

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

**NOTE:** This application is to be used by all applicants, except Government Agencies, as defined in 957 CMR 5.02.

**I. GENERAL INFORMATION**

APPLICANT INFORMATION	
Applicant Name:	Roger Feinstein
Title:	Director of Marketing and Market Research
Organization:	Partners HealthCare System
Project Title:	Market Data Warehouse – Data update
Date of Application:	8/9/2013
Project Objectives (240 character limit)	PHS wants to use case mix data for planning and to understand the performance of care delivery models like ACOs and PCMH. The data will also help us assess quality through analyses of avoidable admissions and readmissions, support DoN applications, clinical and facility planning, etc
Project Research Questions	<ol style="list-style-type: none"> <li>1. How are physician practice patterns are changing due to new models of care such as the Patient Centered Medical Home and Accountable Care Organizations?</li> <li>2. Where are there high rates of potentially avoidable admissions, readmissions, and avoidable readmissions?</li> <li>3. What is the impact of population health management? How can we evaluate how effectively utilization is distributed across different sites of care?</li> <li>4. Who are our patients? Where are they patients coming from? Where should we allocate healthcare resources?</li> </ol>

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

<input checked="" type="checkbox"/> Researcher <input type="checkbox"/> Payer <input checked="" type="checkbox"/> Provider / Provider Organization	<input type="checkbox"/> 957 CMR 5.04 (De-Identified Data) <input type="checkbox"/> 957 CMR 5.05 (Direct Patient Identifiers)
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All other requests are subject to [957 CMR 5.06](#).

## II. PROJECT SUMMARY

Briefly describe the purpose of your project and how you will use the CHIA data?

Partners HealthCare intends to use Case Mix Data for planning purposes and to help understand the healthcare marketplace in Massachusetts. Our plans will be focused on delivering the best health care we can while controlling total medical expense.

The healthcare market is changing rapidly. This data will help us understand how physician practice patterns are changing due to new models of care such as the Patient Centered Medical Home and Accountable Care Organizations. Partners will use this data to better understand potentially avoidable admissions, readmissions, and avoidable readmissions, with the aim of increasing quality and efficiency. Partners also plans to use this data to understand the impact of population health management and to evaluate how effectively utilization is distributed across different sites of care.

For business planning, this data will help us understand patient origin and market position, and help us determine where to allocate healthcare resources. For service-line and facilities planning, it will help us understand service mix and the demographics profile of patient populations. This data will also provide critical support for any "Determination of Need" applications.

The following are examples of some of the uses to which the data will be put:

- Analyzing preventable admissions and readmissions
- Analyzing utilization of ED, observation and inpatient services for physicians in a PCMH practice
- Evaluate physician referral patterns for those affiliated with an ACO
- Understanding medical practice patterns and map services to population need
- Analyze the reasons for use of EDs and identify geographies where urgent care may be provided in less expensive settings
- Comparing beds to patient days to identify capacity issues in a market
- Implementing quality monitoring with a new level of specificity
- Identifying utilization patters for particular clinical services (e.g., cardiac, oncology, orthopedics), for a range of years
- Analyzing tertiary versus secondary mix at particular hospitals
- Identifying patient origin for users of a particular clinical service
- Investigating the change in patient length of stay over time
- Analyzing payor mix by service, hospital, or geography

**III. FILES REQUESTED**

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

DATABASE	Level 1 <sup>1</sup> or 2 <sup>2</sup>	Single or Multiple Use	Year(s) Of Data Requested Current Yrs. Available 2009 - 2011
<input type="checkbox"/> Medical Claims	<input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2	Select...	<input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011
<input type="checkbox"/> Pharmacy Claims	<input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2	Select...	<input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011
<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"/> Member Eligibility	<input type="checkbox"/> Level 2	Select...	<input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011
<input type="checkbox"/> Provider	<input type="checkbox"/> Level 2	Select...	<input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011
<input type="checkbox"/> Product	<input type="checkbox"/> Level 2	Select...	<input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011
<b>CASEMIX</b>	<b>Level 1 - 6</b>		<b>Fiscal Years Requested</b>
<b>Inpatient Discharge</b>	<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 checked="" 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>  <b>2012</b>
<b>Outpatient Observation</b>	<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 checked="" 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>2002-2011 Available</u>  <b>2012</b>

<sup>1</sup> 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.

