

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

### I. INSTRUCTIONS

*This form is required for all Applicants, except Government Agencies as defined in [957 CMR 5.02](#), requesting protected health information. 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](mailto: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. 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 [apcd.data@state.ma.us](mailto:apcd.data@state.ma.us).
3. If you believe that you qualify for a fee waiver, complete and submit the [Fee Remittance Form](#) and attach it and all required supporting documentation with your application. Refer to the [Fee Schedule](#) (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**

<b>Project Title:</b>	Analysis of Caregiver Support Impact on Healthcare Utilization
<b>IRBNet Number:</b>	1482026-1
<b>Organization Requesting Data (Recipient):</b>	Seniorlink, Inc.
<b>Organization Website:</b>	<a href="https://www.seniorlink.com/">https://www.seniorlink.com/</a>
<b>Authorized Signatory for Organization:</b>	<b>Ashish Shrowty</b>
<b>Title:</b>	Director, Data & Analytics
<b>E-Mail Address:</b>	asrhowty@seniorlink.com
<b>Address, City/Town, State, Zip Code:</b>	120 Saint James Ave Floor 4 Boston, MA 02166
<b>Data Custodian: (individual responsible for organizing, storing, and archiving Data)</b>	<b>Ashish Shrowty</b>
<b>Title:</b>	Director, Data & Analytics, Seniorlink, Inc
<b>E-Mail Address:</b>	ashrowty@seniorlink.com
<b>Telephone Number:</b>	866-797-2333
<b>Address, City/Town, State, Zip Code:</b>	120 Saint James Ave Floor 4 Boston, MA 02166
<b>Primary Investigator (Applicant): (individual responsible for the research team using the Data)</b>	Ashish Shrowty
<b>Title:</b>	Director, Data & Analytics, Seniorlink, Inc.
<b>E-Mail Address:</b>	ashrowty@seniorlink.com
<b>Telephone Number:</b>	866-797-2333
<b>Names of Co-Investigators:</b>	Tyler Poliquin; Nick Marsceill
<b>E-Mail Addresses of Co-Investigators:</b>	tpoliquin@seniorlink.com; nmarsceill@seniorlink.com

**IV. PROJECT INFORMATION**

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

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Epidemiological                  | <input type="checkbox"/> Health planning/resource allocation   | <input type="checkbox"/> Cost trends                     |
| <input checked="" type="checkbox"/> Longitudinal Research | <input checked="" type="checkbox"/> Quality of care assessment | <input type="checkbox"/> Rate setting                    |
| <input checked="" type="checkbox"/> Reference tool        | <input 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 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.

Our project will seek to inform performance improvement initiatives throughout our organization. We will research questions like – do recipients of in-home caregiver services experience a lower rate of negative health outcomes than individuals who do not receive these services in similarly matched populations and under which circumstances are there the greatest observable impacts? The objective of this research will be

to inform quality of service improvements and provide benchmarks for our internal KPIs. With baseline metrics for our internal KPIs, we can more robustly compare the efficacy of our services and consumer outcomes to the State of Massachusetts as a whole.

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. 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.*

Seniorlink regularly develops, pilots, and implements programs that improve health outcomes for our population. Over 3,000 of our consumers and their caregivers reside in the state of Massachusetts. Engaging in research to better inform our service improvements will lead programs that reduce rates of falls, ED visits, and inpatient stays, among other negative outcomes within our population.

## VI. DATA 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 insured and self-insured plans. APCD data are refreshed and updated annually and made available to approved data users in Release Versions that contain five calendar years of data and three months of run-out. Data requests will be fulfilled using the most current Release Version. For more information about the most current APCD Release Version, including available years of data and a full list of elements in the release please refer to release 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. Applicants who anticipate a need for future years of data may request to be considered for a subscription. Approved subscriptions will receive, upon request, the same data files and data

elements included in the initial Release annually or as available. Please note that approved subscription request will be subject to the Data Use Agreement, will require payment of fees for additional Data, and subject to the limitation that the Data can be used only in support of the approved Project.

