

**Non-Government Application for Massachusetts All-Payer Claims Data
[Exhibit A: Data Application]**

I. INSTRUCTIONS

This form is required for all Applicants, except Government Agencies as defined in 957 CMR 5.02. All Applicants must also complete the Data Management Plan, attached to this Application. The Application and the Data Management Plan must be signed by an authorized signatory of the Organization. This Application and the Data Management Plan will be used by CHIA to determine whether the request meets the criteria for data release, pursuant to 957 CMR 5.00. Please complete the Application documents fully and accurately. Prior to receiving CHIA Data, the Organization must execute CHIA's Data Use Agreement. Applicants may wish to review that document prior to submitting this Application.

Before completing this Application, please review the data request information on CHIA's website:

- [Data Availability](#)
- [Fee Schedule](#)
- [Data Request Process](#)

After reviewing the information on the website and this Application, please contact CHIA at apcd.data@state.ma.us if you have additional questions about how to complete this form.

All attachments must be uploaded to IRBNet with your Application. All Application documents can be found on the [CHIA website](#) in Word and in PDF format or on [IRBNet](#) in Word format. If you submit a PDF document, please also include a Word version in order to facilitate edits that may be needed.

Applications will not be reviewed until the Application and all supporting documents are complete and the required application fee is submitted. A [Fee Remittance Form](#) with instructions for submitting the application fee is available on the [CHIA website](#) and [IRBNet](#). If you are requesting a fee waiver, a copy of the [Fee Remittance Form](#) and any supporting documentation must be uploaded to [IRBNet](#).

II. ORGANIZATION AND INVESTIGATOR INFORMATION

Project Title:	Impact of the ACA on preventive health services
IRBNet Number:	1041104-1
Organization Requesting Data:	Trustees of Boston College
Organization Website:	www.bc.edu
Authorized Signatory for Organization:	Jason Wen
Title:	Director, Technology Transfer & Licensing
E-mail Address:	Jason.wen@bc.edu
Address, City/Town, State, Zip Code:	Waul House, 140 Commonwealth Avenue, Chestnut Hill MA 02467
Primary Investigator:	Summer Hawkins
Title:	Associate Professor
E-mail Address:	Summer.hawkins@bc.edu
Telephone Number:	617-552-0945
Names of Co-Investigators:	Dr. Christopher F. Baum; Dr. Jessica Cohen; Dr. Lydia Pace; Ms. Annie Haakenstad; Ms. Caroline Kelley; Ms. Krisztina Horvath

E-mail Addresses of Co-Investigators:	baum@bc.edu; cohenj@hsph.harvard.edu; LEPACE@partners.org; anh580@mail.harvard.edu; caroline_kelley@g.harvard.edu; horvaith@bc.edu
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III. FEE INFORMATION

1. Consult the Fee Schedule for All-Payer Claims Database data and select one of the following options:

- Researcher
- Other
- Reseller

2. Are you requesting a fee waiver?

- Yes
- No

3. Complete and submit the Fee Remittance Form. If requesting a fee waiver, submit a letter stating the basis for your request (if required). Please refer to the Fee Schedule (effective Feb 1, 2017) for fee waiver criteria.

IV. PROJECT INFORMATION

1. What will be the use of the CHIA Data requested? [Check all that apply]

- | | | |
|---|---|--|
| <input checked="" type="checkbox"/> Epidemiological | <input checked="" type="checkbox"/> Health planning/resource allocation | <input checked="" type="checkbox"/> Cost trends |
| <input checked="" type="checkbox"/> Longitudinal Research | <input type="checkbox"/> Quality of care assessment | <input type="checkbox"/> Rate setting |
| <input type="checkbox"/> Reference tool | <input checked="" type="checkbox"/> Research studies | <input type="checkbox"/> Severity index tool |
| <input type="checkbox"/> Surveillance | <input type="checkbox"/> Student research | <input type="checkbox"/> Utilization review of resources |
| <input type="checkbox"/> Inclusion in a product | <input type="checkbox"/> Other (describe in box below) | |

2. Provide a summary of the specific purpose and objectives of your Project. This may include research questions and/or business use Projects.

The Patient Protection and Affordable Care Act (ACA) requires all new insurance policies, including the state and federal health insurance Marketplaces to 1) provide coverage for recommended preventive services and 2) provide that coverage with no cost sharing. The ACA preventive health services for adults and children, which came into effect on September 23, 2010, and additional prevention-related health services for women, effective on August 1, 2012. Despite the national reach of the ACA, its preventive health services with no cost sharing provision applies only to adults with private health insurance. While the ACA has the potential to improve preventive care there are gaps in the current coverage of preventive health services, which may ultimately increase disparities.

