

Massachusetts Division of Health Care Finance and Policy Application for All-Payer Claims Database (APCD) Data

Applications for APCD data must meet the requirements set forth in regulation **114.5 CMR 22.00: Health Care Claims Data Release** and any Administrative Bulletins promulgated under this regulation. The regulation and bulletins are available online at <http://www.mass.gov/eohhs/gov/departments/hcf/regulations.html>. Information provided on pages 1-4 of this application will be posted on the internet for public comment.

A. APPLICANT INFORMATION	
Applicant Name:	Noelle Cocoros, DSc, MPH
Title:	Director of Research and Evaluation
Organization:	Massachusetts Department of Public Health (MDPH), Bureau of Infectious Disease (BID)
Project Title:	Examination of STD, HIV, and Viral Hepatitis Testing, Treatment, and Screening Trends in Massachusetts
Date of Application:	August 31, 2012; amendment submitted January 8, 2013
Brief Description of Project (240 character limit)	The MDPH BID is responsible for the prevention, surveillance, and response to STDs, HIV, and viral hepatitis in Massachusetts. This project will examine trends in testing, treatment, and screening for these reportable conditions to better understand and prevent these infections.

B. DATA REQUESTED

1. PUBLIC USE			
File	SINGLE USE* '08 – '09 – '10	REPEATED USE* '08 – '09 – '10	MULTIPLE USE* '08 – '09 – '10
Medical Claims	X <input type="checkbox"/> X <input type="checkbox"/> X <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Pharmacy Claims	X <input type="checkbox"/> X <input type="checkbox"/> X <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Dental Claims	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Membership Eligibility	X <input type="checkbox"/> X <input type="checkbox"/> X <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Provider	X <input type="checkbox"/> X <input type="checkbox"/> X <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Product	X <input type="checkbox"/> X <input type="checkbox"/> X <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

2. RESTRICTED USE			
File	SINGLE USE* '08 – '09 – '10	REPEATED USE* '08 – '09 – '10	MULTIPLE USE* '08 – '09 – '10
Medical Claims	X <input type="checkbox"/> X <input type="checkbox"/> X <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Pharmacy Claims	X <input type="checkbox"/> X <input type="checkbox"/> X <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Dental Claims	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Membership Eligibility	X <input type="checkbox"/> X <input type="checkbox"/> X <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Provider	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Product	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

* The Division reserves the right to change proposed “use level” after review of this application.

<p>Definitions:</p> <ul style="list-style-type: none"> • Single Use: Use of the data for a project or study. • Repeated Use: Use of the data as an input to develop a report or product for sale to multiple clients or customers provided that it will NOT disclose APCD data. Examples include: development of a severity index tool, development of a reference tool used to inform multiple consulting engagements where no APCD data is disclosed. • Multiple Use: Use of the data to develop a product or service that will be sold in the marketplace and will disclose APCD data. Examples include: a benchmark report produced by analyzing APCD data, a query tool to ease access to APDC data.
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3. **Filters:** If you are requesting data elements from the Restricted Use dataset, 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 products.)

File	Data Element(s)	Range of Values Requested
Medical Claims	Date of Service – From Year Member Birth Month City Name of Member Payer Claim Control Number	These variables will only be analyzed for those claims with one of the Procedure Codes listed in the attachment (i.e., those members who had one of the tests/procedures of interest performed)
Pharmacy Claims	Year Prescription was Filled Member Birth Month City Name of Member Payer Claim Control Number	These variables will only be analyzed for those claims with one of the drug names listed in the attachment (i.e., those members who had a prescription of interest filled)
Dental Claims		
Membership Eligibility	Member Birth Month City Name of Member	These variables will only be analyzed for those claims with one of the Procedure Codes or one of the drug names listed in the attachment
Provider		
Product		

4. **Restricted data elements:** If you are requesting Data Elements from the Restricted Use dataset, list each restricted data element you are requesting on the attached Data Element List and explain why you need access to EACH Restricted Use data element for your project. Limit your request to the

minimum data elements necessary to complete the project and be specific as to how each element relates to your proposed model/analytic plan. Add rows to this table as needed.

Restricted Data Element Name	Restricted Data Element Description	Data File (Medical, Pharmacy, Dental, Eligibility, Provider, Product)	Justification (reason this data element is necessary for your project)
Member City Name	MC014, PC014, ME015 - City name of member	Medical, Pharmacy, and Eligibility	To compare testing and treatment rates/trends to those of confirmed cases of the reportable diseases of interest in specific cities
Date of Service – From Year	MC059 - Year of service	Medical	To compare the number of tests performed to the number of confirmed cases reported to MDPH by year
Payer Claim Control Number	MC004 and PC004	Medical and Pharmacy	To be able to de-duplicate claims and therefore more accurately calculate the number of tests performed and prescriptions filled
Member Birth Month	MC013, PC013, ME014 – Birth month of member	Medical, Pharmacy, and Eligibility	To more accurately estimate the age of the member at the time of the test or prescription
Date Prescription Filled Year	PC032 – Year the prescription was filled	Pharmacy	To compare the number of HIV and HCV prescriptions filled per year to the number of confirmed cases reported to MDPH by year

C. PURPOSE AND INTENDED USE

1. Please describe the purpose of your project and how you will use the APCD.

Under 105 CMR 300, which is authorized by Massachusetts General Law Chapter 111 sections 5 – 7, the Massachusetts Department of Public Health (MDPH) Bureau of Infectious Disease (BID) is responsible for the prevention, surveillance, and response to cases of sexually transmitted diseases (STDs), HIV/AIDS, and viral hepatitis. The purpose of this project is to use APCD data to better understand the occurrence of a subset of reportable conditions in Massachusetts. Specifically, we will examine the number of tests performed for Chlamydia, gonorrhea, syphilis, HIV, hepatitis C virus (HCV), hepatitis B virus (HBV), and hepatitis A virus (HAV) by member and provider characteristics. This analysis will supplement our typical surveillance efforts as well as other data sources used by BID (e.g., BRFSS), and convey information on clinician practices. For example, we aim to understand whether the decline in the number of HCV cases among middle-aged adults in recent years is due to a decline in testing. Additionally, for HCV specifically, this project will allow