1. List years of data requested (only list years available in the current Release Version): 2013 - 2017

2. Please indicate below whether this is a one-time request, or if the described Project will require a subscription.

One-Time Request **OR**  Subscription

3. Specify below the data files requested for this Project, and provide your justification for requesting each file.

<input checked="" type="checkbox"/> <b>Medical Claims</b>
Describe how your research objectives require Medical Claims data: We will use medical claims to identify characteristics about our population and to track healthcare service utilization over time between the groups that will be the focus of our research project.
<input type="checkbox"/> <b>Pharmacy Claims</b>
Describe how your research objectives require Pharmacy Claims data:
<input type="checkbox"/> <b>Dental Claims</b>
Describe how your research objectives require Dental Claims data:
<input checked="" type="checkbox"/> <b>Member Eligibility</b>
Describe how your research objectives require Member Eligibility data: We will use Member Eligibility to identify demographic traits about the population being researched and to calculate eligibility-focused utilization metrics: e.g. ED visits per 1,000 member months.
<input type="checkbox"/> <b>Provider</b>
Describe how your research objectives require Provider data:

<input type="checkbox"/> <b>Product</b> Describe how your research objectives require Product data:
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**VII. DATA ENHANCEMENTS 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 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 release layouts, data dictionaries 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 each enhancement.

**Geographic Subdivisions**

The geographic subdivisions listed below are available for Massachusetts residents and providers only. Select one of the following options.

<input type="checkbox"/> 3-Digit Zip Code (standard)	<input checked="" type="checkbox"/> 5-Digit Zip Code***
<p><b>***If requested, provide justification for requesting 5-Digit Zip Code. Refer to specifics in your methodology:</b>                  Our research methodology requires us to investigate trends at a level that is more detailed than what ZIP 3 can provide. In comparing metrics from the APCD to our own data, we will need to make comparisons on a 5-digit ZIP code level. While we can otherwise make ZIP 3 level comparisons, 5-digit Zip code comparisons will allow us to make more robust and nuanced comparisons between our population and the general MA population in the MA APCD data.</p>	

**Date Resolution**

Select one option from the following options.

<input type="checkbox"/> Year (YYYY) (Standard)	<input type="checkbox"/> Month (YYYYMM) ***	<input checked="" type="checkbox"/> Day (YYYYMMDD) *** [for selected data elements only]
<p><b>*** If requested, provide justification for requesting Month or Day. Refer to specifics in your methodology:</b>                  Our research methodology requires us to measure monthly changes in service utilization metrics. Without months on the date of claims we will be limited in our ability to measure changes in our matched cohorts over time. For some metrics, such as rates per 1000 member days, we require eligibility/membership at the day level in order to calculate the proportion of a month that an individual receives insurance.</p>		

**National Provider Identifier (NPI)**

Select one of the following options.

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

**VIII. MEDICAID (MASSHEALTH) 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 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 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.

One of the primary goals of our project is to inform performance improvement projects that aim to reduce adverse health incidents. These include incidents such as falls, ED visits, inpatient stays, etc. This not only has the effect of improving the quality of life for our population, but also will reduce Medicaid healthcare costs for the portion of our population in Massachusetts that is on 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.*

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.

Seniorlink will not link APCD data to any external data source for the purposes of our proposed project. We will be making comparisons between our population and subsets of the MA APCD population, but when doing so, the two data sources will not be linked and the extraction of each study group and any related analyses will be done with our data isolated from the APCD data.

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.

N/A

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

N/A

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

N/A



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

1. Do you anticipate that the results of your analysis will be published or made publicly 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.

At this time, Seniorlink does not have plans publicize reports or analysis from this project. In the event that we decide to publish our results externally, we will follow all cell suppression rules when publishing or presenting results. We will also submit an amendment to this application to ensure CHIA is aware of this change. Seniorlink will also make every effort to ensure our methodology is public and reviewable by individuals viewing our reports – methodology and report findings would be made publically available.

Our primary use case is to demonstrate service effectiveness and inform performance improvement efforts within our company. We intend to produce internal reports that broadly under two categories: 1) Reports that inform new performance improvement initiatives and 2) reports that can be used to validate the impact of new performance improvement initiatives with comparison cohorts and baseline metrics from the APCD data.