Health insurance claims for preventive health services can be used to evaluate the success of the ACA as well as identify gaps. All Payer Claims Databases (APCD) are available in Massachusetts, New Hampshire, and Maine from 2009 through 2015, which cover time periods prior to the ACA, after the ACA preventive health services came into effect, and additionally after Medicaid expansion. While Massachusetts and New Hampshire expanded their Medicaid programs, Maine chose not to adopt the expansion. Differences in Medicaid expansion across states creates a natural

experiment which we can evaluate using the APCD data.

The overarching goal of this study is to examine the impact of the ACA preventive health services and Medicaid expansion on screening tests, vaccines, and health-related behaviors and outcomes among adolescents and adults. The Specific Aims are:

Aim 1: Evaluate the overall impact of the ACA preventive health services on the uptake of preventive care and screening.

Aim 2: Evaluate the impact of the ACA preventive health services across social determinants.

Aim 3: Evaluate the impact of the ACA preventive health services across states.

Through this project we intend to identify gaps in the coverage of preventive health service provisions between the ACA and Medicaid as well as help close those gaps through policy recommendations. Our results will be directly applicable to current policies and practices in Massachusetts, New Hampshire, and Maine, which we hope will contribute to the discussion about health insurance and Medicaid coverage of preventive items and services.

3. Has an Institutional Review Board (IRB) reviewed your Project?

Yes [If yes, a copy of the approval letter and protocol must be included with the Application package on IRBNet.]

No, this Project is not human subject research and does not require IRB review.

4. **Research Methodology:** Applicants must provide either the IRB protocol or a written description of the Project methodology (typically 1-2 pages), which should state the Project objectives and/or identify relevant research questions. This document must be included with the Application package on IRBNet and must provide sufficient detail to allow CHIA to understand how the Data will be used to meet objectives or address research questions.

V. PUBLIC INTEREST

1. Briefly explain why completing your Project is in the public interest. *Uses that serve the public interest under CHIA regulations include, but are not limited to: health cost and utilization analysis to formulate public policy; studies that promote improvement in population health, health care quality or access; and health planning tied to evaluation or improvement of Massachusetts state government initiatives.*

The implementation of no cost sharing provision under the Affordable Care Act in 2010 provides a critical opportunity to improve access and utilization of preventive care. Certain preventive health services such as screening tests, vaccines, and counseling are provided with no cost sharing to consumers, greatly removing prior cost barriers that may have existed. As ACA implementation continues, it will be important to measure the impact of the no cost provision on the utilization of preventive health services across populations, including differences by sex, race/ethnicity, and age groups.

Our analysis will allow policymakers, researchers, and stakeholders to gain more accurate insight into how preventive service utilization overall and across populations, including racial/ethnic minorities, sex differences, and differences in provisions by age in Massachusetts. This information will help Massachusetts understand the full impact of the no cost sharing provision and whether there are populations that are experiencing access barriers to these preventive health services. This project will provide valuable information for Massachusetts policymakers as they seek to efficiently target resources for underserved populations and improve health behaviors and outcomes.

VI. DATASETS REQUESTED

1. Specify below the dataset(s) and year(s) of data requested for this Project, and provide your justification for requesting *each* dataset.

