

## Non-Governmental Application for Massachusetts Case Mix and Charge 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 [casemix.data@state.ma.us](mailto:casemix.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 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](mailto: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 AND INVESTIGATOR INFORMATION

<b>Project Title:</b>	Prospect Medical Service Area Study
<b>IRBNet Number:</b>	
<b>Organization Requesting Data (Recipient):</b>	Prospect Medical Holdings
<b>Organization Website:</b>	<a href="https://prospectmedicalsyste.ms.com">https://prospectmedicalsyste.ms.com</a>
<b>Authorized Signatory for Organization:</b>	Frank Saidara
<b>Title:</b>	Vice President, Corporate Development
<b>E-Mail Address:</b>	<a href="mailto:frank.saidara@prospectmedical.com">frank.saidara@prospectmedical.com</a>
<b>Address, City/Town, State, Zip Code:</b>	3415 South Sepulveda Boulevard., 9th Floor, Los Angeles, CA 90034
<b>Data Custodian: (individual responsible for organizing, storing, and archiving Data)</b>	Prospect Medical Holdings – Frank Saidara
<b>Title:</b>	Vice President, Corporate Development
<b>E-Mail Address:</b>	<a href="mailto:frank.saidara@prospectmedical.com">frank.saidara@prospectmedical.com</a>
<b>Telephone Number:</b>	(310) 696-4747
<b>Address, City/Town, State, Zip Code:</b>	3415 South Sepulveda Boulevard., 9th Floor, Los Angeles, CA 90034
<b>Data Custodian: (individual responsible for organizing, storing, and archiving Data)</b>	NERA Economic Consulting – Thomas McCarthy
<b>Title:</b>	Managing Director
<b>E-Mail Address:</b>	<a href="mailto:Thomas.mccarthy@nera.com">Thomas.mccarthy@nera.com</a>
<b>Telephone Number:</b>	213-346-3005
<b>Address, City/Town, State, Zip Code:</b>	NERA Economic Consulting, Suite 1950, 777 South Figueroa St., Los Angeles, CA 90017
<b>Primary Investigator: (individual responsible for the research team using the Data)</b>	Frank Saidara
<b>Title:</b>	Managing Director
<b>E-Mail Address:</b>	Vice President, Corporate Development
<b>Telephone Number:</b>	213-346-3005
<b>Names of Co-Investigators:</b>	Thomas McCarthy
<b>E-Mail Addresses of Co-Investigators:</b>	<a href="mailto:Thomas.mccarthy@nera.com">Thomas.mccarthy@nera.com</a>

### IV. PROJECT INFORMATION

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

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

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.

Prospect Medical Holdings is seeking to understand whether and how much Massachusetts hospitals provide inpatient care to Rhode Island residents.

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.*

This project will assist Prospect Medical Holdings in determining strategic plans for future services and treatment of Rhode Island patients in Our Lady of Fatima Hospital. Doing so will assist Our Lady of Fatima Hospital in preserving affordable accessibility to the needed and appropriate health care for Rhode Island residents

#### VI. DATASETS REQUESTED

The Massachusetts Case Mix and Charge Data 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 and Charge Data are updated each fiscal year (October 1 – September 30) and made available to approved data users. For more information about Case Mix and Charge 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.

<input type="checkbox"/> <b>Hospital Inpatient Discharge Data</b>
<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 checked="" type="checkbox"/> 2015 <input checked="" type="checkbox"/> 2016
<b>Describe how your research objectives require Inpatient Discharge data:</b> This project requires Inpatient Discharge data, as it is the only way that Our Lady of Fatima can determine whether and how many Rhode Island residents are seeking care at Massachusetts hospitals, and will provide information on the type of care being sought by these individuals
<input type="checkbox"/> <b>Outpatient Hospital Observation Stay Data</b>
<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
<b>Describe how your research objectives require Outpatient Hospital Observation Stay data:</b> N/a
<input type="checkbox"/> <b>Emergency Department Data</b>
<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
<b>Describe how your research objectives require Emergency Department data:</b> N/a

## 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 and Charge Data are grouped into six "Levels" or Limited Data Sets (LDS) for release, depending on the fiscal year. Data for FY 2004 – 2014 are organized into Levels. Level 6 Data will be released to Government Applicants only. *CHIA staff will use the information provided in this section to determine the appropriate Level of Data justified for release.*

Data for FY 2015 and later are organized into LDS's. 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.

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 ***
Three-digit zipcodes are too broad to understand where patients are coming from and the degree to which different hospitals are actually competing for these patients. For example, one hospital might draw heavily from the northern end of a three-digit zip while another hospital draws heavily from the southern part, yet their 5-digit service areas never overlap. The three digit zip would mistakenly indicate that the service areas overlapped.			

#### Demographic Data

Choose one of the following options.

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

#### 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)***
Necessary to account for Medicare reimbursement changes that occur in October. We may also be able to use the data to correct for any seasonality that might occur.		

#### Practitioner Identifiers (UPN)

Select one of the following options.

