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:	Robin Clark, PhD
Title:	Director of Research and Evaluation
Organization:	Center for Health Policy and Research, University of Massachusetts Medical School
Project Title:	Massachusetts Patient Centered Medical Home Initiative Shared Savings Project
Date of Application:	January 31, 2013
Project Objectives (240 character limit)	A shared savings opportunity is available to all Patient-Centered Medical Home Initiative (PCMHI) Technical Assistance-Plus practice sites from participating payers. Shared savings is a payment arrangement that rewards a practice for reducing health care spending for a defined population of patients. The opportunity is available to practice sites that do not participate in alternative payment arrangements with a given payer that support medical home practice infrastructure and/or provide the practice with the opportunity to share or reap savings through effective and efficient delivery of care. The All Payer Claims Database (APCD) will be a source of data for this project.
Project Research Questions	1. Determination of whether savings have been realized 2. Determination of whether and how savings will be distributed

B. DATA REQUESTED

Note: 2009-2011 public and restricted use data are being requested as all the data become available.

1. PUBLIC USE									
File	SINGLE USE* '08 – '09 – '10			REPEATED USE* '08 – '09 – '10			MULTIPLE USE* '08 – '09 – '10		
Medical Claims	☐	☐	☐	☐	X	X	☐	☐	☐
Pharmacy Claims	☐	☐	☐	☐	X	X	☐	☐	☐
Dental Claims	☐	☐	☐	☐	☐	☐	☐	☐	☐
Membership Eligibility	☐	☐	☐	☐	X	X	☐	☐	☐

File	SINGLE USE* '08 – '09 – '10			REPEATED USE* '08 – '09 – '10			MULTIPLE USE* '08 – '09 – '10		
Provider	☐	☐	☐	☐	X	X	☐	☐	☐
Product	☐	☐	☐	☐	X	X	☐	☐	☐

2. RESTRICTED USE									
File	SINGLE USE* '08 – '09 – '10			REPEATED USE* '08 – '09 – '10			MULTIPLE USE* '08 – '09 – '10		
Medical Claims	☐	☐	☐	☐	X	X	☐	☐	☐
Pharmacy Claims	☐	☐	☐	☐	X	X	☐	☐	☐
Dental Claims	☐	☐	☐	☐	☐	☐	☐	☐	☐
Membership Eligibility	☐	☐	☐	☐	X	X	☐	☐	☐
Provider	☐	☐	☐	☐	X	X	☐	☐	☐
Product	☐	☐	☐	☐	X	X	☐	☐	☐

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

> **Definitions:**
>
> - **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 APCD data.

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		
Pharmacy Claims		
Dental Claims		
Membership Eligibility		
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.

The Data Element List is attached.

Notes:

Product File – 6 elements requested – we are requesting the restricted 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.

Member Eligibility File – 15 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 analysis.

Medical Claims File – 12 elements requested

Pharmacy Claims File – 8 elements requested

Provider File – 10 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.

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)
PR001	Product ID	Product	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	Product	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	Product	Necessary to identify the Carrier-specific product name to incorporate different benefit structures in our analysis.
PR004	Product Line of Business Model	Product	Necessary to identify the product line of business in our cost and utilization analysis to analyze information on products across carriers.
PR009	Product Start Date	Product	Necessary to identify the start date of the product in our cost and utilization analysis.
PR010	Product End Date	Product	Necessary to identify the end date of the product in our cost and utilization analysis.
ME001	Payer	Eligibility	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.
ME002	National Plan ID	Eligibility	A data element needed for uniquely identifying providers and patients. In combination with Plan Provider ID (PV002) for Providers and CarrierSpecificUnique MemberID (ME107) for patients.
ME014	Member Birth Month	Eligibility	Necessary for calculating age for certain HEDIS® measures in our analysis.
ME031	Special Coverage		Allow information if product coverage is Commonwealth care or Health Safety Net to identify patients with special coverage in our analysis.
ME036	Health Care Home Number	Eligibility	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	Eligibility	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	Eligibility	Necessary to calculate continuous enrollment in a specific product for HEDIS® measures in our analysis.
ME042	Product Enrollment End Date	Eligibility	Necessary to calculate continuous enrollment in a specific product for HEDIS® measures in our analysis.
ME046	Member PCP ID	Eligibility	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.
ME075	NewMMISID	Eligibility	Necessary to uniquely identify a MassHealth, Medicaid MCO or CommonWealth Care member in the NewMMIS system.
ME076	Member rating category	Eligibility	To identify the rating category of a member.