<input checked="" type="checkbox"/> Medical Claims <input checked="" type="checkbox"/> 2011 <input checked="" type="checkbox"/> 2012 <input checked="" type="checkbox"/> 2013 <input checked="" type="checkbox"/> 2014 <input checked="" type="checkbox"/> 2015
Describe how your research objectives require Medical Claims data: The overarching goal of this study is to examine the impact of the ACA preventive health services and Medicaid expansion on screening tests, vaccines, and health-related behaviors and outcomes among adolescents and adults. The Medical Claims data include ICD-9 codes for each claim, which we will use to identify ACA-related preventive health services. We will also use cost data for each claim to evaluate out-of-product costs for preventive care.
<input type="checkbox"/> Pharmacy Claims <input type="checkbox"/> 2011 <input type="checkbox"/> 2012 <input type="checkbox"/> 2013 <input type="checkbox"/> 2014 <input type="checkbox"/> 2015
Describe how your research objectives require Pharmacy Claims data:
<input type="checkbox"/> Dental Claims <input type="checkbox"/> 2011 <input type="checkbox"/> 2012 <input type="checkbox"/> 2013 <input type="checkbox"/> 2014 <input type="checkbox"/> 2015
Describe how your research objectives require Dental Claims data:
<input checked="" type="checkbox"/> Member Eligibility <input checked="" type="checkbox"/> 2011 <input checked="" type="checkbox"/> 2012 <input checked="" type="checkbox"/> 2013 <input checked="" type="checkbox"/> 2014 <input checked="" type="checkbox"/> 2015
Describe how your research objectives require Member Eligibility data: As described previously, it is important to measure the impact of the ACA's no cost provision on the utilization of preventive health services across populations, including differences by gender, race/ethnicity, and age groups. The Member Eligibility file includes patient demographics for each claim, which we will use to examine differences in the update of the ACA provisions across these populations (racial/ethnic minorities, gender, and age groups).
<input type="checkbox"/> Provider <input type="checkbox"/> 2011 <input type="checkbox"/> 2012 <input type="checkbox"/> 2013 <input type="checkbox"/> 2014 <input type="checkbox"/> 2015
Describe how your research objectives require Provider data:
<input checked="" type="checkbox"/> Product <input checked="" type="checkbox"/> 2011 <input checked="" type="checkbox"/> 2012 <input checked="" type="checkbox"/> 2013 <input checked="" type="checkbox"/> 2014 <input checked="" type="checkbox"/> 2015
Describe how your research objectives require Product data: As described previously, we will evaluate the impact of the ACA preventive health services across social determinants, including health insurance status. The ACA preventive health services at no cost sharing are only for individuals with private insurance. In order to formally test whether the policy changes impact populations differently by health insurance status, we will compare health insurance claims for screening tests, vaccines, and health-related behaviors and outcomes between individuals with private insurance and those with Medicaid.
Although the ACA requirements for most preventive health services are well-documented, the coverage of some items is not detailed. Insurance companies are at their discretion to interpret the provision of the required items or services. We will examine the level of coverage for all ACA preventive health services across major health insurance companies to test for consistency and compliance with government regulations. The Product file includes types of products, contracts and coverage type for each claim, which we will use to examine both differences in coverage by health insurance status and, separately, compare covered across health insurance companies.

2. All-Payer Claims Database data are refreshed and updated periodically and made available in Release Versions that contain the most recent five calendar years of data. As certain Project objectives may require future years of data not yet available, CHIA will consider requests for additional Release Versions of the same data (i.e., same elements and files) without the need to submit a new application. Please note that approved requests will be subject to applicable terms in the Data Use Agreement and fees for additional data. Please indicate below whether this is a one-time request, or if the described Project will require future Release Versions of data and if so, which Versions

One-Time **OR** 2016 2017 2018 2019 2020

VII. DATA ELEMENTS REQUESTED

State and federal privacy laws limit the release and use of Data to the minimum amount of data needed to accomplish a specific Project objective.

All-Payer Claims Database data is released in Limited Data Sets (LDS). All applicants receive the "Core" LDS, but may also request additional elements listed below for inclusion in their analyses. Requests for additional elements will be reviewed by CHIA to determine whether each represents the minimum data necessary to complete the specific Project objective.

For a full list of elements in the release (i.e., the core elements and additional elements), please refer to release layouts, data dictionaries and similar documentation included on CHIA's website.

1. Specify below which elements you are requesting in addition to the "Core" LDS, provide your justification for requesting each element.

Geographic Data

The geographic sub-divisions listed below are available for Massachusetts residents and providers only. Choose one of the following geographic options. [For releases with 5 digit zip code, CHIA will apply a substance abuse filter which will remove all claims that include a substance abuse diagnosis or treatment.]

<input type="checkbox"/> 3-Digit Zip Code (standard)	<input checked="" type="checkbox"/> 5-Digit Zip Code***
<p>***If requested, provide justification for requesting 5-Digit Zip Code. Refer to specifics in your methodology: Research has shown that many health outcomes occur on a gradient depending on individuals' social circumstances, such that individuals from more disadvantaged circumstances have poorer health than those from more advantaged circumstances. However, socio-demographic information is not available in the APCD including race/ethnicity, education, employment status, and income. We are requesting individual-level city and zip code. We intend to link city and zip code information from each claim to area-level measures of racial/ethnic and socioeconomic circumstances. Linkage with Census data will provide the following socioeconomic information: % black, % Hispanic, % low education, % unemployed, and % below poverty level. We need the 5-digit zip code for data linkage. While not at an individual level, having information at the neighborhood level will provide more contextual information on individuals' social circumstances. For example, we will be able to ask whether those individuals' that live in an area with higher levels of poverty (as defined by a high % below poverty level) are less likely to receive preventive health services through the ACA. These analyses will help to identify at risk groups and implications for interventions, such as targeting particular locations in Maine.</p>	