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

<b>Emergency Department</b>	<input type="checkbox"/> Level 1 – No Identifiable Data Elements	<u>2000-2011 Available</u>          <b>2012</b>
	<input type="checkbox"/> Level 2 – Unique Physician Number (UPN)	
	<input type="checkbox"/> Level 3 – Unique Health Information Number (UHIN)	
	<input checked="" 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	

**IV. REQUESTED DATA ELEMENTS [APCD]**

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.

**V. REQUESTED DATA ELEMENTS [CASE MIX]**

Please use the CASE MIX DATA SPECIFICATION WORKBOOK to identify which deniable data elements (from Level 2 or above) you would like to request and attach this to your application.

Case mix data which includes Level I Data plus the UPN, the UHIN, the mother's UHIN, an admission sequence number for each UHIN record, days between stays for each UHIN record, ED reason for visit.

**VI. MEDICAID DATA**

Federal law (42 USC 1396a(a)7) restricts the use of individually identifiable data of Medicaid recipients to uses that benefit 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 benefits the administration of the Medicaid program.

**VII. MEDICARE DATA**

Medicare data may 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.

**VIII. DIRECT PATIENT IDENTIFIERS<sup>3</sup>**

<sup>3</sup> 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.

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.

**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 following are examples of some of the uses to which the data will be put:

- Analyzing preventable admissions and readmissions, thereby bring down utilization and improving the quality of care in the Commonwealth
- Analyzing the impact of care coordination by tracking utilization of ED, observation and inpatient services for physicians in a PCMH practice
- Understanding medical practice patterns and map services to population need
- Analyze the reasons for use of EDs and identify geographies where urgent care may be provided in less expensive settings
- Comparing beds to patient days to identify capacity issues in a market
- Evaluate physician referral patterns for those affiliated with an ACO
- Implementing quality monitoring with a new level of specificity
- Identifying utilization trends for particular clinical services (e.g., cardiac, oncology, orthopedics), for a range of years
- Analyzing tertiary versus secondary mix at particular hospitals
- Identifying patient origin for users of a particular clinical service
- Investigating the change in patient length of stay over time
- Analyzing payor mix by service, hospital, or geography

**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		

**XI. PURPOSE AND INTENDED USE**

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

Partners HealthCare intends to use Case Mix Data for planning purposes and to help understand the healthcare marketplace in Massachusetts. Our plans will be focused on delivering the best health care we can while keeping care affordable for our patients.

The healthcare market is changing rapidly. This data will help us understand how physician practice patterns are changing due to new models of care such as the Patient Centered Medical Home and Accountable Care Organizations. Partners will use this data to better understand potentially avoidable admissions, readmissions, and avoidable readmissions, with the aim of increasing quality and efficiency. Partners also plans to use this data to understand the impact of population health management and to evaluate how effectively utilization is distributed across different sites of care.

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

We use these data in a straightforward way. We report on trends in healthcare utilization (e.g., ER visits, Observation stays, Inpatient Discharges, Readmissions, Preventable Admissions and Readmissions) along the following dimensions: geographies; hospitals; doctors; diagnoses, procedures; payers; and acuity.

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.
- 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.**

Health care utilization analysis is a core skill of the users who will have access to the information. These users have the education and experience to understand what the data mean and work in teams that include clinicians and administrators to apply the data to improving healthcare for the communities we serve.

