# Commonwealth of Massachusetts Center for Health Information & Analysis (CHIA) Non-Governmental Application for Case Mix Data

This form is to be used by all applicants, except Government Agencies, as defined in 957 CMR 5.02.

<u>NOTE</u>: In order for your application to be processed, you must submit the required application fee. Please consult the fee schedule for the appropriate fee amount. A remittance form with instructions for submitting the application fee is available on the CHIA <u>website</u>.

# I. GENERAL INFORMATION

APPLICANT INFORMATION		
Applicant Name:	Carolyn Salsgiver	
Title:	Vice President	
Organization:	Yale New Haven Health	
Project Title:	Outmigration Discharges	
Mailing Address:	789 Howard Ave, New Haven, CT 06519	
Telephone Number:	203-688-2609	
Email Address:	<u>Carolyn.salsgiver@bpthosp.org</u> (with copy to: April.rowe@ynhh.org)	
Names of Co-Investigators:	April Rowe, Diana Storilassi, Carmine Scasino, Katherine Kuzmeskas, Lindsey Greene-Upshaw, Latha Sudhakar, Tara Estabrooks Martindale, Amy Richards	
Email Addresses of Co-Investigators:	April.rowe@ynhh.org, Diana.russo@ynhh.org, carmine.scasino@ynhh.org, Katherine.Kuzmeskas@YNHH.ORG, Lindsey.Greene-Upshaw@ynhh.org, Latha.Sudhakar@YNHH.ORG, tara.estabrooks@ynhh.org, amy.richards@ynhh.org	
Original Data Request Submission Date:	10-27-15	
Dates Data Request Revised:		
Project Objectives (240 character limit)	To track outmigration of Connecticut residents to Massachusetts for medical care	
Project Research Questions (if applicable)	<ol> <li>How many patients travel to MA for a certain condition?</li> <li>Which hospitals are patients from CT utilizing for health care services?</li> <li>From which towns in CT do patients travel to MA for medical care?</li> </ol>	

#### **II. PROJECT SUMMARY**

Briefly describe the purpose of your project and how you will use the requested CHIA data to accomplish your purpose.

Patient zip codes at an aggregate level will be used to track Connecticut patients receiving medical care in Massachusetts. The information will be at an aggregate level and non-indentifiable. The data will be for internal use. This information will also be helpful to compare Connecticut healthcare trends to those in Massachusetts.

#### **III. FILES REQUESTED**

Please indicate the databases from which you seek data, and the Level(s) and year(s) of data requested.

CASE MIX	Levels 1 – 6	Fiscal Years Requested
Inpatient Discharge	<ul> <li>Level 1 – No Identifiable Data Elements</li> <li>Level 2 – Unique Physician Number (UPN)</li> <li>Level 3 – Unique Health Information Number (UHIN)</li> <li>Level 4 – UHIN and UPN</li> <li>Level 5 – Date(s) of Admission; Discharge; Significant Procedures</li> <li>Level 6 – Date of Birth; Medical Record Number; Billing Number</li> <li>PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE</li> <li>CHOSEN LEVEL: For market analysis and trending and to compare CT healthcare trends to MA</li> </ul>	<u>1998 – 2014 Available</u> (limited data 1989-1997) <u>2014</u>
Outpatient Observation	<ul> <li>Level 1 – No Identifiable Data Elements</li> <li>Level 2 – Unique Physician Number (UPN)</li> <li>Level 3 – Unique Health Information Number (UHIN)</li> <li>Level 4 – UHIN and UPN</li> <li>Level 5 – Date(s) of Admission; Discharge; Significant Procedures</li> <li>Level 6 – Date of Birth; Medical Record Number; Billing Number</li> <li>PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE</li> <li>CHOSEN LEVEL: For market analysis and trending and to compare CT healthcare trends to MA</li> </ul>	<u>2002 – 2014 Available</u> <u>2014</u>
Emergency Department	<ul> <li>Level 1 – No Identifiable Data Elements</li> <li>Level 2 – Unique Physician Number (UPN)</li> <li>Level 3 – Unique Health Information Number (UHIN)</li> <li>Level 4 – UHIN and UPN</li> <li>Level 5 – Date(s) of Admission; Discharge; Significant Procedures</li> <li>Level 6 – Date of Birth; Medical Record Number; Billing Number</li> <li>PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE</li> <li>CHOSEN LEVEL: For market analysis and trending and to compare CT healthcare trends to MA</li> </ul>	<u>2000 – 2014 Available</u> <u>2014</u>

#### **IV. FEE INFORMATION**

Please consult the fee schedules for Case Mix data, available at <u>http://chiamass.gov/regulations/#957\_5</u>, and select from the following options:

- Single Use
- □ Limited Multiple Use
- Multiple Use

Are you requesting a fee waiver?

