

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

This application 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 schedules for APCD and Case Mix data 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:	Stacey Eccleston
Title:	Implementation and Research Leader
Organization:	Health Care Incentives Improvement Insitute (HCI3)
Project Title:	ECR Analytics: Price and Quality Transparency
Date of Application:	1/29/2014
Project Objectives (240 character limit)	Evaluate and make publicly available information on the extent of variation in costs and quality of similar medical episodes of care.
Project Research Questions (if applicable)	1, What is the extent of variation in costs and quality of medical care for similar episodes. 2. What drives those differences (price v. utilization).

Please indicate if you are a Researcher, Payer, Provider, Provider Organization or Other entity and whether you are seeking data pursuant to [957 CMR 5.04](#) (De-Identified Data), [957 CMR 5.05](#) (Direct Patient Identifiers for Treatment or Coordination of Care), or [957 CMR 5.06](#) (Discretionary Release).

<input checked="" type="radio"/> Researcher <input type="radio"/> Payer <input type="radio"/> Provider / Provider Organization <input type="radio"/> Other	<input checked="" type="radio"/> 957 CMR 5.04 (De-identified Data) <input type="radio"/> 957 CMR 5.05 (Direct Patient Identifiers) <input type="radio"/> 957 CMR 5.06 (Discretionary Release)
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II. PROJECT SUMMARY

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

The purpose of the project is two-fold: To evaluate the extent of variation in costs and quality of care for similar conditions or episodes and to include that information in national benchmarks. The second is to provide transparency on costs and quality of care by publishing metrics for the state and acrpss providers. The information will be made available to the public and published free of charge.

In March 2012, CMS awarded a contract to a Brandeis University-led coalition to build a “grouper” for Medicare, as stipulated in the Affordable Care Act. The Grouper is designed to be used for generating physician resource use reports and informing the fee schedule value modifiers. As such, over the next several years, the Medicare Grouper will inform much of the way in which physicians are judged for the costs of care delivered. HCI3, part of the coalition, has taken the winning model, PACES (Patient Centered Episode System), and adapted it to analyze both the under-65 population and the post-65 population. This revised system, referred to as SAS for ECR Analytics, is designed to generate certain metrics of costs and quality of care, building on prior work by HCI3 with its PROMETHEUS ECR Analytics v 3.6.

The new ECR Analytics system is a multi-tiered model that begins with individual patients and the episodes they trigger at the lowest level, to an association logic that ultimately rolls them up to global populations, permitting both specific individual drill-downs and global trend estimates. At all these various levels (there are 5), it is possible to distinguish clinically indicated care and its costs from the costs of care due to “defects” in the provision of care. And since reducing care defects is an important federal payment policy focus in addition to having been shown to reduce costs of care while improving quality, we believe the fruits of this research could greatly benefit all Commonwealth residents.

The data will be run through HCI3’s ECR analytic software that groups claims into episodes of care and identifies “typical” vs. “potentially avoidable complications” Metrics will include:

- Total cost of care
- emergency department and Inpatient utilization and diagnoses of high ED/IP utilizers
- percent of costs and volume for each of 23 episodes of care
- Cost variation within each ECR
- Complication rates per ECR
- Variation attributable to price vs. volume vs. mix
- Provider specific cost and quality metrics
- Savings simulations for reducing variation in costs

III. FILES REQUESTED

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

DATABASE	Level 1 ¹ or 2 ²	Single or Multiple Use	Year(s) Of Data Requested Current Yrs. Available 2009 - 2012
<input checked="" type="checkbox"/> Medical Claims	<input type="checkbox"/> Level 1 <input checked="" type="checkbox"/> Level 2	Multiple	<input checked="" type="checkbox"/> 2009 <input checked="" type="checkbox"/> 2010 <input checked="" type="checkbox"/> 2011 <input checked="" type="checkbox"/> 2012
<input checked="" type="checkbox"/> Pharmacy Claims	<input type="checkbox"/> Level 1 <input checked="" type="checkbox"/> Level 2	Multiple	<input checked="" type="checkbox"/> 2009 <input checked="" type="checkbox"/> 2010 <input checked="" type="checkbox"/> 2011 <input checked="" type="checkbox"/> 2012
<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"/> 2012

¹ 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.

