

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	
Application Number:	2
Applicant Name:	Robin Clark, PhD
Title:	Director of Research and Evaluation
Organization:	Center for Health Policy & Research, University of Massachusetts Medical School
Project Title:	Massachusetts Patient Centered Medical Home Initiative Evaluation
Date of Application:	June 29, 2012
Brief Description of Project (240 character limit)	46 primary care practices at various locations in Massachusetts are implementing the Primary Care Medical Home model, other practices will serve as comparison sites. All-payer claims data will be used to evaluate changes in healthcare utilization, quality and cost.

B. DATA REQUESTED

1. PUBLIC USE			
File	SINGLE USE '08 – '09 – '10	LIMITED USE '08 – '09 – '10	MULTIPLE USE '08 – '09 – '10
Medical Claims	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Pharmacy Claims	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" 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	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Provider	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Product	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

2. RESTRICTED USE			
File	SINGLE USE '08 – '09 – '10	LIMITED USE '08 – '09 – '10	MULTIPLE USE '08 – '09 – '10
Medical Claims	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Pharmacy Claims	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" 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	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Provider	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Product	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

3. If you are requesting a Restricted Use dataset, please check 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 necessary to complete the project.

Data Elements for Restricted Release – Requested Elements		
Product File – 4 elements requested – we are requesting the elements below to fully define the benefit. We will be conducting cost and utilization analysis at the payer level as payers have different payment rates and benefit packages.		
Element	Data Element Name	Rationale
PR001	Product ID	Necessary to uniquely define the product and to link to the product ID in the member eligibility file (ME040). We are requesting product information to incorporate different benefit structures into our cost and utilization analyses.
HD002	Payer	Necessary to uniquely identify the payer and to link to the payer in the member eligibility file (ME001) in order to group members by payer and incorporate different benefit structures in our cost and utilization analysis.
PR002	Product Name	Necessary to identify the Carrier-specific product name to incorporate different benefit structures in our analysis.
PR004	Product Line of Business Model	Necessary to identify the product line of business in our cost and utilization analysis to analyze information on products across carriers.
Member Eligibility File – 8 elements requested- The data elements requested from the Member Eligibility File will be used to link members to their primary care providers for our practice-level analysis and to link members to all related claims to successfully calculate HEDIS [®] measures for the clinical quality analysis and to conduct the cost and utilization analysis.		
Element	Data Element Name	Rationale
ME001	Payer	Necessary to identify the payer (links to the payer variable in the Provider File (PV001), in the Product File (HD002) and claims files (MC001) and (PC001)) in order to group members by payer and incorporate different benefit structures in our cost and utilization analysis.
ME014	Member Birth Month	Necessary for calculating age for certain HEDIS [®] measures in our analysis.
ME036	Health Care Home Number	Necessary to identify the member's assigned provider and to link to the provider file field PV002. Use of member's assigned provider is an important measure in our analysis to assess access and continuity of care within a practice.
ME040	Product ID Number	Necessary to uniquely define the product and to link to the product ID in the Product File (PR001). We are requesting this to identify the product a

