

# Application for Massachusetts All-Payer Claims Data (Non-Government) [Exhibit A – Data Application]

#### I. INSTRUCTIONS

This form is required for all Applicants, Agencies, or Organizations, hereinafter referred to as "Organization", except Government Agencies as defined in 957 CMR 5.02, requesting protected health information. All Organizations must also complete the Data Management Plan, and attach it to this Application. The Application and the Data Management Plan must be signed by an authorized signatory. 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. Organizations 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
- <u>Data Request Process</u>

After reviewing the information on the website and this Application, please contact CHIA at <u>apcd.data@chiamass.gov</u> if you have additional questions about how to complete this form.

The Application and all attachments must be uploaded to IRBNet. All Application documents can be found on the <u>CHIA</u> website.

Information submitted as part of the Application may be subject to verification during the review process or during any audit review conducted at CHIA's discretion.

Applications will not be reviewed until the Application and all supporting documents are complete and the required application fee is received.

A <u>Fee Remittance Form</u> with instructions for submitting the application fee is available on the CHIA website. If you are requesting a fee waiver, a copy of the Fee Remittance Form and any supporting documentation must be uploaded to IRBNet. Please be aware that if your research is funded and under that funding you are required to release raw data to the funding source, you may not receive CHIA Data.

#### II. FEE INFORMATION

- 1. Consult the most current Fee Schedule for All-Payer Claims Database data.
- 2. After reviewing the Fee Schedule, if you have any questions about the application or data fees, contact <a href="mailto:apcd.data@chiamass.gov">apcd.data@chiamass.gov</a>.
- 3. If you believe that you qualify for a fee waiver, complete and submit the <u>Fee Remittance Form</u> and attach it and all required supporting documentation with your application. Refer to the <u>Fee Schedule</u> (effective Feb 1, 2017) for fee waiver criteria.
- 4. Applications will not be reviewed until the application fee is received.
- 5. Data for approved Applications will not be released until the payment for the Data is received.

# III. ORGANIZATION & INVESTIGATOR INFORMATION

Project Title:	Access to Oral Healthcare in Massachusetts.
IRBNet Number:	2178708-1
Organization Requesting Data (Recipient):	Trustees of Boston University
Organization Website:	https://www.bumc.bu.edu/
Authorized Signatory for Organization:	William P. Segarra, JD, MPH
Title:	Director, Industry Contracts & Agreements
E-Mail Address:	industry@bu.edu
Telephone Number:	617-353-4365
Address, City/Town, State, Zip Code:	25 Buick Street, Suite #200, Boston, MA 02215
Data Custodian:	Ashwini Ranade
(individual responsible for organizing, storing, and archiving	
Data)	
Title:	Clinical Associate Professor
E-Mail Address:	aranade@bu.edu
Telephone Number:	617-358-6293
Address, City/Town, State, Zip Code:	560 Harrison Avenue, Boston, MA 02118
Primary Investigator (Applicant):	Ashwini Ranade
(individual responsible for the research team using the Data)	
Title:	Clinical Associate Professor
E-Mail Address:	aranade@bu.edu
Telephone Number:	617-358-6293
Address, City/Town, State, Zip Code:	560 Harrison Avenue, Boston, MA 02118
Names of Co-Investigators:	Huimin Cheng
E-Mail Addresses of Co-Investigators:	huimin23@bu.edu

# IV. PROJECT INFORMATION

<u>IMPORTANT NOTE</u>: Organization represents that the statements made below as well as in any study or research protocol or project plan, or other documents submitted to CHIA in support of the Data Application are complete and accurate and represent the total use of the CHIA Data requested. Any and all CHIA Data released to the Organization under an approved application may ONLY be used for the express purposes identified in this section by the Organization, and for <u>no</u> other purposes. Use of CHIA Data for other purposes requires a separate Data Application to CHIA <u>or</u> written request to CHIA, with approval being subject to CHIA's regulatory restrictions and approval process. Unauthorized use is a material violation of your Organizations's Data Use Agreement with CHIA.