<input type="checkbox"/> Not Requested (Standard)	<input type="checkbox"/> Hashed ID ***	<input checked="" type="checkbox"/> Board of Registration in Medicine Number(BORIM) ***
Necessary to understand what services are outmigrating from RI to MA, as well as helpful in understanding the referral patterns for these services		

#### Unique Health Information Number (UHIN)

Select one of the following options.

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

#### 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 ***
*** If requested, provide justification for requesting Hashed Mother's SSN. Refer to specifics in your methodology: N/a	

## 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 data base(s) to which the CHIA Data will be linked, indicate which CHIA Data elements will be linked and the purpose for each linkage.

Similar discharge data from Rhode Island and Connecticut

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.

A simple combination of data sets to understand what percentage of Rhode island patients are out migrating to surrounding states and for what services.

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

Unknown at this point; final file will not be linked, just used to make estimates

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

Patient name, street address are not requested and will not be used. Moreover, results will be aggregated by DRG and by Service areas; thus, will not present individual data

#### 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.

No.

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.

At this time Prospect only has plans to use this data for internal purposes. If requested, it is possible that Prospect might disclose the results of the research project to state or federal authorities.

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?

Analysis will be based on 5-digit zip code level data. The maps will reflect service areas that are combinations of 5-digit zip codes and will not identify individuals or individual patient locations.

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?

N/a

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

N/a

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?

N/a

## XI. INVESTIGATOR 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.

NERA Economic Consulting has years of experience in analyzing health care services. The lead investigator (Tom McCarthy) has been analyzing geographic markets and hospital mergers for hundreds of different mergers or potential mergers, all of which involve looking at inpatient discharge data to identify service areas, their overlaps and various measures of the degree of competition among a set of hospitals, such as a diversion ratio analysis.

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.)

## XII. 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 work with the CHIA Data. [Add agents or contractors as needed.]

AGENT/CONTRACTOR #1 INFORMATION	
Company Name:	NERA Economic Consulting
Company Website:	<a href="http://www.nera.com">www.nera.com</a>
Contact Person:	Thomas McCarthy
Title:	Managing Director
E-mail Address:	<a href="mailto:Thomas.mccarthy@nera.com">Thomas.mccarthy@nera.com</a>
Address, City/Town, State, Zip Code	NERA Economic Consulting, Suite 1950, 777 South Figueroa St., Los Angeles, CA 90017
Telephone Number:	213-346-3005
Term of Contract:	Unspecified, length of project. Estimated at one (1) year.

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

NERA will conduct the market share analysis for Prospect Medical using MA CHIA data.

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.

Prospect Medical will be in close touch with NERA in a consistent back and forth regarding data usage and analytical results.

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.

### XIII. 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 :	Frank Saidara
Title:	Vice President, Corporate Development

#### 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.**

## **Attachment 1: Research Methodology**

### ***Research Questions***

1. What are the competitive effects of hospital facilities in neighboring states on Rhode Island Residents?
2. What services and what patients from what locations are leaving the state for hospital care?

Prospect Medical Holdings (“Prospect”) owns 20 hospitals in six states, including Connecticut and Rhode Island. In Rhode Island, Prospect also belongs to a joint venture network called CharterCARE Health Partners. CharterCARE Health Partners is a coordinated regional care network comprised of two acute care hospitals, a large nursing home facility, a regional cancer center, a rehabilitation center, a community primary care center, a home health services company, an IPA, and a large physician group practice. CharterCARE also operates a school of nursing.

For strategic planning and corporate development purposes, Prospect wishes to understand the competitive effects of hospital facilities in neighboring states on Rhode Island residents. In particular, Prospect wishes to understand what services and what patients from what locations are leaving the state for hospital care. This information is important to understanding where the Prospect hospitals and CharterCARE could do a better job of keeping Rhode Island patients home or even to attract more out-of-state residents to ensure a reliable scale and mix of services. Such studies require a full discharge dataset like the data collected by CHIA and used by HPC to evaluate hospital services in Massachusetts. The CHIA data include patient level data including important information such as the patient’s residential zip code, the exact medical care received, the hospital at which the care was received, and other demographic data.

This study will also help inform Prospect about the likely effects of pending merger proposals that might inform Prospect of which types of medical services are currently leaving the state, and where they are going. Prospect already has obtained Connecticut inpatient discharge data and expects to receive Rhode Island inpatient discharge data this week. With the exception of patient name and street address or any personal identifiers, both data sets include all the information needed to study the degree to which hospitals services are leaving Rhode Island for care in Connecticut. The CHIA is needed to explore the same question for possible outmigration to Massachusetts.

NERA Economic Consulting is the principal firm that will use the data to perform the analysis. The methods will include looking at DRG and other service area overlaps across competing hospitals, measures of outmigration by DRG or service line, measures of outmigration due to differences in the complexity of the care available in Rhode Island compared to the care needed, and a diversion analysis to estimate which hospitals are the closest substitutes to the Our Lady of Fatima and the other CharterCARE partners. NERA has extensive experience in performing these types of studies and working with patient discharge data, including managing all HIPAA concerns and data security issues.