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.)**

First	Last	First	Last
Jenny	Andrews	John	Llamas
Donna	Antonelli	Sara	Long
Karen	Batt	Steven	Loving**
Ilmyrde	Bosquet*♦	Martino	Lisa**
Taylan	Bozkurt	Gwen	McCoy
Lynne	Brocco	Denise	McFadden

Kerri	Carlson	Eileen	McLaughlin
Helen	Chan	Sean	McWalters
Xiaoxin	Chen	Frank	Melanson
Raul	Cuadra	Wendy	Morris**
Roger	Feinstein♦	Leigh	Murray ♦
Michael	Freni	Gowri	Nagaraj♦
Tiffany	Gavin	George	Nisotel
Patricia	Gordon	Paul	Nordberg
Katie	Gould	Brian	O'Dea
Lisa-Marie	Guzman ♦	Tavinder	Phull
Frederick	Haigis	Michael	Pierce
Celine	Hoogenboom ♦	Antonia	Roberts
Michael	Humphrey*	Aarti	Shukla
Anthony	Jennings	Andrew	Smith ♦
Susan	Kananovich**	Neil	Stolzenbach*
Robert	Kanan**	Melinda	Stylos-allan
Bradley	Keith	Linda	Sweeney
Sarah	Kessel	Linda	Vizy
Barbara	Lampkin	Julie	Voegelin
Elizabeth	Langford	Christine	Vogeli♦
Teresa	Lau	Nora	Wells
Pin-chen	Lin		

♦ Denotes users with access to UHIN field

\* Denotes data processors

\*\*Denotes users in the PHS Information Systems Department responsible for giving access and ensuring data security

Highlighted cells = new users since last application

### XIII. DATA LINKAGE AND FURTHER DATA ABSTRACTION

- Does your project require linking the CHIA Data to another dataset? YES  NO
- 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
- If yes, please identify all linkages proposed and explain the reasons(s) that the linkage is necessary to accomplish the purpose of the project.

- 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, or similar document.

Currently, the data is not used for publications, and is only reported internally. In the event that data is published externally using this case mix data, the report will be submitted to the Division for review and approval.

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.

No

- |   |     |                          |    |                                     |
|---|-----|--------------------------|----|-------------------------------------|
| 3. Will you use the data for consulting purposes?               | YES | <input type="checkbox"/> | NO | <input checked="" type="checkbox"/> |
| 4. Will you be selling standard report products using the data? | YES | <input type="checkbox"/> | NO | <input checked="" type="checkbox"/> |
| 5. Will you be selling a software product using the data?       | YES | <input type="checkbox"/> | NO | <input checked="" type="checkbox"/> |

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

**XV. 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:	Parallax Consulting
Contact Person:	Neil Stolzenbach
Title:	Partner
Address:	325 Wood Road, Suite 107, Braintree MA, 02184
Telephone Number:	(781)535-6004 ext. 228
E-mail Address:	ncs@parallax-consulting.com
Organization Website:	<a href="http://www.parallax-consulting.com/">http://www.parallax-consulting.com/</a>

Company Name:	Sg2
Contact Person:	Mike Humphrey
Title:	Regional Vice President
Address:	5250 Old Orchard Road Skokie, IL 60077

Telephone Number:	(847)779-5387
E-mail Address:	mahumphrey@sg2.com
Organization Website:	<a href="http://www.sg2.com/">http://www.sg2.com/</a>

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.

Parallax Consulting is responsible for the data warehousing.

Sg2 is responsible for categorizing readmissions, service line tagging, and for using the data to develop a custom utilization forecast for Massachusetts and Partners HealthCare.

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

Parallax Consulting builds custom applications to meet a wide range of business and technology requirements for their clients.

Sg2 is a firm with analytics-based health care expertise helps hospitals and health systems integrate, prioritize and drive growth and performance across the continuum of care. Over 1,200 organizations around the world rely on Sg2's analytics, intelligence, consulting and educational services.

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

Parallax Consulting and Sg2 follow Partners Healthcare's standards for maintaining data behind a secure firewall. Only legitimate employees of each firm, who have a log-on ID are eligible to access their information systems. Data is backed up on a routine basis, and subject to their security procedures.

All users coming into contact with the data have been trained in HIPAA compliance, and are subject to policies and procedures with regard to the protection of patient data, both internal and as may be furnished by MA CHIA. Further, any persons accessing the data are made aware of the provisions of the data use agreement required by MA CHIA.