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

☐ Epidemiological	⊠ Health planning/resource allocation	□Cost trends
□ Longitudinal Research	☐ Quality of care assessment	☐ Rate setting
☐ Reference tool	⊠ Research studies	☐ Severity index tool (or other derived input)
⊠ Surveillance	☐ Student research	☐ Utilization review of resources
☐ Inclusion in a product	☐ Other (describe in box below)	

The purpose of this research project is to examine the impact of COVID-19 pandemic on dental service utilization by examining emergency department (ED) use for non-traumatic dental conditions (NTDC) and patterns of dental service use in outpatient dental settings for Massachusetts residents. Considering that COVID-19 pandemic was superimposed on the

ongoing opioid epidemic this project will assess the trends in opioid prescriptions for NTDC ED visits during the study period.

In addition, we will apply spatial data science methods to develop and estimate measures of neighborhood-level spatial access to dental services in Boston and assess the association between these measures and emergency department (ED) visits for non-traumatic dental conditions (NTDC).

2. Provide an abstract or brief summary of the specific purpose and objectives of your Project. This description should include the research questions and/or hypotheses the project will attempt to address, or describe the intended product or report that will be derived from the requested data and how this product will be used. Include a brief summary of the pertinent literature with citations, if applicable.

Oral health is an integral part of overall health. Significant disparities in access to oral healthcare and outcomes exist in the U.S. The COVID-19 pandemic severely restricted access to care; several restrictions were implemented to stop the spread of the virus. Access to oral healthcare is also expected to be adversely affected due to the pandemic and hence the first two aims of this study aim to assess the impact of COVID-19 pandemic on dental service utilization in Massachusetts. These two aims include;

- 1. To examine the impact of the COVID-19 pandemic on emergency department (ED) utilization for non-traumatic dental conditions (NTDCs) in Massachusetts.
- 2.To examine changes in patterns of dental service use and associated costs in outpatient dental settings in Massachusetts during the COVID-19 pandemic.

Both these studies will identify patient level determinants of dental service use in emergency departments and outpatient dental settings.

The third aim is nested within the context of the COVID-19 pandemic superimposed on the ongoing opioid epidemic. The COVID-19 pandemic exacerbated underlying socioeconomic, mental health, and access to care issues that have contributed to the opioid epidemic. Thus, we are witnessing the COVID-19 pandemic superimposed on the opioid epidemic. Prior research in this arena has shown that opioid prescriptions are common in the EDs because of the urgent and pain-related nature of visits, however, they are disproportionately prescribed for some conditions19. In 2020, Rui and colleagues reported that even though the percentage of ED visits with opioid prescriptions had decreased from 2010–2011 through 2016–2017, dental pain remained one of the top 2 diagnoses for opioid prescriptions in the ED20. In 2016–2017, 49.7% of dental pain visits resulted in receipt of an opioid prescription, compared with 66.0% in 2010–201121. Given this background, it is important to assess opioid prescription patterns in ED's for dental conditions, specifically within the context of the COVID-19 pandemic. This will provide valuable information regarding the state of opioid prescribing patterns for dental conditions during the pandemic and help identify those at most risk for opioid misuse by describing patient characteristics. Thus, the purpose of the third aim is;

3. To assess opioid prescription patterns during the COVID-19 pandemic for NTDC ED visits in Massachusetts.

To develop policies and programs that help reduce NTDC ED visits we need to understand *why* patients seek dental care in the EDs. Prior studies have examined patient-level factors as potential drivers of NTDC ED use. However, these well-documented economic and socio-political factors are rooted in the local geographic contexts in which people live and interact. Such characterizations of the local dental care delivery systems on a patient's ability to access timely oral health services are thus needed to fully understand drivers of ED use for dental conditions. Thus, the fourth aim of this project is;

4. To apply spatial data science methods to develop and estimate measures of neighborhood-level spatial access to dental services in Boston and assess the association between these measures and emergency department (ED) visits for non-traumatic dental conditions (NTDC).

