

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

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

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

**I. GENERAL INFORMATION**

APPLICANT INFORMATION
Applicant Name: Elmer R. Freeman
Title: Executive Director
Organization: Center for Community Health Education Research and Service (CCHERS)
Project Title: School-Based Health Centers Avoid Unnecessary Emergency Department Use
Date of Application: February 28, 2014
Project Objectives (240 character limit) 1. Identify Massachusetts communities where adolescent over-reliance on the Emergency Department for treatment of specific primary care conditions is evident. 2. Determine potential cost savings of having a school based health center compared to ED utilization.
Project Research Questions (if applicable) 1. What percentage of adolescent ED visits are for the specific conditions? 2. What is the rank order of adolescent dependency on EDs by community for the specific conditions? 3. What is the rank order of adolescent dependency on EDs by payor for these conditions?

Please indicate if you are a Researcher, Payer, Provider, Provider Organization or Other entity and whether you are seeking data pursuant to 957 CMR 5.04 (De-Identified Data), 957 CMR 5.05 (Direct Patient Identifiers for Treatment or Coordination of Care), or 957 CMR 5.06 (Discretionary Release).

<input checked="" type="checkbox"/> Researcher	<input checked="" type="checkbox"/> 957 CMR 5.04 (De-identified Data)
<input type="checkbox"/> Payer	<input type="checkbox"/> 957 CMR 5.05 (Direct Patient Identifiers)
<input type="checkbox"/> Provider / Provider Organization	<input type="checkbox"/> 957 CMR 5.06 (Discretionary Release)
<input type="checkbox"/> Other	

**II. PROJECT SUMMARY**

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

The purpose of this project is to enable the Center for Community Health Education Research and Service (CCHERS) to build on a 2012 study by the Massachusetts Association for School-Based Health Care (MASBHC). The formative work of MASBHC consisted of an analysis of six specific diagnostic conditions frequently treated in Massachusetts school-based health centers (SBHCs). The six conditions are: asthma/allergy; abdominal pain; upper respiratory infections (URI)/pharyngitis; ankle sprain, knee sprain, concussion; headaches; and menstrual problems. The conditions are associated with nearly 200

ICD-9 codes. The conditions were selected by a subset of SBHC Nurse Practitioners (NPs) for their potential to result in an Emergency Department (ED) visit in the absence of timely access to primary care. Data on the number of visits provided by SBHCs for these conditions for School Year 2010-2011 was collected from 26 school-based health centers located throughout the state. Analysis of the data found, using a conservative estimate of ED costs, for every dollar of care provided by a SBHC, if just half of those visits avert a visit to an ED, nearly the same amount in additional spending was avoided.<sup>1</sup>

CCHERS and MASBHC propose a more comprehensive and more systematic follow up to the initial assessment MASBHC conducted in 2012. Requested “case mix” data will be analyzed to determine what percentage the selected conditions represent of total adolescent ED visits in the state, and to selected hospitals. Hospital EDs will be rank ordered by the percent of adolescent visits for these conditions to ascertain what percentage of all adolescent visits to the ED they represent. ED visits for these conditions will be aggregated by community of residence to assess the degree to which adolescents in the city or town of residence utilize the ED relative to other communities for treatment of these conditions. Similarly, ED visits by adolescents for the selected conditions will be analyzed by payer. Hospital ED visits for the selected conditions will be rank ordered by payer by the percent of adolescent visits for the conditions, by payer expense for the conditions on a state-wide basis, and for specific EDs. Based on the findings, geographic areas with significant adolescent utilization for the conditions will be identified. A policy brief will be written and disseminated, outlining opportunities to reduce avoidable ED visits by adolescents by development of new school-based health center capacity.

**III. FILES REQUESTED**

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

ALL PAYER CLAIMS DATABASE	Level 1 <sup>2</sup> or 2 <sup>3</sup>	Single or Multiple Use	Year(s) Of Data Requested Current Yrs. Available 2009 - 2012
<input type="checkbox"/> Medical Claims	<input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2	Multiple	<input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011 <input type="checkbox"/> 2012
<input type="checkbox"/> Pharmacy Claims	<input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2		<input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011 <input type="checkbox"/> 2012
<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"/> 2012
<input type="checkbox"/> Member Eligibility	<input type="checkbox"/> Level 2	Select...	
<input type="checkbox"/> Provider	<input type="checkbox"/> Level 2	Select...	
<input type="checkbox"/> Product	<input type="checkbox"/> Level 2	Select...	

