

**Commonwealth of Massachusetts  
Center for Health Information & Analysis (CHIA)  
Non-Government Agency Application for Data**

**NOTE:** This application is to be used by all applicants, except Government Agencies, as defined in 957 CMR 5.02.

**I. GENERAL INFORMATION**

APPLICANT INFORMATION	
Applicant Name:Snehal N. Shah, MD, MPH	
Title:Director, Research and Evaluation Office	
Organization:Boston Public Health Commission	
Project Title:Continuing Use of Case Mix Data	
Date of Application:10/18/2013	
Project Objectives (240 character limit) The Boston Public Health Commission (BPHC) is the oldest public health department in the country and serves as the City of Boston Board of Health. As a municipal public health agency that is publicly funded, the Boston Public Health Commission provides a variety of health services and has more than 40 programs. Public service and access to quality healthcare is a major focus of its mission “to protect, preserve, and promote the health and wellbeing of all Boston residents, particularly those who are most vulnerable.” Similar to state health departments, a primary function of BPHC is to conduct local public health surveillance. Access to and use of data is critical to fulfilling this function which is why, historically, the Commission has relied on case mix data as one of its many data resources for public health surveillance. The Commission is requesting case mix data much like an agency such as the Massachusetts Department of Public Health would.	
Project Research Questions In monitoring the health of Boston residents through a variety of public health surveillance activities, the Boston Public Commission uses aggregate case mix data to help with answering such questions as: <ol style="list-style-type: none"> <li>1) What are the disease patterns among Boston residents?</li> <li>2) Which health outcomes for Boston residents could benefit the most from initiatives and policies developed and implemented by the Commission?</li> <li>3) What is the burden of specific diseases within the Boston population that contributes to racial/ethnic and neighborhood health inequities?</li> <li>4) Are there inpatient, ED and outpatient observation utilization patterns that may signal inadequacy of primary care resources or poor management of chronic health problems such as asthma and diabetes?</li> </ol>	<ol style="list-style-type: none"> <li>1.</li> <li>2.</li> <li>3.</li> </ol>

Please indicate if you are a Researcher, Payer, Provider or Provider Organization and you are seeking data pursuant to [957 CMR 5.04](#) (De-Identified Data) or [957 CMR 5.05](#) (Direct Patient Identifiers for Treatment or Coordination of Care).

<ul style="list-style-type: none"> <li><input type="radio"/> Researcher</li> <li><input type="radio"/> Payer</li> <li><input type="radio"/> Provider / Provider Organization</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="radio"/> 957 CMR 5.04 (De-identified Data)</li> <li><input type="radio"/> 957 CMR 5.05 (Direct Patient Identifiers)</li> <li>•Publicly Funded Municipal Health Agency</li> </ul>
---	---

All other requests are subject to [957 CMR 5.06](#).

**II. PROJECT SUMMARY**

Briefly describe the purpose of your project and how you will use the CHIA data?

Aggregate inpatient discharge, hospital emergency department (ED), and outpatient observation data are needed to assist the Boston Public Health Commission (BPHC) with its public health surveillance activities, especially assessing and monitoring the health of Boston residents--a major responsibility of the Commission. Analysis of these data will provide the Commission with an important additional dimension to identifying and understanding the patterns of illness, treatment and care among Boston residents. This in turn will allow for the identification of needs and gaps in existing health care resources utilized by Boston residents so that appropriate public health measures and initiatives can be considered and policy decision making enhanced.

Inpatient discharge, hospital ED utilization, and observational stay data, in aggregate form, are incorporated into BPHC major health reports such as *Health of Boston*. This annual report provides health professionals, planners, researchers, elected public officials, community organizations, and others, with information to help address health issues that affect Boston residents and their neighborhoods.