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- 3. Has an Institutional Review Board (IRB) reviewed your Project?
- ⊠ Yes [*If yes, a copy of the approval letter and protocol <u>must</u> be included with the Application package on IRBNet.*] □ No. this Project is not human subject research and does not require IRB review.
- 4. <u>Research Methodology</u>: Applications must include 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 this Project is in the public interest. Use quantitative indicators of public health importance where possible, for example, numbers of deaths or incident cases; age-adjusted, age-specific, or crude rates; or years of potential life lost. 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 WHO declared COVID-19 as a global pandemic on March 11th, 2020. Several measures were taken to stop the transmission of the novel virus by restricting movement and community interactions. However, these strategies were inconsistent along with a lack of coordinated responses which meant that access to healthcare was severely restricted. These unprecedented events have perpetuated existing disparities in access to healthcare and health outcomes. Oral healthcare is often viewed in a silo, separate from medical care and very little is known regarding the impact of COVID-19 restrictions on access to oral healthcare. Thus, this project is of public interest as we will be able to assess the impact of the pandemic on NTDC ED visits (a marker for inadequate access to dental care) and outline patient level determinants to inform program planning in this area. The findings from these studies will provide baseline utilization patterns and will be relevant as we recover from the pandemic.

As stated earlier, the COVID-19 pandemic exacerbated underlying socioeconomic, mental health, and access to care issues that have contributed to the opioid epidemic. Thus, we are witnessing the COVID-19 pandemic superimposed on the opioid epidemic. It is important to examine opioid prescription patterns and patient level determinants within the context of the pandemic to continue <u>surveillance</u> in this area. The findings can be leveraged to develop targeted programs to continue efforts in addressing the opioid epidemic.

The findings from the fourth aim will estimate the effect of <u>spatial access</u> to dental care on NTDC ED visits. In addition, the findings will highlight oral health disparities specifically related to access and help identify areas with dental service needs in Boston. Application of spatial data science methods in dental public health is limited and has not been used to inform program planning and policy development and this project offers an opportunity to contribute in this arena.

# VI. DATASETS REQUESTED

The Massachusetts All-Payer Claims Database is comprised of medical, pharmacy, and dental claims and information from the member eligibility, provider, and product files that are collected from health insurance payers licensed to operate in the Commonwealth of Massachusetts. This information encompasses public and private payers as well as data from fully-insured and self-insured plans. APCD data are refreshed and updated annually and made available to approved data users. For more information about APCD Data, including available years of data and a full list of elements in the database please refer to layouts, data dictionaries and similar documentation included on CHIA's website.

Data requests are typically fulfilled on a one time basis, however; certain Projects may require future years of data that will become available in a subsequent release. Projects that anticipate a need for future years of data may request to be considered for a subscription. Approved subscriptions will receive, upon request, the <a href="mailto:same\_data\_files\_and\_data\_elements">same\_data\_files\_and\_data\_elements</a> included in the initial Release annually or as available. Please note that approved subscription requests are subject to the Data Use Agreement, will require payment of fees for additional Data for Non-Government Entities, and subject to the limitation that the Data can be used only in support of the approved Project.