Dates

Choose one option from the following options for dates:

<input type="checkbox"/> Year (YYYY) (Standard)	<input checked="" type="checkbox"/> Month (YYYYMM) ***	<input type="checkbox"/> Day (YYYYMMDD) *** [for selected data elements only]
<p>*** If requested, provide justification for requesting Month or Day. Refer to specifics in your methodology: We are also requesting month/year of patients' date of birth only and not the specific day of birth. We plan to calculate the age of each patient based on when the claim occurred in relation to the ACA. A key provision of the ACA was extending health insurance coverage for children and young adults until age 26 by allowing them to be included on a parent's health insurance plan as a dependent. Thus, month/year is requested to distinguish eligibility of preventive health services and accurate comparison of health insurance claims to the ACA policy changes. For example, we will be able to ask whether and which preventive health services increased for those individuals with extended coverage versus young adults ages 27-29 who are no longer eligible for cover through their insurance plan. These analyses will help evaluate this key provision of the ACA and identify groups at higher risk of not engaging in preventive health services based on their eligibility.</p>		

National Provider Identifier (NPI)

Choose one of the following options for National Provider Identifier(s):

<input checked="" type="checkbox"/> Encrypted National Provider Identifier(s) (standard)	<input type="checkbox"/> Decrypted National Provider Identifier(s)***
<p>*** If requested, provide justification for requesting decrypted National Provider Identifier(s). Refer to specifics in your methodology:</p>	

VIII. MEDICAID DATA

1. Please indicate whether you are seeking Medicaid Data:

- Yes
- No

2. Federal law (42 USC 1396a(a)7) restricts the use of individually identifiable data of Medicaid recipients to uses that are directly connected to the administration of the Medicaid program. If you are requesting Medicaid Data, please describe, in the space below, why your use of the Data meets this requirement. Requests for 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. CHIA cannot release Medicaid Data without approval from MassHealth. This may introduce significant delays in the receipt of Medicaid Data.

Health insurance claims for preventive health services can be used to evaluate the success of the ACA as well as identify gaps. APCDs are available in Massachusetts, New Hampshire, and Maine from 2009 through 2015, which cover time periods prior to the ACA, after the ACA preventive health services came into effect, and additionally after Medicaid expansion. While Massachusetts and New Hampshire expanded their Medicaid programs, Maine chose not to adopt the expansion. Differences in Medicaid expansion across states creates a natural experiment which we can evaluate using the APCD data.

As described previously, one of our aims is to evaluate the impact of the ACA preventive health services by health insurance status status. Since the ACA preventive health services at no cost sharing are only available for individuals with private insurance, we will compare health insurance claims for screening tests, vaccines, and health-related behaviors and outcomes between individuals with private insurance and those with Medicaid. Our findings will provide details on the extent to which patients may be underutilizing preventive services and variations in coverage by types of health insurance. From a policy perspective, our findings can help inform new ACA regulations and Medicaid coverage of preventive services as well as the potential for cost savings.

Our study team has experience using Medicaid claims. Drs. Hawkins and Baum received All Payer Claims Data from Maine (2012-2014) to examine the impact of the ACA provision on breast pumps by women's insurance status. We found that women with private insurance had a significant increase in the number of insurance claims for breast pumps after the implementation of the ACA breastfeeding provision, which provides breast pumps at no cost sharing. For these women, in the third quarter 2012, there were 70 claims for breast pumps compared to 629 claims one year later in the third quarter 2013. Furthermore, there were 803 claims for breast pumps in the third quarter 2014 after health insurance became available through the Marketplace. In contrast, women with Medicaid had 8 claims for breast pumps over this time period because Maine does not provide breast pumps for Medicaid recipients. This paper has been accepted by the American Journal of Public Health.

IX. DATA LINKAGE

Data linkage involves combining CHIA Data with other data to create a more extensive database for analysis. Data linkage is typically used to link multiple events or characteristics within one database that refer to a single person within CHIA Data.

1. Do you intend to link or merge CHIA Data to other data?

Yes

No linkage or merger with any other data will occur

2. If yes, please indicate below the types of data to which CHIA Data will be linked. [Check all that apply]

Individual Patient Level Data (e.g. disease registries, death data)

Individual Provider Level Data (e.g., American Medical Association Physician Masterfile)

Individual Facility Level Data (e.g., American Hospital Association data)

Aggregate Data (e.g., Census data)

Other (please describe):

3. If yes, describe the dataset(s) to which the CHIA Data will be linked, indicate which CHIA Data elements will be linked and the purpose for each linkage.

