our state for will be very important so that we can ensure patients have healthcare closer to home. Our intent is to investigate:

- Number of patients leaving Connecticut who travel to Massachusetts, and to what hospitals they go
- What are the health conditions of those patients who are leaving Connecticut
- Have the utilization trends changed over the last two years
- Does it seem like there are specific towns/zip codes that are leaving Connecticut which is showing that there are gaps of care in service offerings
- Is there a potential for Hartford HealthCare to partner with health systems in Massachusetts

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:** Applications must include 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 this 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.*

Hartford HealthCare's mission statement is "To improve the health and healing of the people and communities we serve". With its mission as the guiding principle, Hartford HealthCare has worked over the past 10 years to embed services that the communities it serves need closer to home. Given that, one area that has always been challenging to understand is those patients that are traveling outside of the state and going further than they may need to, due to the lack of data to understand those shifts to Massachusetts. If Hartford HealthCare had access to data on patients traveling outside of Connecticut, it would be able to strategically place services and providers to ensure patients were able to get the care they

need much closer to where they live. This would allow Hartford HealthCare providers to help care for those communities better and help ensure their health care needs were met.

VI. DATASETS REQUESTED

The Massachusetts Case Mix (“Case Mix”) are comprised of Hospital Inpatient Discharge, Emergency Department and Outpatient Hospital Observation Stay Data collected from Massachusetts’ acute care hospitals, and satellite emergency facilities. Case Mix Data are updated each fiscal year (October 1 – September 30) and made available to approved data users. For more information about Case Mix Data, including a full list of available elements in the datasets 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 years of data not yet available. 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. Please indicate below whether this is a one-time request, or if the described Project will require a subscription.

One-Time Request **OR** Subscription

2. Specify below the dataset(s) and year(s) of data requested for this Project, and your justification for requesting *each* dataset. Data prior to 2004 is not available.

<p><input checked="" type="checkbox"/> Hospital Inpatient Discharge Data</p> <p><input type="checkbox"/>2004 <input type="checkbox"/>2005 <input type="checkbox"/>2006 <input type="checkbox"/>2007 <input type="checkbox"/>2008 <input type="checkbox"/>2009 <input type="checkbox"/>2010 <input type="checkbox"/>2011 <input type="checkbox"/>2012 <input type="checkbox"/>2013 <input type="checkbox"/>2014 <input type="checkbox"/>2015 <input type="checkbox"/>2016 <input type="checkbox"/>2017 <input checked="" type="checkbox"/>2018 <input checked="" type="checkbox"/>2019</p> <p>Describe how your research objectives require Inpatient Discharge data: With hospital inpatient discharge data, Hartford HealthCare will better be able to understand the market and where patients are traveling for care from Connecticut within Massachusetts, as well as where patients along the borders of Connecticut that live in Massachusetts travel to. Furthermore, there may be opportunities to partner with other health systems to coordinate care better.</p>
<p><input checked="" type="checkbox"/> Outpatient Hospital Observation Stay Data</p> <p><input type="checkbox"/>2004 <input type="checkbox"/>2005 <input type="checkbox"/>2006 <input type="checkbox"/>2007 <input type="checkbox"/>2008 <input type="checkbox"/>2009 <input type="checkbox"/>2010 <input type="checkbox"/>2011 <input type="checkbox"/>2012 <input type="checkbox"/>2013 <input type="checkbox"/>2014 <input type="checkbox"/>2015 <input type="checkbox"/>2016 <input type="checkbox"/>2017 <input checked="" type="checkbox"/>2018 <input checked="" type="checkbox"/>2019</p> <p>Describe how your research objectives require Outpatient Hospital Observation Stay data: With outpatient hospital observation stay data, Hartford HealthCare will better be able to understand the market and where patients are traveling for care from Connecticut within Massachusetts, as well as where patients along the borders of Connecticut that live in Massachusetts travel to. Furthermore, there may be opportunities to partner with other health systems to coordinate care better. Also, this can help Hartford HealthCare understand where patients are traveling for ambulatory surgeries, and if there is a potential for patients to travel to a lower cost free-standing ambulatory surgery center that may be closer to their home. This could be done through understanding patient towns of origin through this data and what type of surgery they had. By utilizing this data, through marketing and patient education patients may have other options that are closer to home and less expensive.</p>
<p><input checked="" type="checkbox"/> Emergency Department Data</p> <p><input type="checkbox"/>2004 <input type="checkbox"/>2005 <input type="checkbox"/>2006 <input type="checkbox"/>2007 <input type="checkbox"/>2008 <input type="checkbox"/>2009 <input type="checkbox"/>2010 <input type="checkbox"/>2011 <input type="checkbox"/>2012 <input type="checkbox"/>2013 <input type="checkbox"/>2014 <input type="checkbox"/>2015 <input type="checkbox"/>2016 <input type="checkbox"/>2017 <input type="checkbox"/>2018 <input checked="" type="checkbox"/>2019</p>

Describe how your research objectives require Emergency Department data:

With emergency department data, Hartford HealthCare will better be able to understand the market and where patients are traveling for care from Connecticut within Massachusetts, as well as where patients along the borders of Connecticut that live in Massachusetts travel to. With this data, Hartford HealthCare would be able to understand where patients are going for emergency care, and what the case mix is of those patients. Furthermore, there may be opportunities to open urgent care centers in locations that are more accessible for patients, keeping them safer and the cost of care lower.