MDPH to assess the impact that new Centers for Disease Control and Prevention (CDC) birth cohort testing recommendations may have on provider practice. This will be done by providing a baseline understanding of HCV testing volume in the state that can later be compared to data in the years following the August 2012 release of the recommendations. Further, changes to consent requirements for HIV testing in Massachusetts went into effect in July 2012, wherein written consent for testing is no longer required. MDPH anticipates this change will result in an increase in the number of tests performed and in turn, an increase in the number of HIV-positive individuals knowing their status. By examining the rates of HIV testing the APCD for the currently available years, we can establish a baseline for comparison at a later date.

As a secondary analysis, we will examine the rates of HCV and HIV treatment. We have observed substantial changes in the epidemiology of both HCV and HIV in Massachusetts in recent years (e.g., increases in HCV rates in young adults; overall declining incidence of HIV) and it is imperative that we understand whether providers are treating these serious infections. The APCD data will provide us the unique opportunity to review changes in treatment over time.

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

State regulations, as authorized by MGL Chapter 111 (sections 5-7), provide the BID with the regulatory framework to collect detailed individual-level information on reportable conditions. However, interpreting trends and changes in the epidemiology of certain reportable conditions in Massachusetts can be limited due to inadequate additional data sources. It is in the interest of the public for MDPH to have as comprehensive an understanding of the epidemiology of infectious diseases as possible. By evaluating the testing, treatment, and screening data for the diseases described above, MDPH may be able to make policy changes and clinical recommendations that are more likely to prevent new occurrences of the infections. The better the Bureau of Infectious Disease can track and understand serious infectious diseases, the better prepared the Bureau is to prevent new infections.

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

In the attached research methodology, we also list the public use variables we intend to use in the analysis.

4. 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

D. APPLICANT QUALIFICATIONS

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

The PI of this project, Noelle Cocoros, has a doctorate in infectious diseases epidemiology and extensive experience in infectious disease surveillance. Dr. Cocoros has identified a small group of BID epidemiologists with expertise in the infections of interest to carry out the analysis and assist with interpretation of results. Each epidemiologist has a graduate degree in public health and substantial experience with related analytic projects. The BID routinely utilizes a variety of data sources to fully understand the epidemiology of reportable conditions in the state (e.g., BRFSS, program evaluation results, and laboratory data) and is adept at interpreting and presenting data.

2. Describe the software you plan to use to analyze the data and the experience that the applicant's team members have in using that software.

Project staff will work primarily in SAS (version 9.3) with some work likely in Excel and EpiSheet. All individuals on this project have taken courses in SAS and work with all three software programs routinely. Several have worked with the Case Mix Datasets previously and are familiar with complex medical datasets. Data cleaning and analysis is routine work for all individuals on this project and all have had coursework and professional experience in biostatistics.

3. 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.)

E. DATA LINKAGE AND FURTHER DATA ABSTRACTION

1. Does your project require linking the APCD to another dataset?

YES NO

2. If yes, will the APCD 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, specify the specific steps you will take to prevent the identification of individual patients in the linked dataset.

F. RE-RELEASE OF DATA

Applicants must obtain prior approval from the Division to publish reports that use APCD files. Applicants must provide the Division with a copy of any report at least 30 days prior to release to outside parties, including peer review and prepublication analysis by anyone other than the individuals named in this Application. The Division will review the report to ensure that the publication will not permit identification of an individual patient or permit identification of a specific payment by individual payer. The Division may prohibit release of reports that may permit identification of individual patients or specific payment by individual payer.

1. Describe your plans to publish or otherwise disclose any APCD data elements, or any data derived or extracted from such data, in any paper, report, website, statistical tabulation, or similar document.

The BID often publishes briefs and reports focused on the incidence and prevalence of infectious diseases. These reports discuss trends over time, high-risk populations, health disparities, and health of residents in communities across the state. APCD data would be included in these reports when appropriate to give a richer, more nuanced picture of the diseases in Massachusetts.

In addition, the BID may publish findings in relevant academic journals that may be of use or interest to other public health professionals. APCD data would be included in these articles when appropriate to give a richer, more nuanced picture of the disease in Massachusetts.

For any publication authored by BID staff, data will only be reported on an aggregate level. In addition, data will only be reported stratified by race/ethnicity, socioeconomic status, gender, or community when numbers are sufficiently large to preclude identification (generally meaning more than 10 cases). When cell values are suppressed, complementary cells will be suppressed to prevent calculation of the missing values.

2. Will the results of your analysis be publicly available to any interested party? Will you charge a fee for the reports or analysis? Please describe how an interested party will obtain your analysis and, if applicable, the amount of the fee.

Reports will be available to the public on the Massachusetts Department of Public Health's website for no fee.

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. If you have answered "yes" to questions 3, 4 or 5, please (i) describe the types of products, services or studies; (ii) estimate the number and types of clients for which the data will be used and (iii) describe any rerelease of data by your clients.

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G. USE OF AGENTS OR CONTRACTORS

Third-Party Vendors. Provide the following information for all agents and contractors who will work with the APCD data.

Company Name:	N/A
Contact Person:	
Title:	
Address:	
Telephone Number:	
Fax 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.

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

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

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