**III. FILES REQUESTED**

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

DATABASE	Level 1 <sup>1</sup> or 2 <sup>2</sup>	Single or Multiple Use	Year(s) Of Data Requested Current Yrs. Available 2009 - 2011
<input type="checkbox"/> Medical Claims	<input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2	Select... ▼	<input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011
<input type="checkbox"/> Pharmacy Claims	<input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2	Select... ▼	<input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011
<input type="checkbox"/> Dental Claims	<input type="checkbox"/> Level 2	Select... ▼	<input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011
<input type="checkbox"/> Member Eligibility	<input type="checkbox"/> Level 2	Select... ▼	<input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011
<input type="checkbox"/> Provider	<input type="checkbox"/> Level 2	Select... ▼	<input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011
<input type="checkbox"/> Product	<input type="checkbox"/> Level 2	Select... ▼	<input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011
<b>CASEMIX</b>	<b>Level 1 - 6</b>		<b>Fiscal Years Requested</b>
<b>Inpatient Discharge</b>	<input type="checkbox"/> Level 1 – No Identifiable Data Elements <input type="checkbox"/> Level 2 – Unique Physician Number (UPN) X 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		<u>1998-2012 Available</u> (limited data available 1989-1997)  2012
<b>Outpatient Observation</b>	<input type="checkbox"/> Level 1 – No Identifiable Data Elements <input type="checkbox"/> Level 2 – Unique Physician Number (UPN) X 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		<u>2002-2011 Available</u>  2012

<sup>1</sup> Level 1 Data: De-identified data containing information that does not identify an individual patient and with respect to which there is no reasonable basis to believe the data can be used to identify an individual patient. This data is de-identified using standards and methods required by HIPAA.

<sup>2</sup> Level 2 (and above) Data: Includes those data elements that pose a risk of re-identification of an individual patient.

<b>Emergency Department</b>	<input type="checkbox"/> Level 1 – No Identifiable Data Elements	<u>2000-2011 Available</u>
	<input type="checkbox"/> Level 2 – Unique Physician Number (UPN)	
	<input checked="" type="checkbox"/> Level 3 – Unique Health Information Number (UHIN)	<u>2012</u>
	<input type="checkbox"/> Level 4 – UHIN and UPN; Stated Reason for Visit	
	<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	

**IV. REQUESTED DATA ELEMENTS [APCD Only]**

State and federal privacy laws limit the use of individually identifiable data to the minimum amount of data needed to accomplish a specific project objective. Please use the [APCD Data Specification Workbook](#) to identify which data elements you would like to request and attach this document to your application.

**V. MEDICAID DATA**

Federal law (42 USC 1396a(a)7) restricts the use of individually identifiable data of Medicaid recipients to uses that benefit the administration of the Medicaid program. If you are requesting Medicaid data from Level 2 or above, please describe in detail why your use of the data benefits the administration of the Medicaid program.

**VI. MEDICARE DATA**

Medicare data may be disseminated to state agencies and/or entities conducting research projects that are directed and partially funded by the state if such research projects would allow for a Privacy Board or an IRB to make the findings listed at 45 CFR 164.512(i)(2)(ii) if the anticipated data recipient were to apply for the data from CMS directly. If you are requesting Medicare data, please explain how your research project is directed and partially funded by the state and describe in detail why your proposed project meets the criteria set forth in 45 CFR 164.512(i)(2)(ii). Applicants must describe how they will use the data and inform CHIA where the data will be housed. CHIA must be informed if the data has been physically moved, transmitted, or disclosed.

**VII. DIRECT PATIENT IDENTIFIERS<sup>3</sup>**

State and federal privacy laws may require the consent of Data Subjects prior to the release of any Direct Patient Identifiers. If you are requesting data that includes Direct Patient Identifiers, please provide documentation of patient consent or your basis for asserting that patient consent is not required.

**VII. REQUESTS PURSUANT TO 957 CMR 5.04**

<sup>3</sup> Direct Patient Identifiers. Personal information, such as name, social security number, and date of birth, that uniquely identifies an individual or that can be combined with other readily available information to uniquely identify an individual.

Payers, providers, provider organizations and researchers seeking access to Level 1 (de-identified) data are required to describe how they will use such data for the purposes of lowering total medical expenses, coordinating care, benchmarking, quality analysis or other administrative research purposes. Please provide this information below.

--

**IX. FILTERS**

If you are requesting APCD elements from Level 2 or above, describe any filters you are requesting to use in order to limit your request to the minimum set of records necessary to complete your project. (For example, you may only need individuals whose age is less than 21, claims for hospital services only, or only claims from small group projects.

