Commonwealth of Massachusetts
Center for Health Information & Analysis (CHIA)
Non-Government MA APCD Request for Data

This form is to be used by all applicants, except Government Agencies as defined in 957 CMR 5.02.

<u>*NOTE:*</u> *In order for your application to be processed, you must submit the required application fee. Please consult the fee schedules for MA APCD data for the appropriate fee amount. A remittance form with instructions for submitting the application fee is available on the CHIA* <u>*website.*</u>

I. GENERAL INFORMATION

APPLICANT INFORMATION	
Applicant Name:	Daniel Caron
Title:	COO
Organization:	RxREVU, Inc.
Project Title:	Improved Prescribing
Mailing Address:	1553 Platte St. Suite 202 Denver, CO 80202
Telephone Number:	617-312-5119
Email Address:	dan.caron@rxrevu.com
Names of Co-Investigators:	Trent Kriete
Email Addresses of Co-Investigators:	trent.kriete@rxrevu.com
Original Data Request Submission Date:	March 20th, 2015
Dates Data Request Revised:	January 8th 2016
Project Objectives (240 character limit)	We are a digital health startup trying to create statistical models to help physicians prescribe medications more effectively and accurately. Improving health outcomes and lowering healthcare costs is our mission. The purpose of this data request is to vet the data and to confirm that we can succeed using the APCD data for our algorithms and predictive models.
Project Research Questions (if applicable) or Business Use Case(s):	1. What is the relative prescribing frequency of a medication for a given condition? 2.How does adherence change for a medication across different patients and conditions?

II. PROJECT SUMMARY

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

We are a digital health startup trying to create statistical models to help physicians prescribe medications more effectively and accurately. If we can improve the prescribing process by just a few percentage points in terms of accuracy and effectiveness, we can reduce side-effects, improve outcomes, make patients feel better, and reduce suffering and costs on a large scale.

III. FILES REQUESTED

Please indicate which MA APCD file(s) you are requesting, the year(s) of data requested, and your justification for requesting *each* file. Please refer to the MA APCD Release 4.0 Documentation Guides for details of the file contents.

MA ALL PAYER CLAIMS DATABASE FILES	Year(s) Of Data Requested Current Yrs. Available ☐ 2010 ☒ 2011 ☒ 2012 ☒ 2013 ☒ 2014
☐ Medical Claims	**Please provide justification for requesting Medical Claims file:**
☒ Pharmacy Claims	**Please provide justification for requesting Pharmacy Claims file:** The pharmacy claims will be used to investigate patient adherence to different treatment options as well as prescribing frequencies of different medications. We are investigating the use case for adherence to medications inside of our clinical support tool. The potential benefit is large. If we can help providers make better prescribing decisions (help choose treatments their patients are most likely to be adherent to), we could help lower over medical cost burden to the patient as well as the healthcare system.
☐ Dental Claims	**Please provide justification for requesting Dental Claims file:**
☐ Member Eligibility	**Please provide justification for requesting Member Eligibility file:**

☐ **Provider** (encrypted NPI) Standard or ☐ **Provider*** (unencrypted NPI)	**Please provide justification for requesting Provider file:**
	***Please provide justificaiton for requesting unencrpted NPI (if requested). Refer to specifics in your methodology:**
☐ **Product**	**Please provide justification for requsting Product file:**

IV. GEOGRAPHIC DETAIL

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

☒ 3 Digit Zip Code (MA)	5 Digit Zip Code (MA)
***Please provide justification for requesting 5 digit zip code. Refer to specifics in your methodology:**	

V. DATE DETAIL

Please choose *one* option from the following options for dates:

Year (YYYY) (Standard)	☒ Month (YYYYMM) ***	☒ Day (YYYYMMDD) *** [for selected data elements only]
*** If requested, lease provide justification for requesting Month or Day. Refer to specifics in your methodology: Month and day are required in order to precisely calcuate adherence based on the pharmacy claims. We do NOT need month and day for biographical information about the patient (e.g. birthday)		

VI. FEE INFORMATION

Please consult the fee schedules for MA APCD data, available at http://chiamass.gov/regulations/#957_5, and select from the following options:

APCD Applicants Only

☐   Academic Researcher
☒   Others (Single Use)
☐   Others (Multiple Use)

Are you requesting a fee waiver?
☐   Yes
☒   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.

VII. MEDICAID DATA [APCD Only]

Please indicate here whether you are seeking Medicaid Data:
☒   Yes
☐   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.

The mission of our statistical models is to improve outcomes and lower costs. By building models that help highlight the most effective medication for a patient, we can help reduce or eliminate the $150 billion dollars of wasteful and unnecessary prescribing (as estimated by ExpressScripts) that happens each year in the United States healthcare system. This research could save Medicaid billions of dollars.

VIII. PURPOSE AND INTENDED USE

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

We develop software to help physicians prescribe medications more accurately by looking at electronic health records and claims data. By analyzing clinical data such as blood pressure or blood sugar we develop statistical models that are designed to save lives, reduce suffering, lessen side-effects and make people healthier and happier by surfacing the most effective medication for a patient based on clinical evidence and data analysis.

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.

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

IX. APPLICANT QUALIFICATIONS

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

Our team is part of the "Startup Health" digital health accelerator program. This group of 71 elite healthcare companies was screened from 1,600 applicants. Through this program we've been to Google, Cleveland Clinic and The White House on our mission to improve healthcare. Our principal investigator, Trent Kriete has over ten years in artificial intelligence, machine learning and advanced statistical analysis. Biographies of our team can be found at: https://rxrevu.com/about - Also, see Trent Kriete's CV specifically.

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.)

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, 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:

None

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

None

☐ Individual Provider Level Data

What is the purpose of the linkage:

> None

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

> None

☐   <u>Individual Facility Level Data</u>

What is the purpose of the linkage:

> None

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

> None

☐   <u>Aggregate Data</u>

What is the purpose of the linkage:

> None

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

> None

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 it will link each dataset .

None

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

None

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.

XI. 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 purpose of this initial trial is to vet the data and to confirm that we can succeed using the APCD data for our algorithms and predictive models. As such, the only dissemination of the data would be to publish findings about the potential for solutions such as RxRevu's to improve healthcare. We would not be using this data directly in the software. We would re-apply for multiple-use if this proves worth-while.

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 results will be made to interested parties through any publication. We as an organization prefer open access publication models, as such any publication will be available for public consumption. No fee will be required to view published results.

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.)?

N/A

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

N/A

XII. 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.

Company Name:	None
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

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.

N/A

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

N/A

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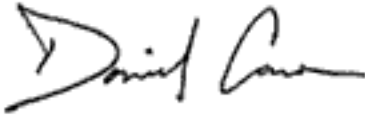
N/A

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, as detailed in the DUA and the applicant's CHIA-approved Data Management Plan.

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 procedures designed to protect CHIA data in a manner consistent with the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA).

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:	
Printed Name:	Daniel Caron
Title	COO
Original Data Request Submission Date:	March 20th 2015
Dates Data Request Revised:	January 8th, 2016