As described previously, socio-demographic information is not available in the APCD including race/ethnicity, education, employment status, and income. We are requesting individual-level city and zip code. We intend to link city and zip code information from each claim to area-level measures of racial/ethnic and socioeconomic circumstances. Linkage with census data will provide the following socioeconomic information: % black, % Hispanic, % low education, % unemployed, and % below poverty level. While not at an individual level, having information at the neighborhood level will provide more contextual information on individuals' social circumstances.

4. If yes, for each proposed linkage above, please describe your method or selected algorithm (e.g., deterministic or probabilistic) for linking each dataset. If you intend to develop a unique algorithm, please describe how it will link each dataset.

We will link individual patient-level data to aggregate socio-demographic data at the 5-digit zip code level.

5. If yes, please identify the specific steps you will take to prevent the identification of individual patients in the linked dataset.

The linked dataset will have the same individual-level information as the Mass CHIA file. The same data security procedures used for the Mass CHIA file will be utilized for the linked file.

X. PUBLICATION / DISSEMINATION / RE-RELEASE

1. Describe your plans to publish or otherwise disclose CHIA Data, or any data derived or extracted from CHIA Data, in any paper, report, website, statistical tabulation, seminar, conference, or other setting. Any and all publication of CHIA Data must comply with CHIA's cell size suppression policy, as set forth in the Data Use Agreement. Please explain how you will ensure that any publications will not disclose a cell less than 11, and percentages or other mathematical formulas that in the display of a cell less than 11.

The results of our analysis will be published in a report made publicly available on the researchers' websites, presented at professional conferences, and/or submitted for academic publication. We will comply with CHIA's cell size suppression policy and all information from the study will be summarized from our analyses. We will not publish or disclose raw, sensitive or identifiable patient information at any point before, during, or after the study is complete.

2. Do you anticipate that the results of your analysis will be published and/or made publically available? If yes, describe how an interested party will obtain your analysis and, if applicable, the amount of the fee, that the third party must pay.

The results of our analysis will be published in a report made publicly available at no fee on the researchers' websites, presented at professional conferences, and/or submitted for academic publication.

3. Will you use CHIA Data for consulting purposes?

Yes

No

4. Will you be selling standard report products using CHIA Data?

Yes

No

5. Will you be selling a software product using CHIA Data?

Yes

No

6. Will you be reselling CHIA Data in any format?

Yes

No

If yes, in what format will you be reselling CHIA Data (e.g., as a standalone product, incorporated with a software product, by a subscription, etc.)?

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

8. If you have answered "yes" to questions 4, 5, or 6, what is the fee you will charge for such products, services or studies?

XI. APPLICANT QUALIFICATIONS

1. Describe your previous experience using claims data. This question should be answered by the primary investigator and any co-investigators who will be using the Data.

Summer Hawkins, PI, is a social epidemiologist and recently received a grant from the American Cancer Society to examine the impact of the ACA on the prevention and early detections of women's cancers using the APCD data from Maine, Massachusetts, and New Hampshire. The study team has extensive experience working with APCD data from Maine and Massachusetts.

Christopher Baum is an economist and Co-I on the project. Professor Baum has decades of experience in applied econometric research, most of it involving the use of panel data and instrumental variables techniques in financial and international economics and, more recently, in collaborations with Dr. Hawkins.

Drs. Hawkins and Baum received All Payer Claims Data from Maine (2012-2014) to examine the impact of the Patient Protection and Affordable Care Act (ACA) provision on breast pumps by women's insurance status. In the analysis described above, we found that women with private insurance had a significant increase in the number of insurance claims for breast pumps after the implementation of the ACA breastfeeding provision, which provides breast pumps at no cost sharing. For these women, in the third quarter 2012, there were 70 claims for breast pumps compared to 629 claims one year later in the third quarter 2013. Furthermore, there were 803 claims for breast pumps in the third quarter 2014 after health insurance became available through the Marketplace. In contrast, women with Medicaid had 8 claims for breast pumps over this time period because Maine does not provide breast pumps for Medicaid recipients. This paper has been accepted by the American Journal of Public Health.