1. Please indicate below v subscription.	whether this is a one-time request, or if the described Project will require a	
☐ One-Time Request	OR   Subscription	
•	porting requests for claims data from 2016 to 2022. Requests made outside of these	
,	orted by CHIA and will be considered on a case-by-case basis. Please specify the	
, , , , , , , , , , , , , , , , , , , ,	being requested: 2018-2022 .	
y cars or acta that are o		
3. Specify below the data	a files requested for this Project, and provide your justification for requesting <u>each</u>	
file.	1 J / 1 J J 1 8	
<b>⋈</b> Medical Claims		
	objectives require Medical Claims data: o identify NTDC ED visits and will be linked to the dental claims, pharmacy claims and member	
	sess dental service use prior to the NTDC ED visit and track opioid prescriptions. Zipcode data from	
the medical claims file will be	e used to link to other publicly available datasets (American Community Survey, Health Resource	
Service Adminitration data etc	c.)	
<b>☒</b> Pharmacy Claims		
	objectives require Pharmacy Claims data:	
Pharmacy claims will be used	to track opioid prescrioptions for dental conditions.	
<b>☑</b> Dental Claims		
Describe how your research o	objectives require Dental Claims data:	
Dental claims will be used to a	assess dental service utilization and associated costs.	
<b>⋈</b> Member Eligibility		
	objectives require Member Eligibility data:	
<u>-</u>	e used to capture patient demographic characteristics of interest. This includes member age, gender,	
zip-code, insurance type.	rused to expense patient demograpine endiagements of interest Timo mercusor member age, gender,	
☐ Provider		
Describe how your research of	objectives require Provider data:	
Click here to enter text.		
☐ Product		
- I I vauct		

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Describe how your research objectives require Product data:
Click here to enter text.
VII. DATA ENHANCEMENTS REQUESTED
State and federal privacy laws limit the release and use of CHIA Data to the minimum amount of data needed accomplish a specific Project objective.
All-Payer Claims Database data is released in Limited Data Sets (LDS). All Organizations receive the "Core" LDS, but may also request the data enhancements listed below for inclusion in their analyses. Requests for enhancements 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 <u>release</u> <u>layouts</u> , <u>data dictionaries</u> and similar documentation included on CHIA's website.
1. Specify below which enhancements you are requesting in addition to the "Core" LDS, provide your justification for requesting <u>each</u> enhancement.

## a. Geographic Subdivisions

ZIP code and state geographic subdivisions are available for Massachusetts residents and providers only. Small population ZIP codes are combined with larger population ZIP codes. One ZIP Code per person (MEID) per year has been assigned based on the ZIP code/state reported in the member eligibility record's earliest submission year month. If the record does not have an MEID, assignment is based on distinct OrgID/Carrier Specific Unique Member ID.

Non-Massachusetts ZIP codes and state codes except for CT, MA, ME, NH, NY, RI, and VT are suppressed.

Select *one* of the following options.

☐ 3-Digit Zip Codes (standard)	⊠ 5-Digit Zip Codes***
***If requested, provide justification for requesting 5-Digit Z	Lip Code. Refer to specifics in your methodology:
Our study will require 5 digit zip-code of residence for two	reasons. We need the 5 digit zip-code to be able to link the
claims data with other publicly available datasets and to be	able to accurately assess aggregate level information (eg
income by zip-code, provider shortage areas, vehicle owner	rship). We also need the five digit zip-code data to be able to
assess place of residence in relation to spatial access level v	variables (eg distance to public transit, distance to ED, dental
provider etc.)	•

### b. Date Resolution

Select <u>one</u> option from the following options.

☐ Year (YYYY) (Standard)	☐ Month (YYYYMM) ***	☐ Day (YYYYMMDD) ***	
		[for selected data elements only]	
*** If requested, provide justification for requesting Month or Day, Refer to specifics in your methodology:			

The specific dates are necessary to be able to follow the sequence of claims occurring in the same month. When analyzing visit level data, it is important to know if different claims were filed on the same day.

c. National Provider Identifier (NPI)

Select *one* of the following options.

☐ Encrypted National Provider Identifiers (standard)	☐ Decrypted National Provider Identifiers***
*** If requested, provide justification for requesting decrypted	National Provider Identifier(s). Refer to specifics in your
methodology:	
Click here to enter text.	