<sup>1</sup> Making the Cost-Savings Case for School-Based Health Centers SBHCs Avoid Unnecessary Emergency Department Visits: Contribute to Reduction in State Health Care Spending. <http://www.ma4sbhc.org/images/downloadablefiles/Making%20the%20Case%20for%20SBHCs%20-%20Final%20%2009-13.pdf>

<sup>2</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>3</sup> Level 2 (and above) Data: Includes those data elements that pose a risk of re-identification of an individual patient.

CASEMIX	Level 1 - 6	Fiscal Years Requested
<b>Inpatient Discharge</b>	<input type="checkbox"/> Level 1 – No Identifiable Data Elements	<u>1998-2012 Available</u> (limited data 1989-1997)
	<input type="checkbox"/> Level 2 – Unique Physician Number (UPN)	
	<input type="checkbox"/> Level 3 – Unique Health Information Number (UHIN)	
	<input 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	
<b>Outpatient Observation</b>	<input type="checkbox"/> Level 1 – No Identifiable Data Elements	<u>2002-2012 Available</u>
	<input type="checkbox"/> Level 2 – Unique Physician Number (UPN)	
	<input type="checkbox"/> Level 3 – Unique Health Information Number (UHIN)	
	<input 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	
<b>Emergency Department</b>	<input checked="" type="checkbox"/> Level 1 – No Identifiable Data Elements	<u>2000-2012 Available</u>  <u>2010-2012</u>
	<input type="checkbox"/> Level 2 – Unique Physician Number (UPN)	
	<input type="checkbox"/> Level 3 – Unique Health Information Number (UHIN)	
	<input 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. FEE INFORMATION**

Please consult the fee schedules for APCD (Administrative Bulletin 13-11) and Case Mix data (Administrative Bulletin 13-09) and select from the following options:

**APCD Applicants Only**

- Academic Researcher
- Others (Single Use)
- Others (Multiple Use)

**Case Mix Applicants Only**

- Single Use
- Limited Multiple Use
- Multiple Use

Are you requesting a fee waiver?

- Yes
- No

If yes, please submit a letter stating the basis for your request.  
Please see attachment A.

**V. REQUESTED DATA ELEMENTS [APCD Only]**

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.

**VI. 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.

**VII. MEDICARE DATA**

Please indicate here whether you are seeking Medicare Data:

- Yes  
 No

Medicare data may only 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.

Applicants seeking Medicare data must complete a Medicare Request Form.

Applicants approved to receive Medicare data will be required to execute an Addendum to CHIA's standard data use agreement, containing terms and conditions required by CHIA's data use agreement with CMS.

**VIII. DIRECT PATIENT IDENTIFIERS<sup>4</sup>**

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.

None requested.

**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.

We plan to utilize the data from this project to demonstrate to payers, policy makers, stakeholders and other interested parties that there are opportunities to reduce unnecessary utilization by adolescents of EDs for the six conditions by increasing access to nurse practitioner-led primary health care services provided in schools.

Preliminary work indicates that adolescents with access to a school-based health center avoid unnecessary visits to an Emergency Department for specified conditions. This project will look at ED utilization by adolescents for specified conditions to ascertain the potential that availability of a school-based health center would reduce their reliance on ED visits for these conditions.

**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.)

NA

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.

The data generated through this project will be analyzed to determine if there are opportunities to replicate the cost-saving contributions made by existing school-based health centers in helping students avoid unnecessary ED visits in additional communities and schools in MA. The service provided by

<sup>4</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.

school-based health centers in providing access to students for these and other urgent and primary health care needs helps to reduce overall systems costs. It is in the public interest to determine whether there are additional schools and communities that could benefit from establishment of a school-based health center and reduction in unnecessary ED visits. The public's interest in public health and public education is well served by this project, which has the potential to provide a pathway for policy makers and health care payers to reduce health costs, increase access to primary care, and provide needed resources for schools. Increased access to school-based health centers has been demonstrated to decrease student absenteeism and tardiness, increase student and parent engagement and communication with schools, and improve student achievement for those receiving mental health services. Communities with student access to school-based health centers offer a competitive advantage through increased opportunities to enhance the health and productivity of their workforce.

