

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

*This form is required by all Applicants, except Government Agencies as defined in [957 CMR 5.02](#). 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 if your organization may receive CHIA data. Please be sure the documents are completed fully and accurately. You may wish to consult the Evaluation Guide that CHIA will use to review your documents. Prior to receiving CHIA Data, the organization must execute the [Data Use Agreement](#). You may wish to review that document as you complete these forms.*

***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.***

*All attachments must be uploaded to IRBNet with your Application. All applications documents can be found on the [CHIA website](#) in Word and/or PDF format.*

## I. GENERAL INFORMATION

APPLICANT INFORMATION	
Applicant Name:	David Bierschied
Title:	Director, Strategic Financial Planning
Organization:	UMass Memorial Healthcare Inc
Project Title:	FY15 Market Data
IRBNet ID:	UMass Memorial
Mailing Address:	306 Belmont St, Suite 120, Worcester MA 01604
Telephone Number:	508-334-0463
Email Address:	<a href="mailto:David.Bierschied@umassmemorial.org">David.Bierschied@umassmemorial.org</a>
Names of Co-Investigators:	Ian.Copland; Thomas Jagling; Alicia Colizza
Email Addresses of Co-Investigators:	<a href="mailto:Ian.Copland@umassmemorial.org">Ian.Copland@umassmemorial.org</a> <a href="mailto:Thomas.Jagling@umassmemorial.org">Thomas.Jagling@umassmemorial.org</a> <a href="mailto:Alicia.Colizza@umassmemorial.org">Alicia.Colizza@umassmemorial.org</a>
Original Data Request Submission Date:	July 1, 2016
Dates Data Request Revised:	
Project Objectives (240 character limit):	Provide de-identified data and analysis to UMass Memorial Health Care internal service areas for purposes of: a) market share by service area; b) community needs assessment by service line; and c) analysis by DRG, Diagnosis, and Procedure categories.
Project Research Questions (if applicable) Business Use Case(s):	1. 2. 3.

**II. PUBLIC INTEREST & PROJECT SUMMARY**

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

Providing inpatient analytics to internal providers promotes programmatic investment in services increasing our community presence to deliver exceptional value (quality/cost) to the patients we serve.

2. Has an Institutional Review Board (IRB) reviewed your project?

- Yes, a copy of the approval letter and protocol must be **attached** to this Application
- No, this project is not human subject research and does not require IRB review.

3. If your project has not been reviewed by an IRB, please **attach** a brief (1-2 page) description of your project including the methodology, objectives, and research questions.

**III. DATA FILES REQUESTED** [*Applicants seeking 2015 data only should skip to Question 2*]

1. FY 2004 – 2014 Data: Please indicate the Case Mix files from which you seek data, the Level(s), the year(s) of data requested, and your justification for requesting *each* file. Please refer to the [Case Mix Data Specifications](#) for details of the file contents.

CASE MIX FILES	Levels 1 – 6	Years Available 2004 - 2014
<b>Inpatient Discharge</b>	<input type="checkbox"/> Level 1 – 3 Digit Zip Code <input type="checkbox"/> Level 2 – Unique Physician Number (UPN) + 5 Digit Zip Code <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 <b><u>PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE CHOSEN LEVEL:</u></b>  	Year(s) of Data Requested:
<b>Outpatient Observation</b>	<input type="checkbox"/> Level 1 – 3 Digit Zip Code <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 <b><u>PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE CHOSEN LEVEL:</u></b>  	Year(s) of Data Requested:

<b>Emergency Department</b>	<input type="checkbox"/> Level 1 – 3 Digit Zip Code <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 <b><u>PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE CHOSEN LEVEL:</u></b>  	<b>Year(s) of Data Requested:</b>
-----------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------

2. FY 2015 Data: Beginning with fiscal year 2015, Massachusetts Acute Care Hospital and Case Mix and Charge Data (collectively Case Mix Data) are released in **Limited Data Set (LDS) files**. Please refer to the [Case Mix Data Specifications](#) for details of the file contents.

Please indicate the Case Mix files from which you seek data, the year(s) of data requested, and your justification for requesting each file.

CASE MIX LIMITED DATA SET FILES	Year(s) Of Data Requested Current Yrs. Available <input type="checkbox"/> 2015
<input checked="" type="checkbox"/> <b>Inpatient Discharge</b>	<b>Please describe how your research objectives require Inpatient Discharge data:</b> CHIA data will be used in strategic planning and market analysis presentations to internal users of UMass Memorial Healthcare for the purposes of market share by service area and analysis by DRG, Diagnosis, and Procedure categories.
<input checked="" type="checkbox"/> <b>Outpatient Observation</b>	<b>Please describe how your research objectives require Outpatient Observation data:</b> CHIA data will be used in strategic planning and market analysis presentations to internal users of UMass Memorial Healthcare for the purposes of market share by service area and analysis by Diagnosis and Procedure categories.
<input checked="" type="checkbox"/> <b>Emergency Department</b>	<b>Please describe how your research objectives require Emergency Department data:</b> CHIA data will be used in strategic planning and market analysis presentations to internal users of UMass Memorial Healthcare for the purposes of market share by service area and analysis by Diagnosis and Procedure categories.