# VIII. MEDICAID (MASSHEALTH) 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 <u>directly connected to the administration of the Medicaid program</u>. If you are requesting MassHealth Data, please describe, in the space below, why your use of the Data meets this requirement. *Your description should focus on how the results of your project could be used by the Executive Office of Health and Human Services in connection with the administering the MassHealth program*. Requests for identifiable MassHealth 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 MassHealth program. CHIA cannot release MassHealth Data without approval from MassHealth. This may introduce significant delays in the receipt of MassHealth Data.

Massachusetts is one of the few states in the country that provides comprehensive dental benefits to its adult Medicaid enrollees, which provides a unique setting to study access to dental care for Medicaid enrollees. Despite provision of comprehensive dental coverage, Medicaid enrollees are known to experience several barriers in accessing timely, appropriate dental care. Prior research has demonstrated that Medicaid enrollees have been disproportionately impacted by the COVID-19 pandemic. Hence, including Medicaid enrollee data for the proposed studies is critical to understand the full extent of the impact of the COVID-19 pandemic on access to dental care in MA. Assessing patient and community-level determinants has the potential to guide policy makers and administrators to develop targeted programs and intervention strategies to meet the dental needs of Medicaid enrollees in MA. The findings from these studies will inform policy makers on dental service utilization patterns at the same time help quantify unmet need as measured by emergency department utilization for non-traumatic dental conditions.

Including Medicaid enrollee data will also outline the extent of disparities in access to dental care when compared to non-Medicaid enrollees in MA. MassHealth can use the study findings to identify subgroups that are likely to be impacted by the COVID-19 pandemic as it relates to accessing dental care. Administrators can use the study findings to inform targeted interventions to meet the dental needs of enrollees. In addition, these findings can be used as baseline for comparison as we recover from the pandemic in the coming years. Prior studies have not applied spatial data science methods to dental delivery system, and findings from this study can guide future research in this area to inform policy makers of the factors that operate beyond individual patients at the community level.

The researchers will share all relevant study findings with MassHealth. Overall, these studies have the potential to assist MassHealth in identifying opportunities to intervene, and direct patients to appropriate and timely dental care. The

proposed studies not only add to the growing body of literature in the dental care delivery area but also provide baseline information on the impact of the COVID-19 pandemic on access to dental care in MA.

3. Organizations approved to receive Medicaid Data will be required to execute a <u>Medicaid Acknowlegment of Conditions</u>. MassHealth may impose additional requirements on applicants for Medicaid Data as necessary to ensure compliance with federal laws and regulations regarding Medicaid.

#### 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.

<ol> <li>Do you intend to link or merge CHIA Data to other data?</li> <li>         ∑ Yes     </li> </ol>
☐ 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.
We will link the APCD data with four publicly available data sources.

Geographic boundaries of federally defined <u>dental health professional shortage areas (DHPSAs)</u> will be downloaded from <u>Health Resources and Services Administration (HRSA)</u>. Five digit zip-codes will be used to designate DHPSAs as it relates to member zip-code in the APCD data.

Data from the <u>American Community Survey's 2015-2019 (ACS)</u> 5-year estimates on vehicle ownership, median income, race/ethnicity and education level will be obtained at the ZIP code level to match the geography of the claims dataset.

MA dental provider data will be accessed through the <u>American Dental Association (ADA) provider file</u>. Zip-codes will be used to identify location of the dental providers in Boston which will be used to estimate the distance from member zip-code to dental provider practice location. In addition we will include information on the type of dental insurance accepted (Medicaid, private) at the practice from the ADA provider file. This will be used to examine spatial accessibility to dental providers.

Public transit data will be obtained from MBTA's open data portal. Five digit zip-codes will be used to estimate the distance from member zip-code to nearest public transit route.

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.

When linking the APCD to the above listed data sources, we will be using the 5 digit zip code as the unique identifier.

5. If yes, attach or provide below a complete listing of the variables from <u>all sources</u> to be included in the final linked analytic file.