Jessica Cohen is a health economist and Co-I on the project and she collaborated with Lydia Pace, a physician scientist who is also a Co-I on the project. Using the APCD from Massachusetts we have examined the change in utilization of five preventive services – colorectal, breast and cervical cancer screenings, influenza vaccination, and chlamydia screening comparing the pre-ACA period (January 2009-September 2010) with the period after the policy came into effect (October 2010-December 2012). Using an interrupted time series design, we assessed the change in preventive service utilization during our study period. Our preliminary analysis showed that the ACA did not increase preventive service utilization in Massachusetts, though it did bring down cost sharing for some preventive services. Massachusetts has a unique health care environment because the state underwent large reforms that may have impacted preventive care before the passage of the ACA. For instance, Massachusetts had already eliminated deductible payments for preventive care before the start of the ACA, potentially dampening the ACA policy's effect. Using data from other states will allow us to assess whether the ACA had a greater effect on utilization in states without large pre-existing reforms. Using data from public providers will also strengthen our analysis because it will allow us to compare the change in the out-of-pocket cost of preventive care between privately versus publically insured individuals after the start of the ACA. We anticipate that out-of-pocket costs for preventive care decreased among the privately insured but not among the publically insured. Evidence documenting how the cost of care changed by insurance type from this

study will inform the debate about the causes of the disparities in preventive care use between the publically and privately insured.

Dr. Pace has also led three published analyses of contraceptive use and adherence before and after implementation of the Affordable Care act, using Truven Health MarketScan claims data.

2. **Resumes/CVs:** When submitting your Application package on IRBNet, include résumés or curricula vitae of the principal investigator and co-investigators. (These attachments will not be posted on the internet.)

XII. USE OF AGENTS AND/OR CONTRACTORS

Please note: By signing this Application, the Organization assumes all responsibility for the use, security and maintenance of the CHIA Data by its agents, including but not limited to contractors.

Provide the following information for all agents and contractors who will have access to the CHIA Data. *[Add agents or contractors as needed.]*

AGENT/CONTRACTOR #1 INFORMATION	
Company Name:	Trustees of Boston College
Company Website	www.bc.edu
Contact Person:	Christopher F Baum, PhD
Title:	Professor of Economics and Social Work
E-mail Address:	baum@bc.edu
Address, City/Town, State, Zip Code:	140 Commonwealth Avenue, Chestnut Hill MA 02467
Telephone Number:	617-552-3673
Term of Contract:	Tenured professor

1. Describe the tasks and products assigned to the agent or contractor for this Project and their qualifications for completing the tasks.

Dr. Baum will work closely with Dr. Hawkins on all analyses related to the study aims. As a Co-I, he will oversee all analyses in conjunction with Dr. Hawkins. He is an econometrician and has extensive experience analyzing large datasets. As described previously, Dr. Baum has previously worked with the Maine APCD. He will supervise a Ph.D. student who will assist in cleaning and analyzing the data.

2. Describe the Organization's oversight and monitoring of the activities and actions of the agent or contractor for this Project, including how the Organization will ensure the security of the CHIA Data to which the agent or contractor has access.

Dr. Baum will meet with Dr. Hawkins monthly in person or by phone/email and discuss all study analyses and activities. Dr. Hawkins will ensure that any issues or concerns raised are appropriately addressed and ensure that compliance with CHIA's data use requirements are met.

3. Will the agent or contractor have access to or store the CHIA Data at a location other than the Organization's location, off-site server and/or database?

Yes

No

4. If yes, a separate Data Management Plan **must** be completed by the agent or contractor.

AGENT/CONTRACTOR #2 INFORMATION	
Company Name:	Harvard T.H. Chan School of Public Health
Company Website:	http://www.hsph.harvard.edu/jessica-cohen/
Contact Person:	Jessica Lee Cohen, PhD
Title:	Associate Professor of Global Health Department of Global Health and Population
E-mail Address:	cohenj@hsph.harvard.edu
Address, City/Town, State, Zip Code:	665 Huntington Avenue Boston, Massachusetts 02115
Telephone Number:	617-733-6470
Term of Contract:	August 2020

1. Describe the tasks and products assigned to the agent or contractor for this Project and their qualifications for completing the tasks.

Dr. Cohen will work closely with Drs. Baum and Hawkins on the analyses related to the study aims. In particular, she will help evaluate the overall impact of the ACA preventive health services on the uptake of preventive care and screening with a focus on patient out-of-pocket costs. She is a health economist and has experience conducting interrupted time series regression analysis. As described previously, Dr. Cohen has previously worked with the Massachusetts APCD. She will oversee a graduate student who will assist in cleaning and analyzing the data.

2. Describe the Organization's oversight and monitoring of the activities and actions of the agent or contractor for this Project, including how the Organization will ensure the security of the CHIA Data to which the agent or contractor has access.

Dr. Cohen will meet with Drs. Baum and Hawkins monthly in person or by phone/email and discuss all study analyses and activities. Dr. Hawkins will ensure that any issues or concerns raised are appropriately addressed and ensure that compliance with CHIA's data use requirements are met.