APCD FILE	DATA ELEMENT(S) FOR WHICH FILTERS ARE REQUESTED	RANGE OF VALUES REQUESTED
Medical Claims		
Pharmacy Claims		
Dental Claims		
Membership Eligibility		
Provider		
Product		

**X. PURPOSE AND INTENDED USE**

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

The Boston Public Health Commission (BPHC) uses case mix data, especially aggregate inpatient discharge and hospital ED data to provide city-wide and neighborhood-level surveillance in understanding the major health problems of Boston residents, developing public health initiatives, measuring progress towards improving health outcomes of Boston residents, and supporting policy decisions. Interpretive text is provided with our analysis. In addition, the Commission uses case mix data for follow up to public information data requests (internal and external). For example, community coalitions and organizations frequently contact us for neighborhood-level data to assist them with developing strategies for working towards healthier neighborhoods.

Aggregate Case mix data, are also incorporated into the Boston Public Health Commission’s annual *Health of Boston* reports and other special reports such as *Substance Abuse in Boston, 2011* which are made available to the public. The Commission, in collaboration with various community partners, hold several community meetings a year in which presentations are made pertaining to major health issues identified by the community through the availability of neighborhood specific analyses provided by the Commission. Such presentations often include aggregate case mix data analyses.

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)?

- 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.

**XI. APPLICANT QUALIFICATIONS**

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

The Research and Evaluation office of the Boston Public Health Commission has been conducting data analyses using case mix data for more than 10 years. Members of the staff who will have access to the case mix data are epidemiologists with backgrounds in public health and data analysis. They are experienced in working with case mix datasets, and have an understanding of how to appropriately analyze the data. Only members of the staff who have signed the required CHIA Confidentiality Agreements and understand the terms of the data use agreement will have access to the case mix data.

2. Attach résumés or curriculum 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.)

**XII. DATA LINKAGE AND FURTHER DATA ABSTRACTION**

1. Does your project require linking the CHIA Data to another dataset? YES  NO
2. If yes, will the CHIA Data be linked to other patient level data or with aggregate data (e.g. Census data)?  
Patient Level Data  Aggregate Data
3. If yes, please identify all linkages proposed and explain the reasons(s) that the linkage is necessary to accomplish the purpose of the project.

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

**XIII. 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, or similar document.

We usually include some CHIA data (case mix) analyses based on aggregate hospital discharges, ED visits, and outpatient observation data in our annual *Health of Boston* reports, special topic reports such as *Substance Abuse in Boston, 2011*, community meeting presentations, presentations made by the senior leadership of the Boston Public Health Commission, data requests made by BPHC staff for grants and training purposes, and public information data requests made by the general public. Annual *Health of Boston* reports and special topic reports are available in hard copy and also on our website. There is no fee for these reports or presentations. They can be found at [www.bphc.org/hob](http://www.bphc.org/hob). There is also no fee for providing aggregated case mix data for public health information data requests.

When we produce reports intended for publication that includes case mix data, we will send CHIA any charts and/or tables pertaining to case mix data 30 days prior to publication for notification purposes.

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.

Anyone can contact the Commission for aggregate case mix data analyses pertaining to the health of Boston residents available in our annual Health of Boston reports, special reports, or presentations. Case mix data analyses not available from these sources can be requested by completing and submitting a BPHC public information data request form. No fee is charged for providing these data. Interested parties can email or phone the Research and Evaluation Office with their request. Such requests are evaluated by staff in the Research and Evaluation Office to determine if the data being requested are available and can be provided.

- |   |     |                          |    |   |
|---|-----|--------------------------|----|---|
| 3. Will you use the data for consulting purposes?               | YES | <input type="checkbox"/> | NO | X |
| 4. Will you be selling standard report products using the data? | YES | <input type="checkbox"/> | NO | X |
| 5. Will you be selling a software product using the data?       | YES | <input type="checkbox"/> | NO | X |

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

**XIV. 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.  
NOT APPLICABLE

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

1. Will the agent/contractor have access to the data at a location other than your location or in an off-site server and/or database?                      YES                       NO

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

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

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