HRSA (5 digit zip-code level): site zip-code variable to identify designated dental health professional shortage areas. ACS (5 digit zip-code level): median family income, education level, vehicle ownership, percent of residents who are: White, Black, Hispanic and urban vs rural classification.

American Dental Association (ADA) provider file: Provider practice zip-code and type of insurance accepted (Medicaid vs private)

MBTA's open data portal: public transit service areas

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

Our linked datasets do not include any individual patients, as they are provider-level and census-level data. Patients will not be identifiable.

### X. PUBLICATION / DISSEMINATION / RE-RELEASE

1. Do you anticipate that the results of your analysis will be published or made publically available? If so, how do you intend to disseminate the results of the study (e.g.; publication in professional journal, poster presentation, newsletter, web page, seminar, conference, statistical tabulation)? 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 result in the display of a cell less than 11.

Results from this project will be publicly disseminated through manuscripts, conference presentations, and seminar presentations. Results will be reported in aggregate. We do not anticipate small cell sizes for any outcomes or subanalyses. However, we will ensure that no reported results will have a cell size less than 10. We will ensure this by reporting all sample sizes by cell. If any analyses were to result in a cell size <10 then we would not report that finding. Instead, we would include a note indicating that the cell size was insufficient for reporting.

2. Describe your plans to use or otherwise disclose CHIA Data, or any Data derived or extracted from such Data, in any paper, report, website, statistical tabulation, seminar, or other setting that is not disseminated to the public.

We would be happy to share statistical code and aggregate results from our analyses (no fee) if this is helpful to other researchers or stakeholders, but we will not provide third parties with data or any other product.

3. What will be the lowest geographical level of analysis of data you expect to present for publication or
presentation (e.g., state level, city/town level, zip code level, etc.)? Will maps be presented? If so, what methods
will be used to ensure that individuals cannot be identified?

Geographic analyses will not be presented in publication. However, we may use zip codes to create "zip code groups." An example is median income by zip-code, where we would group zip codes across the state by income quartiles. This method would aggregate many zip codes within each group, such that individuals would not be identified. In the unlikely event of cell size <11, we will not report these data.

<ul><li>4. Will you be using CHIA Data for consulting purposes?</li><li>☐ Yes</li><li>☒ No</li></ul>
<ul><li>5. Will you be selling standard report products using CHIA Data?</li><li>☐ Yes</li><li>☒ No</li></ul>
<ul><li>6. Will you be selling a software product using CHIA Data?</li><li>☐ Yes</li><li>☒ No</li></ul>
7. Will you be using CHIA Data as in input to develop a product (i.e., severity index took, risk adjustment tool, reference tool, etc.)  ☐ Yes ☑ No
<ul><li>8. Will you be reselling CHIA Data in any format not noted above?</li><li>☐ Yes</li><li>☒ No</li></ul>
If yes, in what format will you be reselling CHIA Data?
N/A
9. If you have answered "yes" to questions 5, 6, 7 or 8, please provide the name and a description of the products, software, services, or tools.
N/A
10. If you have answered "yes" to questions 5, 6, 7 or 8, what is the fee you will charge for such products, software, services or tools?

# XI. APPLICANT QUALIFICATIONS

N/A

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.

Ashwini Ranade, MPH, PhD is a Clinical Associate Professor in the Dept of Health Policy and Health Services Research at Boston University, School of Dental Medicine. The proposed studies build on her prior work in this area. For her doctoral dissertation, she has worked with MA APCD data to study patient characteristics of those visiting ED's for NTDCs and has examined the impact of changes in dental benefits for Medicaid enrollees on ED use for dental conditions. Her prior work using MA APCD has resulted in three peer reviewed publications\* and conference presentations. The proposed studies will allow to further develop her skills in big data analytics and learn the application of different study design and statistical methodologies to study large data sets.