3. Will the agent or contractor have access to or store the CHIA Data at a location other than the Organization's location, off-site server and/or database?

Yes

No

We will share extracts of the data with Dr. Cohen, which will not contain the individual records from the MHDO database but rather summary information from those records at the monthly level. This analytic file will be de-identified and not contain any personally identifiable information. We will transfer the analytic file by secure copy (scp).

4. If yes, a separate Data Management Plan must be completed by the agent or contractor.

AGENT/CONTRACTOR #3 INFORMATION	
Company Name:	Brigham & Women's Hospital
Company Website:	www.brighamandwomens.org
Contact Person:	Lydia Pace, MD, MPH

Title:	Associate Physician, Research Scientist, and Instructor in Medicine
E-mail Address:	lepace@partners.org
Address, City/Town, State, Zip Code:	Division of Women’s Health 1620 Tremont Street, 3 rd Floor Boston, MA 02120
Telephone Number:	617-525-7545
Term of Contract:	At will

1. Describe the tasks and products assigned to the agent or contractor for this Project and their qualifications for completing the tasks.

Dr. Pace will work closely with Drs. Baum and Hawkins on the analyses related to the study aims. In particular, she will help evaluate the impact of the ACA preventive health services on the uptake of preventive care and screening across social determinants with a focus on women’s health outcomes. Dr. Pace has also led three published analyses of contraceptive use and adherence before and after implementation of the Affordable Care act, using Truven Health Marketscan claims data. She has supported Dr. Cohen’s previous project examining changes in utilization of five preventive services using the Massachusetts APCD.

2. Describe the Organization’s oversight and monitoring of the activities and actions of the agent or contractor for this Project, including how the Organization will ensure the security of the CHIA Data to which the agent or contractor has access.

Dr. Pace will meet with Drs. Baum and Hawkins monthly in person or by phone/email and discuss all study analyses and activities. Dr. Hawkins will ensure that any issues or concerns raised are appropriately addressed and ensure that compliance with CHIA’s data use requirements are met.

3. Will the agent or contractor have access to or store the CHIA Data at a location other than the Organization’s location, off-site server and/or database?

Yes

No

We will share extracts of the data with Dr. Pace, which will not contain the individual records from the MHDO database but rather summary information from those records at the monthly level. This analytic file will be de-identified and not contain any personally identifiable information. We will transfer the analytic file by secure copy (scp).

4. If yes, a separate Data Management Plan **must** be completed by the agent or contractor.

AGENT/CONTRACTOR #3 INFORMATION	
Company Name:	Harvard T.H. Chan School of Public Health
Company Website:	www.hsph.harvard.edu
Contact Person:	Annie Haakenstad
Title:	Doctoral student
E-mail Address:	anh580@mail.harvard.edu
Address, City/Town, State, Zip Code:	665 Huntington Avenue, Building 1, Room 1104, Boston, MA 02115
Telephone Number:	N/A
Term of Contract:	12/31/2020

1. Describe the tasks and products assigned to the agent or contractor for this Project and their qualifications for completing the tasks.

Annie is a doctoral student at the Harvard T.H. Chan School of Public Health and Dr. Jessica Cohen will directly supervise her. Annie's main responsibilities will be cleaning and coding the data. In conjunction with Dr. Cohen, she will conduct analyses. Annie has taken courses in applied econometrics and health economics.

2. Describe the Organization's oversight and monitoring of the activities and actions of the agent or contractor for this Project, including how the Organization will ensure the security of the CHIA Data to which the agent or contractor has access.

Annie will meet with Dr. Cohen weekly in person or by phone/email and discuss all study activities. Annie will also meet with Drs. Hawkins and Baum at least quarterly in person and/or by phone/email.

3. Will the agent or contractor have access to or store the CHIA Data at a location other than the Organization's location, off-site server and/or database?

Yes

No

Ms. Annie Haakenstad is a doctoral student who will work with Dr. Cohen on data cleaning and analysis. See our response above regarding data access.

4. If yes, a separate Data Management Plan **must** be completed by the agent or contractor.

AGENT/CONTRACTOR #4 INFORMATION	
Company Name:	Harvard T.H. Chan School of Public Health
Company Website:	www.hsph.harvard.edu
Contact Person:	Caroline Kelley
Title:	Doctoral student
E-mail Address:	caroline_kelley@g.harvard.edu
Address, City/Town, State, Zip Code:	75 Charles Street, Apt 4, Boston, MA 02114
Telephone Number:	N/A
Term of Contract:	12/31/2020

1. Describe the tasks and products assigned to the agent or contractor for this Project and their qualifications for completing the tasks.