		member is associated with during a given time period in our cost and utilization analysis.
ME041	Product Enrollment Start Date	Necessary to calculate continuous enrollment in a specific product for HEDIS [®] measures in our analysis.
ME042	Product Enrollment End Date	Necessary to calculate continuous enrollment in a specific product for HEDIS [®] measures in our analysis.
ME046	Member PCP ID	Necessary for linking to the provider file field PV002 to identify the member's assigned provider. Use of member's assigned provider is an important measure in our analysis to assess access and continuity of care within a practice.
ME107	CarrierSpecificUniqueMemberID	Necessary to identify the Carrier-specific unique member id (links to the unique member id in the claims data files (MC137) and (PC107)). We are requesting this element to identify unique members within a payer's system for grouping information at a member level across all files
Medical Claims File – 11 elements requested		
Element	Data Element Name	Rationale
MC001	Payer	Necessary to identify the payer submitting claims payments (links to the payer element in the Product File (HD002) and the payer element in the Provider File (PV001)) in order to group members by payer and incorporate different benefit structures in our cost and utilization analysis.
MC018	Admission Date	Necessary for calculating hospital length of stay in our cost and utilization analysis.
MC024	Service Provider Number	Necessary for identifying the provider that performed the service (links the Provider identified on the Medical Claims file with the corresponding Provider ID (PV002) in the Provider File). We are requesting this element in order to group all services at the provider level.
MC025	Service Provider Tax ID Number	Necessary for identifying the provider that performed the service. This element is necessary for our analysis to assist in identifying the same servicing provider across carriers for our practice-level analysis.
MC059	Date of Service - From	Necessary for identifying numerator and/or denominator for certain HEDIS [®] measures to be calculated as part of our analysis.
MC060	Date of Service - To	Necessary for identifying numerator and/or denominator for certain HEDIS [®] measures to be calculated as part of our analysis.
MC069	Discharge Date	Necessary for calculating hospital length of stay in

		our cost and utilization analysis.
MC079	Product ID Number	Necessary to identify what product a member is enrolled in during the timeframe of the claim submission (links to the ProductID (PR001) on the Product File). We are requesting product information to incorporate different benefit structures into our cost and utilization analyses.
MC134	Plan Rendering Provider Identifier	Necessary to identify the provider that cared for the patient on the claim and to link the Provider identified on the Medical Claims file with the corresponding Provider ID (PV002) in the Provider File. This element is necessary for our analysis to assist in identifying the same providers caring for members across carriers for our practice-level analysis.
MC135	Provider Location	Necessary to identify the location where the services were performed (links the Provider identified on the Medical Claims file with the corresponding Provider ID (PV002) in the Provider File). This element is necessary to our analysis in order to capture where the services were performed and will help to standardize the provider location across carriers.
MC137	CarrierSpecificUniqueMemberID	Necessary to identify the Carrier-specific unique member id on the claim (links to the member ID in the member eligibility files (ME107). We are requesting this element to identify unique members within a payer's system for grouping information at a member level across all files.
Pharmacy Claims File – 7 elements requested		
Element	Data Element Name	Rationale
PC001	Payer	Necessary to identify the payer submitting claims payments (links to Payer (HD002) in the Product File and the payer element in the Member Eligibility File (ME001)) in order to group members by payer and incorporate different benefit structures in our cost and utilization analysis.
PC032	Date Prescription Filled	Necessary to calculate certain HEDIS [®] measures in our analysis. This element is being requested for identifying the date the pharmacy filled and dispensed the prescription to the patient.
PC043	Prescribing ProviderID	Necessary to identify the prescribing provider (links to the Provider ID field (PV002) on the Provider File). It is important in our analysis to identify who is/what types of providers are prescribing medications to members.
PC047	Prescribing Physician DEA	Necessary to help link providers across carriers in

	Number	our practice-level cost and utilization analysis.
PC056	Product ID Number	Necessary to identify what product a member is enrolled in during the timeframe of the claim submission for our cost and utilization analysis (links to the (PR001) on the Product File).
PC059	Recipient PCP ID	Necessary to identify the member's PCP ID (links to the Plan Provider ID field (PV002) on the Provider File). Use of recipient's assigned provider is an important measure in our analysis to assess access and continuity of care within a practice.
PC107	CarrierSpecificUniqueMemberID	Necessary to identify the Carrier-specific unique member id on the claim (links to the member ID in the member eligibility file (ME107)). We are requesting this element to identify unique members within a payer's system for grouping information at a member level across all files
Provider File – 8 elements requested – We are requesting the individual elements below to identify unique providers and their affiliations and locations, and to link providers to members and across carriers for our practice-level analysis.		
Element	Data Element Name	Rationale
PV001	Payer	Necessary for identifying the Carrier-specific payer for our cost and utilization analysis and to link with the Payer in the Product File (HD002), the payer element in the Member Eligibility File (ME001) and in the Pharmacy Claims file (PC001).
PV002	Plan Provider ID	Necessary to identify the carrier-unique provider number for every service provider and to link with the member eligibility and claims files.
PV003	Tax Id	Necessary to help link providers across carriers for our practice-level analysis.
PV005	DEA ID	Necessary to help link providers across carriers for our practice-level analysis
PV016	Street Address1 Name	Necessary to identify the physical street address where a provider sees plan members. This element is necessary for our analysis to link providers across carriers and to match members to the appropriate provider location.
PV017	Street Address2 Name	Necessary to identify the physical street address where a provider sees plan members. This element is necessary for our analysis to link providers across carriers and to match members to the appropriate provider location.
PV035	SSN Id	Necessary to help link providers across carriers for our practice-level analysis.
PV056	Provider Affiliation	Necessary to identify any affiliations the provider has with another entity or parent company. Combined with PV002, this variable will help us to help identify unique provider affiliations and