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.

Case Mix Data are 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 enhancements), please refer to [release layouts, data dictionaries](#) and similar documentation included on CHIA’s website.

Please note that CHIA Case Mix Data contain reports produced using proprietary computer software created, owned, and licensed by the 3M Company. All Copyrights in and to the 3M APR™ Software, and to the 3M APR™ DRG classification system(s) (including the selection, coordination and arrangement of all codes) are owned by 3M. All rights reserved.

1. Specify below which enhancements you are requesting in addition to the “Core” LDS. CHIA will use this information to determine what Level of data is needed for pre-FY 2015 data requests.

Geographic Subdivisions

State, five-digit zip code, and 3-digit code are available for patients residing in CT, MA, ME, NH, RI, VT, and NY. City or Town of residence is available for residents of MA only. States outside of this region will be coded as XX (“Other”).

Select one of the following options:

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

By having the 5-Digit Zip Code and the City and Town, this would allow Hartford HealthCare to have an exact understanding of the market and where patients live and are traveling for care. This would allow Hartford HealthCare to determine the best strategy to deliver care most effectively to patients.

Demographic Data

Select one of the following options:

<input checked="" type="checkbox"/> Not Requested (Standard)	<input type="checkbox"/> Race & Ethnicity***
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**** If requested, provide justification for requesting Race and Ethnicity. Refer to specifics in your methodology:**

Click here to enter text.

Date Resolution

Select one of the following options for dates of admissions, discharges, and significant procedures.

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

By providing the year and the month, this will help Hartford HealthCare understand if there are any specific trends in the data. Given that there have been new services offered withing the Enfield Market, as well as a partnership with groups in Springfield, having the month and year of the data Hartford HealthCare will be better able to see if this has provided any changes in the care for patients and if there is any opportunities to continue forming partnerships.

Practioner Identifiers (UPN)

Select one of the following options.

<input checked="" type="checkbox"/> Not Requested (Standard)	<input type="checkbox"/> Hashed ID ***	<input type="checkbox"/> Board of Registration in Medicine Number(BORIM) ***
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*****If requested, provide justification for requesting Hashed ID or BORIM Number. Refer to specifics in your methodology:**

Click here to enter text.

Unique Health Information Number (UHIN)

Select one of the following options.

<input checked="" type="checkbox"/> Not Requested (Standard)	<input type="checkbox"/> UHIN Requested ***
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***** If requested, provide justification for requesting UHIN. Refer to specifics in your methodology:**

Click here to enter text.

Hashed Mother’s Social Security Number

Select one of the following options:

<input checked="" type="checkbox"/> Not Requested (Standard)	<input type="checkbox"/> Hashed Mother’s SSN Requested ***
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***** If requested, provide justification for requesting Hashed Mother’s SSN. Refer to specifics in your methodology:**

Click here to enter text.

VIII. 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.

Click here to enter text.

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.

Click here to enter text.

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.

Click here to enter text.

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

Click here to enter text.

IX. 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 results of this analysis will only be used for internal purposes and will not be published or make publically aware. The results will inform Hartford HealthCare's senior leadership and strategic planning team's strategy for the next three to five years.

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.

The results will only be used for internal purposes only, and will be presented to senior leadership, regional leadership, and the strategic planning team.

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?

As previously mentioned, this data will only be used for internal purposes.

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?

Click here to enter text.

9. If you have answered “yes” to questions 5, 6, 7 or 8, please provide the name and a description of the products, software, services, or tools.

Click here to enter text.

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?

Click here to enter text.

X. APPLICANT QUALIFICATIONS

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

Both Evan Schmidt and James Shimer work with data provided from the Connecticut Hospital Association (CHA) on a monthly basis. This data is provided with primary diagnosis, primary procedure, CPT, provider, hospital, date of service, patient town of origin, and demographic details. Both Evan and James are very familiar with this data and feel comfortable using it for analytics to determine patient needs and follow monthly trends.

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.)

XI. USE OF AGENTS AND/OR CONTRACTORS

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. The Organization must have a written agreement with the agent or 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:	FTI Consulting
Company Website	https://www.fticonsulting.com/
Contact Person:	Meg Guerin Calvert
Title:	Senior Managing Director, President, Center for Healthcare Economics and Policy Economic Consulting
E-mail Address:	margaret.guerin-calvert@fticonsulting.com
Address, City/Town, State, Zip Code:	555 12 th Street, NW, Suite 700, Washington DC, 20004
Telephone Number:	(202) 312-9100
Term of Contract:	1 year

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

FTI Consulting annually helps us review discharge data from hospitals in Connecticut to give us a perspective on where patients are going for care.

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.

We are under contracts with FTI Consulting, and they are unable to share any information beyond Hartford HealthCare. Data is provided to them via a secure portal and is destroyed when they are done using it.

3. Will the agent or contractor have access to and 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.

VIII. 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.

Organizations 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) this research is not funded by a source requiring the release of raw data to that source; (3) that the requested Data is the minimum necessary to accomplish the purposes described herein; (4) 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 (5) to my authority to bind the Organization.

Signature: (Authorized Signatory for Organization)	
Printed Name:	Karen Goyette
Title:	Senior Vice President, Strategy and System Integration
Date:	9/14/2020

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