**Sections IV-IX must be completed by all Applicants requesting 2015 data. Applications that only include requests for prior years of data can skip to Section X.**

**IV. GEOGRAPHIC DETAIL**

Please choose one of the following geographic options for MA residents:

<input type="checkbox"/> 3 Digit Zip Code (Standard)	<input type="checkbox"/> 3 Digit Zip Code & City/Municipality ***	<input checked="" type="checkbox"/> 5 Digit Zip Code ***	<input type="checkbox"/> 5 Digit Zip Code & City/Municipality ***
------------------------------------------------------	-------------------------------------------------------------------	----------------------------------------------------------	-------------------------------------------------------------------

**\*\*\*Please provide justification for the chosen level of geographic detail if requesting something other than 3-Digit Zip Code only. Refer to specifics in your methodology:** We are requesting the full five digit zip code. Without the full five digit zip code we will not be able to identify utilization at our regional service areas or identify strategic placement of services based on need and demand. No reporting or analysis is done at the individual patient level but aggregated at the service area and hospital grouping. At the data record level we identify by zip code our four regions within our total service area. This allows us to identify community needs and demand as well as market share by region or total service area.

**V. DEMOGRAPHIC DETAIL**

Please choose one of the following demographic options:

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

**VI. DATE DETAIL**

Please choose one option from the following options for dates:

<input type="checkbox"/> Year (YYYY)(Standard)	<input checked="" type="checkbox"/> Month (YYYYMM) ***	<input type="checkbox"/> Day (YYYYMMDD)***
<b>***Please provide justification for the chosen level of date detail if requesting Month or Day. Refer to specifics in your methodology:</b> Inclusion of the month will allow us to identify seasonality trends.		

**VII. PHYSICIAN IDENTIFICATION NUMBERS (UPN)**

Please choose one of the following options for Provider Identifier(s):

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

**VIII. HASHED UNIQUE HEALTH IDENTIFICATION NUMBER (UHIN)**

Please choose one of the following:

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

--

**IX. HASHED MOTHER’S SOCIAL SECURITY NUMBER**

Please choose one of the following:

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

**X. 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, please indicate below the types of database to which CHIA Data 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 level (e.g., American Hospital Association data)
- Aggregate Data (e.g., Census data)
- Other (please describe):

3. If yes, describe the data base(s) to which the CHIA Data will be linked, which CHIA data elements will be linked; and the purpose for the linkage(s):

--

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.

--

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

**XI. PUBLICATION / DISSEMINATION / RE-RELEASE**

1. Describe your plans to publish or otherwise disclose CHIA Data, or any data derived or extracted from such CHIA Data, in any paper, report, website, statistical tabulation, seminar, conference, or other setting. 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 display a cell less than 11, and no percentages or other mathematical formulas will be used if they result in the display of a cell less than 11.

CHIA data will be used in strategic planning to meet community needs and market analysis presentations to internal users of UMass Memorial Healthcare following CHIA data use protocols. Additionally, very high level summary analysis may be made available to bond rating agencies and/or economic development and finance agencies.

2. Do you anticipate that the results of your analysis will be published and/or publically available to any interested party? Please describe how an interested party will obtain your analysis and, if applicable, the amount of the fee, that the third party must pay.

The results of our analysis will not be publicly available.

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

x No

6. Will you be reselling CHIA Data in any format?

Yes

x No

If yes, in what format will you be reselling CHIA Data (e.g., as a standalone product, incorporated with a software product, with 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 qualifications (and the qualifications of your co-investigators) to perform the research described.

The principal investigators have over 50 years of combined hospital Finance experience and have participated for many years in analysis directly related to this project. The CHIA data will be used to provide market share analytics for internal use only.

2. **Attach** résumés or curricula vitae of the Applicant/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.**

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:	

1. Will the agent have access to the CHIA Data at a location other than your location, your off-site server and/or your database?

- Yes, a separate Data Management Plan must be completed by each agent who will store CHIA Data
- No

2. Describe the tasks and products assigned to this agent for this project; their qualifications for completing the tasks; and the Organization’s oversight of the agent, including how the Organization will ensure the security of the CHIA Data to which the agent has access.

**XIV. FEE INFORMATION**

Please consult the [fee schedules](#) for Case Mix Data and select from the following options:

- x Single Use
- Limited Multiple Use
- Multiple Use

Are you requesting a fee waiver?

- Yes
- x No

If yes, please refer to the [Application Fee Remittance Form](#) and submit a letter stating the basis for your request (if required). 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.

By submitting this Application, the Data Applicant attests that it is aware of its data use, privacy and security obligations imposed by state and federal law *and* is compliant with such use, privacy and security standards. The Data Applicant further agrees and understands that it is solely responsible for any breaches or unauthorized access, disclosure or use of any CHIA Data provided in connection with an approved Application, including, but not limited to, any breach or unauthorized access, disclosure or use by its agents.

Applicants requesting data from CHIA will be provided with data following the execution of a Data Use Agreement that requires the Data Applicant to adhere to processes and procedures aimed at preventing unauthorized access, disclosure or use of data.

**By my signature below, I attest to: (1) the accuracy of the information provided herein; (2) that the requested data is the minimum necessary to accomplish the purposes described herein; (3) the Data Applicant 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) my authority to bind the organization seeking CHIA Data for the purposes described herein.**

Signature: (Authorized Agent)	
Printed Name :	
Title:	
Applicant's Signature:	
Name:	David Bierschied
Title:	Director, Strategic Financial Planning
Original Data Request Submission Date:	July 1, 2016
Dates Data Request Revised:	

Attachments. Please indicate below which documents have been attached to the Application and uploaded to IRBNet:

- 1. IRB approval letter or summary of project (if applicable)
- 2. Resumes of Applicant and co-investigators
- 3. Data Management Plan (for each institution that will store CHIA Data) – See previously approved plan