		locations for our practice-level analysis.
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C. PURPOSE AND INTENDED USE

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

Background
<p>The Massachusetts Patient-Centered Medical Home Initiative (MA PCMHI) is a three-year, multi-payer initiative to implement the Patient-Centered Medical Home (PCMH) model in selected primary care practice sites. The PCMH is an alternative approach to the delivery of primary care services that promises better patient experience and better results than traditional care. The PCMHI seeks to implement the model in a diverse group of practices in terms of primary care specialty (internal medicine, general medicine, pediatric, and family practice), practice structure and size, practice affiliation, clinical setting, geographic location, and payer mix in order to evaluate the effectiveness of this transformation.</p> <p>As part of the project, the Secretary of the Executive Office of Health and Human Services (EOHHS) has asked the University of Massachusetts Medical School (UMMS) to undertake the evaluation of the initiative. The establishment of the MA PCMHI is legislated under Chapter 305, Section 30 of the Mass General Laws.</p>
Purpose of the Evaluation
<p><u>Overview:</u> This evaluation will collect information on the activities, outputs and outcomes of the Massachusetts Patient-Centered Medical Home Initiative so that different stakeholder groups may assess the value of the Initiative.</p> <p><u>Audience:</u> Results of the evaluation will be provided to <i>policymakers</i> (Secretary of EOHHS and the Legislature), <i>purchasers</i> (insurers, employers, payers), <i>providers</i> (individual practitioners, systems), and <i>consumers</i> of care.</p> <p><u>Purpose:</u> Information will include <i>formative</i> components to inform the refinement and further development of the model as well as <i>summative</i> components to assess the initiative's impact.</p>
Evaluation Questions
<p>The evaluation of the MA PCMHI asks three broad questions:</p> <ol style="list-style-type: none"> 1. To what extent do practices transform to become medical homes? 2. To what extent and in what ways do patients become active partners in their health care? 3. What is the initiative's impact on service use, clinical quality, and patient and provider outcomes? <p>Of principal interest to the participating payer stakeholders is the question of value, question 3. Is the investment in medical home "worth it"? This evaluation explores the initiative's impact on three aspects of "value": efficiency, quality and patient outcomes. The requested APCD data will aid in answering <u>Question 3</u>. The hypothesis is that practices that adopt medical home competencies will have a positive impact on clinical quality, patient experience and the use of services by practices. The sub-questions to be answered with analysis of the APCD data include:</p> <p>What is the clinical impact of the medical home initiative and how does the demonstration affect service use and expenditures?</p>

Measures

APCD claims and member eligibility data will be used to describe health care utilization and expenditures for members in the PCMHI sites and at other comparison practice sites across Massachusetts. We will summarize and describe basic demographic characteristics, diagnoses, utilization of key health care services such as emergency departments, inpatient care and detoxification, and total/average expenditures per person. The requested data will also be used to program and calculate selected clinical quality indicators using HEDIS[®] Technical Specifications at the practice site level.