- 1.Ranade, A., Young, G., Garcia, R., Griffith, J., Singhal, A., & McGuire, J. (2020). Changes in Dental Benefits and Use of Emergency Departments for Nontraumatic Dental Conditions in Massachusetts. Public Health Reports (1974), 135(5), 571–577.
- https://doi.org/10.1177/0033354920946788
- 2. Ranade, A., Young, G., Garcia, R., Griffith, J., Singhal, A., & McGuire, J. (2019). Emergency department revisits for nontraumatic dental conditions in Massachusetts. The Journal of the American Dental Association, 150(8), 656-663.
- 3. Ranade, A., Young, G. J., Griffith, J., Garcia, R., Singhal, A. and McGuire, J. (2019). Determinants of emergency department utilization for non-traumatic dental conditions in Massachusetts. Journal of Public Health Dentistry, 79: 71-78. doi:10.1111/jphd.12297

Huimin Cheng, PhD is an Assistant Professor in Department of Biostatistics at the Boston University School of Public Health. Her research focuses on big data analysis. Her research stands at the intersection of statistical theory, computational innovation, and practical application, addressing scientific problems across various domains such as bioinformatics and public health. While her direct experience with APCD may be limited, her expertise in biostatistics and data science has prepared her to analyze complex healthcare datasets effectively.

2. <u>Resumes/CVs</u>: 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

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. The Organization must have a written agreement with the agent of contractor limiting the use of CHIA Data to the use approved under this Application as well as the privacy and security standards set forth in the Data Use Agreement. CHIA Data may not be shared with any third party without prior written consent from CHIA, or an amendment to this Application. CHIA may audit any entity with access to CHIA Data.

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

AGENT/CONTRACTOR #1 INFORMATION				
Company Name:	Click here to enter text.			
Company Website	Click here to enter text.			
Contact Person:	Click here to enter text.			
Title:	Click here to enter text.			
E-mail Address:	Click here to enter text.			
Address, City/Town, State, Zip	Click here to enter text.			
Code:				
Telephone Number:	Click here to enter text.			
Term of Contract:	Click here to enter text.			
1. Describe the tasks and products assigned to the agent or contractor for this Project and their qualifications for completing the tasks.				
Click here to enter text.				

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.

Click here to enter text.

3. Will the	agent or con	tractor have a	access to and	d store the	CHIA I	Data at a	location	other	than the
Organizatio	on's location	, off-site serv	er and/or da	tabase?					

☐ Yes

 $\square$  No

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

AGENT/CONTRACTOR #1 INFORMATION		
Company Name:	Click here to enter text.	
Company Website	Click here to enter text.	
Contact Person:	Click here to enter text.	
Title:	Click here to enter text.	
E-mail Address:	Click here to enter text.	
Address, City/Town, State, Zip	Click here to enter text.	
Code:		
Telephone Number:	Click here to enter text.	
Term of Contract:	Click here to enter text.	

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

Click here to enter text.		

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.

Click here to enter text.
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

[INSERT A NEW SECTION FOR ADDITIONAL AGENTS/CONTRACTORS AS NEEDED]

4. If yes, a separate Data Management Plan <u>must</u> 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 any third party to which it grants access.

Organizations 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) this research is not funded by a source requiring the release of raw data to that source; (3) that the requested Data is the minimum necessary to accomplish the purposes described herein; (4) 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 (5) to my authority to bind the Organization.

Signature: (Authorized Signatory for Organization)	William P. Segarra, MA, SP, MPH Drag signature image here or delete and physically sign
Printed Name:	William P. Segarra
Title:	Senior Director, Industry Contracts
Date:	Marl27, 2024 enter text.

#### Attachments:

A completed Application must have the following documents attached to the Application or uploaded separately to IRBNet:

- ☑ 1. IRB approval letter and protocol (if applicable), or research methodology (if protocol is not attached)
- ⊠ 2. 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);
- ⊠ 3. CVs of Investigators (upload to IRBNet)

APPLICATIONS WILL NOT BE REVIEWED UNTIL THEY ARE COMPLETE, INCLUDING ALL ATTACHMENTS.