2. **Attach** a brief (1-2 pages) description of your research methodology. (This description will not be posted on the internet.) See Attachment B
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 prior to receipt of the requested data.
  - 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.

Elmer Freeman, Executive Director of CCHERS served seventeen years as the CEO of a community health center with a thorough understanding of health care reimbursement and financing; was also responsible for implementation and administration of health center's policies and procedures for compliance with the initial HIPPA laws and regulations. He has served sixteen years as Executive Director of CCHERS with responsibility for oversight for conduct of clinical, public health and health services research as the organizational official with signatory authority. I have extensive experience in health services research and knowledge about the analysis, reporting and dissemination of health data to improve community health services and access. In my capacity as Executive Director of CCHERS, I have worked on numerous research projects that involve the analysis of diverse data sets to improve the delivery of health services at the community level. I have extensive knowledge about the services and access provided through school-based health centers. My background and experience in community based health services and clinical research and school-based health centers makes me highly qualified to lead this research project.

Dr. Linda Sprague Martinez, is CCHERS' Director of Research and Evaluation. At CCHERS she oversees research design and protocol development. This includes ensuring all fieldwork and secondary data analysis meet and exceed ethical research standards as prescribed by the Institutional Review Board. In addition, to serving as the CCHERS research and evaluation director, Dr. Martinez is a faculty member with the Tufts University School of Medicine in the Department of Public Health and Community Medicine, and has served as a member of the Tufts University Social Science Educational and Behavioral IRB. Having worked as both a provider and policy maker, she is interested in the how organizational, municipal and state-level policies directly and indirectly influence the health of individuals, families and

communities. More specifically, Dr. Martinez is interested in identifying the ways in which assets can be recognized across community sectors and leveraged in a way that promotes healthy families and communities, and improves the quality of both health care and living environments. Her expertise is in urban health, youth and community engaged intervention research, qualitative research methods and analysis, and community health assessment.

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.)

See Attachment C for resumes.

### XIII. DATA LINKAGE AND FURTHER DATA ABSTRACTION

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

Yes  
 No

2. 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

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, 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, seminar, conference, or other setting.

We plan to issue a report of findings from this analysis, which we will disseminate to those legislators, policymakers, educators, health providers, and other stakeholders interested in school-based health care issues and concerns through venues such as legislative briefings, presentations at meetings and conferences, and other appropriate forums.

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 report will be available in a downloadable pdf to the public free of charge on CCHERS' and MASBHC's websites. In addition, we will make it available electronically in response to email, telephone and other requests.

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 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:	MA Association for School-Based Health Care
Contact Person:	Nancy W. Carpenter
Title:	Executive Director
Address:	716 Columbus Avenue, Suite 398, Boston, MA 02120
Telephone Number:	617-354-6625
E-mail Address:	nwcarpenter@comcast.net
Organization Website:	www.ma4sbhc.org

7. 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

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

The MA Association for School-Based Health Care Executive Director, Nancy Carpenter will convene and engage their interdisciplinary SBHC Policy Advisory Group as project advisors with expertise in data analysis, policies and procedures in SBHCs, clinical practice and health services delivery. Additionally, she will provide review and critique of data analysis plans, review findings, and and prepare reports, presentation and briefing documents.



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

MASBHC is a not-for-profit community-based organization focused on policy analysis, formulation and research and is experienced in securing and managing data. The MA Association has expertise in school-based health issues and conducted the preliminary analysis of potential ED avoidance provided through school-based health centers. Ms. Carpenter will provide her expertise in school-based health centers and her previous experience assessing how school-based health centers help adolescents avoid ED visits with regard to project content analysis, development of findings, report preparation, and dissemination of findings. MASBHC has a level of access and credibility and a network of school based health centers for whom this data and information is critical for justification of the model in a changing health care system and formulas for reimbursement. In addition, Ms. Carpenter has extensive experience in public health, health policy, program development and planning.

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

Past collaborations with MASBHC have led to mutual respect and cooperative working relationship. Oversight will consist of regular scheduled meetings to discuss progress, review of tasks and activities based on established timeline, and written drafts of products for review throughout the process. My experience working with this organization affords me confidence in their ability to perform the required tasks and responsibilities in accordance with this application and standards.