

**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.*

**NOTE:** *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 [website](#).*

**I. GENERAL INFORMATION**

APPLICANT INFORMATION	
Applicant Name:	William Rafelson MD, MBA
Title:	House Staff Officer in Medicine
Organization:	Rhode Island Hospital
Project Title:	Hospital Consolidation in MA: 1989-2014
Mailing Address:	593 Eddy St, Providence, RI 02906
Telephone Number:	401-350-7793
Email Address:	william_rafelson@brown.edu
Names of Co-Investigators:	Eli Adashi MD MS
Email Addresses of Co-Investigators:	eli_adashi@brown.edu
Original Data Request Submission Date:	6.9.2015
Dates Data Request Revised:	7.14.2015, 10.8.2015, 10.16.2015
Project Objectives (240 character limit)	Our project aims to determine the extent of health care consolidation in Massachusetts, and its change over time. We hope to do this in a quantitative manner using Herfindahl-Hirschman Indices based on total discharges and charges from 1989-2014.
Project Research Questions (if applicable)	<ol style="list-style-type: none"> <li>1. Which regions of MA have most hospital consolidation?</li> <li>2. Has this consolidation increased or decreased over time?</li> <li>3. How have costs of care changed in various MA regions over time?</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.

Briefly, this project will chart the health care marketplace of all six regions (as defined by EOHHS) in Massachusetts, and using deidentified discharge data (including total number and charges) we hope to determine the level of consolidation of each region in MA, and chart how HHI has changed over time. We hope to use the data from MA CHIA to chart the change in consolidation from 1989 to 2014. Our hypothesis is that the market has become more concentrated as larger health systems have adopted smaller community hospitals. This project will help policy makers in identifying the impact (e.g., cost and access), if any, of consolidation of large health systems on the health care consumers.

**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
<p><b>Inpatient Discharge</b></p>	<p><input checked="" type="checkbox"/> Level 1 – No Identifiable Data Elements  <input type="checkbox"/> Level 2 – Unique Physician Number (UPN)  <input type="checkbox"/> Level 3 – Unique Health Information Number (UHIN)  <input type="checkbox"/> Level 4 – UHIN and UPN  <input type="checkbox"/> Level 5 – Date(s) of Admission; Discharge; Significant Procedures  <input type="checkbox"/> Level 6 – Date of Birth; Medical Record Number; Billing Number</p> <p><b>PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE CHOSEN LEVEL:</b>                      This project aims to analyze trends in the acute care hospital market in Massachusetts.                      Given the economic focus of the project, only summary level discharge data will be needed for this project.</p>	<p><u>1998 – 2014 Available</u>                      (limited data 1989-1997)  <b>1989-2014</b></p>
<p><b>Outpatient Observation</b></p>	<p><input type="checkbox"/> Level 1 – No Identifiable Data Elements  <input type="checkbox"/> Level 2 – Unique Physician Number (UPN)  <input type="checkbox"/> Level 3 – Unique Health Information Number (UHIN)  <input type="checkbox"/> Level 4 – UHIN and UPN  <input type="checkbox"/> Level 5 – Date(s) of Admission; Discharge; Significant Procedures  <input type="checkbox"/> Level 6 – Date of Birth; Medical Record Number; Billing Number</p> <p><b>PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE CHOSEN LEVEL:</b></p>	<p><u>2002 – 2014 Available</u></p>
<p><b>Emergency Department</b></p>	<p><input type="checkbox"/> Level 1 – No Identifiable Data Elements  <input type="checkbox"/> Level 2 – Unique Physician Number (UPN)  <input type="checkbox"/> Level 3 – Unique Health Information Number (UHIN)  <input type="checkbox"/> Level 4 – UHIN and UPN  <input type="checkbox"/> Level 5 – Date(s) of Admission; Discharge; Significant Procedures  <input type="checkbox"/> Level 6 – Date of Birth; Medical Record Number; Billing Number</p> <p><b>PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE CHOSEN LEVEL:</b></p>	<p><u>2000 – 2014 Available</u></p>

**IV. FEE INFORMATION**

Please consult the fee schedules for Case Mix data, available at [http://chiamass.gov/regulations/#957\\_5](http://chiamass.gov/regulations/#957_5), 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 [fee schedule](#) 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.

The project aims to lower total medical expenses by showing how hospital consolidation has increased the total cost of care for patients and the health care system as a whole in Massachusetts. We are confident that our data, once published in an academic journal, will be informative to regulatory agencies, especially the MA Attorney General's office, and help to guide decisions about monitoring consolidation of health care markets in the future. This will help control health care costs in the state.

**VI. ALL OTHER REQUESTS - PURPOSE AND INTENDED USE**

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

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).
  - Yes, and a copy of the approval letter is attached to this application.
  - No, the IRB will review the project on \_\_\_\_\_.
  - No, this project is not subject to IRB review.
  - No, my organization does not have an IRB.

4.

**VII. APPLICANT QUALIFICATIONS**

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

Both Dr. Adashi and I have published on health policy and medicine in general medical journals. We are both researchers studying the effect of consolidation in health care.

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

2. 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:

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

Individual Provider Level Data

What is the purpose of the linkage:

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

Individual Facility Level Data

What is the purpose of the linkage:

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

Aggregate Data

What is the purpose of the linkage:

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

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.

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

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.

**The goal of this project is to be furnished into a health policy report for academic medical journal.**

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.

With the permission from CHIA, the results of the analysis would be publicly available without charge. Once the final project is published, the analysis would be available on a medical journal website as supplemental material. A party could also obtain these results by contacting either Dr. Adashi or myself via email with a request.

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.)?

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

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

N/A

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

Company Name:	
Contact Person:	
Title:	
Address:	
Telephone Number:	
E-mail Address:	
Organization Website:	

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

N/A

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

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

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

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

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**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:	<i>W. Rafelson</i>
Printed Name:	<b>William Rafelson</b>
Original Application Submission Date:	<b>June 9, 2015</b>
Dates Application Revised:	July 14, 2015, October 8th, 2015, October 16, 2015