- □ Yes
- ⊠ No

If yes, please submit a letter stating the basis for your request. Please refer to the <u>fee schedule</u> for qualifications for receiving a fee waiver. If you are requesting a waiver based on the financial hardship provision, please provide documentation of your financial situation. Please note that non-profit status alone isn't sufficient to qualify for a fee waiver.

# V. REQUESTS PURSUANT TO 957 CMR 5.04 (Researchers, Payers, Providers, and Provider Organizations) Please complete only if you are requesting Level 1 (de-identified) Case Mix.

Please describe how you will use such data for the purposes of lowering total medical expenses, coordinating care, benchmarking, quality analysis or other administrative research purposes.

Not Applicable – requesting Level 2 data

# VI. ALL OTHER REQUESTS - PURPOSE AND INTENDED USE

1. Please explain why completing your project is in the public interest.

To provide better patient access to care

- 2. Attach a brief (1-2 pages) description of your research methodology. (This description will not be posted on the internet.)
- 3. Has your project received approval from your organization's Institutional Review Board (IRB)? Please note that CHIA will not review your application until IRB documentation has been received (if applicable).
  - $\hfill\square$  Yes, and a copy of the approval letter is attached to this application.
  - □ No, the IRB will review the project on \_\_\_\_\_
  - $\Box$  No, this project is not subject to IRB review.
  - ⊠ No, my organization does not have an IRB.

#### VII. APPLICANT QUALIFICATIONS

1. Describe your qualifications to perform the research described or accomplish the intended use of CHIA data.

YNHHS has previously obtained CHIA data in the past and has worked with hospital discharge data for many years as part of its analysis and planning work.

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2. Attach résumés or curricula vitae of the applicant/principal investigator, key contributors, and of all individuals who will have access to the data. (These attachments will not be posted on the internet.)

# VIII. DATA LINKAGE AND FURTHER DATA ABSTRACTION

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

- 1. Do you intend to link or merge CHIA Data to other datasets?
  - □ Yes
  - No linkage or merger with any other database will occur
- If yes, will the CHIA Data be linked or merged to other individual patient level data (e.g. disease registries, death data), individual provider level data (e.g., American Medical Association Physician Masterfile), facility level (e.g., American Hospital Association data) or with aggregate data (e.g., Census data)? [check all that apply]
  - Individual Patient Level Data

What is the purpose of the linkage:

Not Applicable

What databases are involved, who owns the data and which specific data elements will be used for linkage:

Not Applicable

Individual Provider Level DataWhat is the purpose of the linkage:

Not Applicable

What databases are involved, who owns the data and which specific data elements will be used for linkage:

Not Applicable

Individual Facility Level DataWhat is the purpose of the linkage:

Not Applicable

What databases are involved, who owns the data and which specific data elements will be used for linkage:

## Not Applicable

# Aggregate Data

What is the purpose of the linkage:

Not applicable	

What databases are involved, who owns the data and which specific data elements will be used for linkage:

Not applicable

3. 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 that algorithm will link each dataset.

Not Applicable

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

Not Applicable

5. If yes, and the data mentioned above is not in the public domain, please attach a letter of agreement or other appropriate documentation on restrictions of use from the data owner corroborating that they agree to have you initiate linkage of their data with CHIA data and include the data owner's website.

# IX. PUBLICATION / DISSEMINATION / RE-RELEASE

1. Describe your plans to publish or otherwise disclose CHIA Data, or any data derived or extracted from such data, in any paper, report, website, statistical tabulation, seminar, conference, or other setting.

We do not plan to produce any reports for publication.

2. Will the results of your analysis be publicly available to any interested party? Please describe how an interested party will obtain your analysis and, if applicable, the amount of the fee.

No. the data and	derivative reports w	ill not be public	lv available.
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- 3. Will you use the data for consulting purposes?
- □ Yes
- 🛛 No
- 4. Will you be selling standard report products using the data?
- □ Yes
- 🛛 No
- 5. Will you be selling a software product using the data?
- □ Yes
- 🛛 No
- 6. Will you be reselling the data?
- □ Yes
- 🛛 No

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

Not Applicable

7. If you have answered "yes" to questions 3, 4 or 5, please describe the types of products, services or studies.

Not Applicable

#### X. USE OF AGENTS AND/OR CONTRACTORS

Third-Party Vendors. Provide the following information for all agents and contractors who will work with the CHIA Data.