Caroline is a doctoral student at the Harvard T.H. Chan School of Public Health and Dr. Jessica Cohen will directly supervise her. Caroline's main responsibilities will be cleaning and coding the data. In conjunction with Dr. Cohen, she will conduct analyses. Caroline has taken courses in social policy and macroeconomics.

2. Describe the Organization's oversight and monitoring of the activities and actions of the agent or contractor for this Project, including how the Organization will ensure the security of the CHIA Data to which the agent or contractor has access.

Caroline will meet with Dr. Cohen weekly in person or by phone/email and discuss all study activities. Caroline will also

meet with Drs. Hawkins and Baum at least quarterly in person and/or by phone/email.

3. Will the agent or contractor have access to or store the CHIA Data at a location other than the Organization's location, off-site server and/or database?

Yes

No

Ms. Caroline Kelley is a doctoral student who will work with Dr. Cohen on data cleaning and analysis. See our response above regarding data access.

4. If yes, a separate Data Management Plan **must** be completed by the agent or contractor.

AGENT/CONTRACTOR #5 INFORMATION	
Company Name:	Trustees of Boston College
Company Website:	www.bc.edu
Contact Person:	Krisztina Horvath
Title:	Doctoral student
E-mail Address:	horvaith@bc.edu
Address, City/Town, State, Zip Code:	140 Commonwealth Avenue, Chestnut Hill MA 02467
Telephone Number:	N/A
Term of Contract:	12/31/2020

1. Describe the tasks and products assigned to the agent or contractor for this Project and their qualifications for completing the tasks.

Krisztina is a doctoral student in the Economics Department at Boston College and Drs. Hawkins and Baum will jointly supervise her. Krisztina's main responsibilities will be cleaning and coding the data. In conjunction with Drs. Hawkins and Baum, she will conduct analyses. Krisztina has taken courses in applied econometrics and health economics.

2. Describe the Organization's oversight and monitoring of the activities and actions of the agent or contractor for this Project, including how the Organization will ensure the security of the CHIA Data to which the agent or contractor has access.

Krisztina will meet with Drs. Hawkins and/or Baum weekly in person or by phone/email and discuss all study activities. Drs. Hawkins and Baum will jointly supervise her work.

3. Will the agent or contractor have access to or store the CHIA Data at a location other than the Organization's location, off-site server and/or database?

Yes

No

4. If yes, a separate Data Management Plan **must** be completed by the agent or contractor.

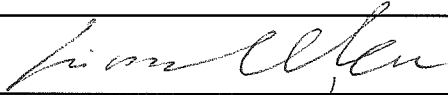
XIII. ATTESTATION

By submitting this Application, the Organization attests that it is aware of its data use, privacy and security obligations imposed by state and federal law *and* confirms that it is compliant with such use, privacy and security standards. The Organization further agrees and understands that it is solely responsible for any breaches or unauthorized access,

disclosure or use of CHIA Data, including, but not limited to, any breach or unauthorized access, disclosure or use by its agents.

Applicants approved to receive CHIA Data will be provided with Data following the payment of applicable fees and upon the execution of a Data Use Agreement requiring the Organization to adhere to processes and procedures designed to prevent unauthorized access, disclosure or use of data.

By my signature below, I attest: (1) to the accuracy of the information provided herein; (2) that the requested Data is the minimum necessary to accomplish the purposes described herein; (3) that the Organization will meet the data privacy and security requirements described in this Application and supporting documents, and will ensure that any third party with access to the Data meets the data use, privacy and security requirements; and (4) to my authority to bind the Organization.

Signature: (Authorized Signatory for Organization)	
Printed Name:	Jason Wen Director. OTTL

Attachments

A completed Application must have the following documents attached to the Application:

- 1. IRB approval letter and protocol (if applicable)
- 2. Research Methodology (if protocol is not attached)
- 3. CVs of Investigators
- 4. Data Management Plan (including one for each agent or contractor that will have access to or store the CHIA Data at a location other than the Organization’s location, off-site server and/or database)

Applications will not be reviewed until they are complete, including all attachments.

TRACKING TABLE (to be completed by CHIA staff only)	
Complete Application Received	
Application Fee Received	
Data Privacy Committee Review	
Data Release Committee Review	
Linkages Approved (as described)	
Approved for additional Release Versions	
Executive Director Approval	
Data Fee Received	
Date of First Audit	
Extract Number:	

Attachment #1 – IRB Approval Letter & Protocol or Research Methodology

Attachment #2 – Data Management Plan(s)