ME079	Recipient Identification Number (MassHealth only)	Eligibility	Necessary to uniquely identify MassHealth members.
ME080	Recipient Historical Number (MassHealth only)	Eligibility	The permanent Medicaid identification number assigned to the individual by MassHealth to assist in uniquely identifying MassHealth members.
ME107	CarrierSpecific Unique MemberID	Eligibility	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
ME001 / ME046	Payer / Member PCP ID	Eligibility	Necessary to attribute and aggregate measure results to PCPs.
MC001	Payer	Medical	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.
MC002	National Plan ID	Medical	A data element needed for uniquely identifying providers and patients. In combination with Plan Provider ID (PV002) for Providers and CarrierSpecificUnique MemberID (ME107) for patients.
MC018	Admission Date	Medical	Necessary for calculating hospital length of stay in our cost and utilization analysis.
MC024	Service Provider Number	Medical	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	Medical	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	Medical	Necessary for identifying numerator and/or denominator for certain HEDIS® measures to be calculated as part of our analysis.
MC060	Date of Service - To	Medical	Necessary for identifying numerator and/or denominator for certain HEDIS® measures to be calculated as part of our analysis.
MC069	Discharge Date	Medical	Necessary for calculating hospital length of stay in our cost and utilization analysis.
MC079	Product ID Number	Medical	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	Medical	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	Medical	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	CarrierSpecific Unique MemberID	Medical	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.

PC001	Payer	Pharmacy	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.
PC002	Plan ID	Pharmacy	A data element needed for uniquely identifying providers and patients. In combination with Plan Provider ID (PV002) for Providers and CarrierSpecificUnique MemberID (ME107) for patients
PC032	Date Prescription Filled	Pharmacy	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	Pharmacy	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 Number	Pharmacy	Necessary to help link providers across carriers in our practice-level cost and utilization analysis.
PC056	Product ID Number	Pharmacy	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	Pharmacy	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	CarrierSpecific Unique MemberID	Pharmacy	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
PV001	Payer	Provider	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	Provider	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	Provider	Necessary to help link providers across carriers for our practice-level analysis.
PV005	DEA ID	Provider	Necessary to help link providers across carriers for our practice-level analysis
PV007	Medicaid Id	Provider	To identify the State Medicaid assigned number for the provider in PV002 for our analysis.
PV016	Street Address1 Name	Provider	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	Provider	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	Provider	Necessary to help link providers across carriers for our practice-level analysis.
PV036	Medicare Id	Provider	To identify the Medicare ID of the provider or entity for our analysis.
PV056	Provider Affiliation	Provider	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.

C. PURPOSE AND INTENDED USE

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

> 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.

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.

A shared savings opportunity is available to all Patient-Centered Medical Home Initiative (PCMHI) Technical Assistance-Plus practice sites from participating payers. Shared savings is a payment arrangement that rewards a practice for reducing health care spending for a defined population of patients. The opportunity is available to practice sites that do not participate in alternative payment arrangements with a given payer that support medical home practice infrastructure and/or provide the practice with the opportunity to share or reap savings through effective and efficient delivery of care.

CHPR will collaborate with the Shared Savings Committee to calculate the shared savings in Fiscal Years 2012-2014. The All Payer Claims Database (APCD) will be a source of data for this project. The key steps in the shared savings methodology are: attributing patients to PCMHI practice sites; calculating medical expenses and the change in medical expense compared to that of a control group; determining the gross savings and net savings; and beginning in year 2, if a practice generated net savings, determining if a practice's quality was sufficient to qualify for payment of savings. CHPR will utilize two sets of HEDIS performance measures to assess quality, one for pediatric practices and one for family medicine and internal medicine practices. Each payer will then make payments, if any, for Years 1 and 2 in 2013, and for Year 3 in 2014.

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 calculate savings and demonstrate cost-effectiveness, claims data are needed to compare practices involved in the project with other practices across the state and to document that practices have achieved their quality targets.

Participating PCMH practices will be able to share in any health care savings that they generate. The purpose of this project is to calculate savings and quality measures that will be used to determine eligibility for shared savings, including achievement of quality targets. This work will demonstrate the impact of PCMH on health care costs and form the basis of future design of incentive payments for health care providers.

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

   Please see attached for a brief description of the research methodology.

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
   - X No, the IRB will review the project **in February 2013**
   - ☐ 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.

   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. 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.

   Statistical Analysis software, SAS 9.3, will be used to analyze the data. The team members listed in this application have extensive experience analyzing data with a combined total of over 40 years experience using this software.

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

   Robin Clark, Applicant/PI

   Bruce Barton, Research Methods Team Leader

   Wen-Chieh Lin, Senior Project Director

   Jianying Zhang, Senior Biostatistician

   Parag Kunte, Biostatistician III

E. DATA LINKAGE AND FURTHER DATA ABSTRACTION

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

    YES   X   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 X

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.

    > 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 cost savings within specific primary care medical home practices, it is important to understand both payer and practice characteristics.

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

    > 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 project leaders, payment consultants, advisory groups, health care payers, individual practices, and state policymakers 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 E4.

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 X

4. Will you be selling standard report products using the data?
   YES ☐ NO X

5. Will you be selling a software product using the data?
   YES ☐ NO X

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

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

Note: CHPR will collaborate with the Shared Savings Committee to develop the final calculations for the shared savings; however only CHPR faculty and staff listed in this application under section D3 will have access to the APCD data.

Company Name:	
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.

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.

_____