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

<input checked="" type="checkbox"/> Member Eligibility <input checked="" type="checkbox"/> Provider <input type="checkbox"/> Product	<input checked="" type="checkbox"/> Level 2 <input type="checkbox"/> Level 2	Multiple Multiple Select...	<input checked="" type="checkbox"/> 2009 <input checked="" type="checkbox"/> 2010 <input checked="" type="checkbox"/> 2011 <input checked="" type="checkbox"/> 2012 <input checked="" type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011 <input type="checkbox"/> 2012
CASEMIX	Level 1 – 6		Fiscal Years Requested
Inpatient Discharge	<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		<u>1998-2012 Available</u> (limited data available 1989-1997)
Outpatient Observation	<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		<u>2002-2012 Available</u>
Emergency Department	<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; 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		<u>2000-2012 Available</u>

IV. FEE INFORMATION

Please consult the fee schedules for APCD (Administrative Bulletin 13-11) and Case Mix data (Administrative Bulletin 13-09) and select from the following options:

APCD Applicants Only

- Academic Researcher
- Others (Single Use)

Others (Multiple Use)

Case Mix Applicants Only

- Single Use
- Limited Multiple Use
- Multiple Use

Are you requesting a fee waiver?

X Yes

No

If yes, please submit a letter stating the basis for your request. (see attached letter)

V. 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.

VI. MEDICAID DATA [APCD Only]

Please indicate here whether you are seeking Medicaid Data:

Yes

X No

Federal law (42 USC 1396a(a)7) restricts the use of individually identifiable data of Medicaid recipients to uses that are directly connected with 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 meets this requirement. Applications requesting Medicaid data will be forwarded to MassHealth for a determination as to whether the proposed use of the data is directly connected to the administration of the Medicaid program. MassHealth may impose additional requirements on applicants for Medicaid data as necessary to ensure compliance with federal laws and regulations regarding Medicaid.

VII. MEDICARE DATA

Please indicate here whether you are seeking Medicare Data:

Yes

X No

Medicare data may only 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.

Applicants seeking Medicare data must complete a Medicare Request Form.

Applicants approved to receive Medicare data will be required to execute an Addendum to CHIA’s standard data use agreement, containing terms and conditions required by CHIA’s data use agreement with CMS.

VIII. DIRECT PATIENT IDENTIFIERS³

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.

Direct patient identifiers are not requested.

IX. REQUESTS PURSUANT TO 957 CMR 5.04

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.

The data will be used for benchmarking episodic costs and quality for performance improvement purposes. Information will provide insight to the Commonwealth on how costs compare to other states and as well as information on inter-provider differences. The information will also be used to evaluate and disseminate best practices with respect to certain episodes of care. By developing an understanding of episodes of care costs, utilization and defect rates, we can develop and propose payment strategies that realign financial incentives for providers to improve outcomes at lower cost to patients and payors. In an effort to provide more transparency on costs and quality, the information on costs and potentially avoidable complications will be made available to the public free of charge.

X. 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		

³ 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.

XI. PURPOSE AND INTENDED USE

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

All analysis results and study findings as well as specific provider performance metrics will be made available directly to the general public through a website www.inquirehealth.org
 This will enable consumers to make better informed health care decisions.

Additionally, the identification of best practices with respect to the treatment of certain conditions will improve the quality of care patients receive.

2. **Attach** a brief (1-2 pages) description of your research methodology. (This description will not be posted on the internet.)

Attached.

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.
- X No, my organization does not have an IRB.

XII. APPLICANT QUALIFICATIONS

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

Members of the project team have vast experience working with medical claims data and other APCDs across the country. Stacey Eccleston was directly involved in the establishment of the MA APCD during her tenure as research director and assistant commissioner at the MA DHCFP and is familiar with its details, strengths and limitations. Included on the team are MDs and PhDs who were originators of the episode creation methodology that will be used for the analysis as well as other episode creation methodologies.

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.) - Attached

XIII. 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.

XIV. 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 derived statistics (not the data) will become part of a larger benchmark database that will be made generally available to other researchers who are using ECR analytics in other areas of the U.S. Basic statistics on costs and complication rates for all episode categories will be compiled and translated in a report that will be provided directly to the Commonwealth. Detailed metrics showing severity adjusted costs and PAC rate differentials across episodes and providers will be incorporated into a website and mobile application hosted by HCI3 designed to provide consumers with access to cost and quality information in the state.

No patient level data will be disclosed, and cell-size suppression will be employed to protect against patient-level reidentification.

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.

The resulting reports and analytics will be available at no charge to any interested party through the HCI3 website and related applicatons.

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|---|-----|--------------------------|----|---|
| 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.