The measures that will be part of the analysis include:

Clinical quality – prevention

- Well Child Visits
- Cancer Screening (breast, cervical, colorectal)

Clinical quality – acute and chronic disease management

- Comprehensive diabetes care
 - A1c testing
 - LDL-C testing
 - Eye exam
- Depression management
 - Acute phase
 - Continuation phase
- Use of appropriate medications for people with asthma
- Follow-up care for children prescribed ADHD Medication
 - Initiation phase
 - Continuation and maintenance phase

Service use and expenditures

- ED Visits
- Hospitalizations – ambulatory care sensitive
- Hospital readmissions – 30 day
- Total costs – casemix adjusted
- Primary care visits
- Specialist visits
- High cost imaging

Only aggregated data will be reported. Cell sizes smaller than 11 members will be suppressed. We will also suppress any cells that could in combination be used to identify an individual.

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

The MA PCMHI is a three-year, multi-payer initiative to implement the Patient-Centered Medical Home (PCMH) model in selected primary care practice sites. The PCMH is an alternative approach to the delivery of primary care services that promises better patient experience and better results than traditional care.

The objectives of the MA PCMHI are:

1. to implement and evaluate the PCMH model as a means to achieve accessible, high quality primary care, for all patients including persons with disabilities;
2. to attract and retain primary care clinicians into practice in Massachusetts by increasing resources available to practices and improving their quality of work life; and
3. to demonstrate cost-effectiveness in order to justify and support the sustainability and spread of the model.

In order to evaluate and demonstrate cost effectiveness, claims data is needed to compare practices involved in the project with other practices across the state. This insures that public funds used for this project will include evidence based results.

Some of the practices will be paid for performing certain start-up activities and per-member-per-month (PMPM) payments. We will use health cost and utilization analysis to formulate public policy in future medical home activities. The evaluation will also contribute to health planning and resource allocation studies and studies that promote improvement in health care quality or a mitigation of health care cost growth.

3. Attach a brief (1-2 pages) description of your research methodology: **Please see attached.**

D. APPLICANT QUALIFICATIONS

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

Robin Clark PhD, principal investigator, has more than 20 years experience as a health services researcher and health economist. He has directed numerous analyses and published more than 20 papers based on insurance claims data. As Director of Research and Evaluation at the Center for Health Policy and Research (CHPR) he works with a team of programmer/analysts and biostatisticians with extensive experience in claims analysis.

2. Submit the résumé or curriculum vitae of the applicant/principal investigator, key contributors, and of all individuals who will have access to the data.

Attached are the CVs of the following individuals having access to the data:

Robin Clark, Applicant/PI

Bruce Barton, Research Methods Team Leader

Jianying Zhang, Senior Biostatistician

Gideon Aweh, Biostatistician III

You Fu Li, Biostatistician III

E. DATA LINKAGE AND FURTHER DATA ABSTRACTION

1. Does your project require linking the APCD data to another dataset?
 YES NO

2. If yes, will the APCD data be linked to other patient level data, other databases, or vital statistics data?
 YES NO

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. Specify the specific steps you will take to prevent the identification of individual patients.

Claims will be linked to information about primary care practices, including data on the extent to which they have adopted the Medical Home model. Patient data will not be linked to other patient level data. Because this is an evaluation of primary care medical home practices, it is important to understand practice characteristics of affected patient outcomes and costs.

Linking patient level data to practice data will not substantially increase the risk of identifying individual patient. Nevertheless, we will take care to report only aggregate data, to suppress cell sizes smaller than 11 patients and avoid reporting variables that could be combined to identify an individual.

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.

Interim and final reports will be disseminated to PCMHI advisory groups, project staff, state policymakers and to the general public. In addition, manuscripts will be prepared for publication in peer reviewed journals or to be presented at academic conferences or other public forums. Only aggregate data will be disseminated, following the procedures outlined above in Section E3.

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.

Results will be available to the parties listed above. A fee will not be charged for the reports or analysis.

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.

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

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

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

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