Company Name:	Equation Consulting
Contact Person:	Kyle Kobe
Title:	Principle
Address:	880 West Heritage Park Blvd. Suite 110 Layton, UT 84041
Telephone Number:	801-783-4100
E-mail Address:	kkobe@equationhealth.com
Organization Website:	http://equationhealth.com/

8. Will the agent/contractor have access to the data at a location other than your location, your off-site server and/or your database?

🛛 Yes

🗆 No

If yes, please provide information about the agent/contractor's data management practices, policies and procedures in your Data Management Plan.

# Non-Gov't Case Mix Data Request – Form Published 6.5.2015 Equation Consulting, Inc. (Equation), a vendor of YNHHS, stores the data on a secure server, and grants YNHHS a license to certain applications and software that allow YNHHS to manipulate the data for its healthcare analytics and reporting purposes. The physical CDs are stored in a locked file cabinet in the YNHHS Planning Department's office in New Haven, CT. Once the data files are received by Equation, they are appended to YNHHS' existing data warehouse. Equation complies with stringent policies regarding the maintenance and security of all clients' data. The warehouse is on a password-protected, user limited network secure folder and access is limited to the members of the YNHHS Planning Department.

More information on Equation's security policies is stated below:

User authentication, assurance, identification, and validation are done using Active Directory. Active Directory helps with the management of users by allowing them to be grouped into organizational units. It is based around the LDAP (lightweight directory access protocol) standard allowing for easy integration with DataRiver and our other tools used to access data. This enables IT and our developers to use Active Directory's centralized policy and rules to build comprehensive access and authentication controls.

• All users are allocated to security groups with appropriate permissions as defined within Active Directory. Security groups within Active Directory are then associated with the security groups that are setup within the "cube" or client database. The web-based front end asks for the client username and password which is passed to Active Directory where the user is identified, validated, and authenticated. The security group policy associated with the user's security group filters the user's access rights after which access is granted.

• Access Control Policy. Employees and users of the application or databases that drive the application are given access on a case by case request based system. All points and occurrences of data access are logged and reviewed.

- Physical access is only granted on a case by case review, or in the company of set authorized individuals.
- Physical security is a setup with dual stop access key.

• Equation consulting manages and hosts its own servers. These servers are physically secured in a temperature and moisture controlled environment, with 24x7 video monitoring. This monitoring includes temperature, humidity and movement (notification of any movement captured by video surveillance) alerts.

• The building at which the server room is located has 24x7 oversight by the managing company.

All communication between the servers and the web front end is done via https connections utilizing 256-bit encryption. Additionally, all transfer of data between Equation Consulting and client systems is also done via 256-bit encryption SSL connection. This includes any data collection process."

The YNHHS Office of Information Security has performed an internal Security Design Review within the past year and has inspected the results of Equations 3<sup>rd</sup> Party audit and penetration test results.

9. Describe the tasks and products assigned to this agent or contractor for this project.

Create Data Warehouse for internal use (data extraction, trending and analysis)

10. Describe the qualifications of this agent or contractor to perform such tasks or deliver such products.

Equation Consulting manages and condolidates data for other many other health care providers and hospitals

11. Describe your oversight and monitoring of the activity and actions of this agent or subcontractor.

Bi-Weekly status meetings between Yale New Haven Health and Equation Consulting occur, and monitoring of warehouse cube internally takes place. Equation Consulting has also been evaluated by Yale New Haven Health's Information Technology Office of Information Security team and found to employ best practices and stringent security protocols and practices.

#### XIII. ASSURANCES

Applicants requesting and receiving data from CHIA pursuant to 957 CMR 5.00 ("Data Recipients") will be provided with data following the execution of a data use agreement that requires the Data Recipient to adhere to processes and procedures aimed at preventing unauthorized access, disclosure or use of data.

Data Recipients are further subject to the requirements and restrictions contained in applicable state and federal laws protecting privacy and data security, and will be required to adopt and implement policies and practices to protect CHIA data in a manner consistent with the requirements of the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA).

Data Recipients must promptly notify CHIA of any unauthorized use or disclosure of CHIA data.

By my signature below, I attest to: (1) the accuracy of the information provided herein; (2) my organization's ability to meet CHIA's minimum data security requirements; and (3) my authority to bind the organization seeking CHIA data for the purposes described herein.

Signature:	
Printed Name:	
Original Application Submission Date:	
Dates Application Revised:	