An example of #1 would be if our team used a linear regression to find that variability in Caregiver "touches" explains a significant amount of the variability in monthly emergency room visits (i.e. more caregiver interaction leads to lower ER visits) – but importantly, the impact is significantly higher for individuals who have had a prior diagnosis of Dementia or Alzheimer's. The Data & Analytics team would communicate this finding to our Clinical Services team, who may develop a new suite of opt-in services for consumers and their caregivers that provides coaching and other supports for caregivers who work with consumers that have Dementia or Alzheimer's.

An example of #2 would be if we compared our population's rate of falls (using our internal clinical data) to a matched cohort from the APCD data in order to determine if there is a statistically significant difference between our population's rate of falls per month and the match cohort from the APCD. Knowing this would inform future analysis questions such as – in what ways is our population of consumers different from a more generalized Massachusetts population? If their rate of falls is different, is it because our program is more effective or is it because the individuals who self-select into our population are more likely to have a lower rate of falls?

In each of these examples all internal reports will follow cell-suppression rules. They will be distributed internally only at the summarized level and will not contain underlying row-level APCD data. We will also not be selling the reports themselves or takeaways from them to external partners.

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.

At this time, we do not plan to disseminate the reports or analysis our project to external partners. We plan to distribute the results internally and when distributed, recipients will be notified that the results are for internal use only. If we do decide to publish the results or discuss them at conferences and seminars, we will follow all privacy and cell suppression rules and notify CHIA that we have decided to do so via an amendment to our application.

As mentioned above, we also do not plan to sell results or the reports themselves to external partners. We will also not be selling information derived from these reports to external partners.



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?

The lowest level of geography we plan to use for analysis is zip-5. We do not plan to present maps to external audiences. Any internal presentations will follow all necessary cell-suppression and de-identification rules. Presentations and information that are disseminated throughout our organization will not be distributed containing row-level data or any metrics that contain fewer than 11 observations. Presentations will only include screenshots of graphs and any dashboards will only include summarized tables, not row-level data.

4. Will you be using CHIA Data for consulting purposes?

- Yes  
 No

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

- Yes  
 No

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

- Yes  
 No

7. Will you be using CHIA Data as in input to develop a product (i.e., severity index tool, risk adjustment tool, reference tool, etc.)

- Yes  
 No

8. Will you be reselling CHIA Data in any format not noted above?

- Yes  
 No

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 describe the types of 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?

N/A

**XII. 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.

**Ashish Shrowty** is a seasoned technology leader with 20+ years of experience building technology and data solutions, and strong delivery teams at small startups to large fortune 100 companies such as MetLife, BNY Mellon, Bank Of America, Fidelity, Pfizer etc. I also co-founded 2 startups in the past and am currently heading the Data team at Seniorlink. In each instance, data management, stewardship and governance of data, research and analysis using the data, have been common functions performed by me and my teams across these organizations.

At BNYM, I was responsible for setting up the data science team building predictive models and indexes for Fixed Income Trading, Macro-economic research, Foreign Currency Trading etc. At Metlife, I was responsible for building up the data team to execute on marketing use cases (retention and attrition models), Fraud Analytics use cases for claims etc. At RedWhiteBoston and Birdzi which were startups, I built the infrastructure and the predictive models for generating recommendations and offers based on customer's buying behavior and profiles.

Co-investigators on this project will be Nick Marsceill, Chris Petrino, and Tyler Poliquin.

**Nick Marsceill** is a Senior Data Analyst with 12 years of experience in financial and healthcare sectors. Nick is experienced working with large/wide data sets and advanced analytic techniques including with protected classes of data and maintaining privacy in results.

**Christopher Petrino** is a Principal Data Engineer who has years of experience in data and analytics. He spent eight years at Raytheon partnering with organizations like MIT Lincoln Laboratory and DARPA to analyze their data and build supporting algorithms. Chris later worked for a series of startups serving as a machine learning engineer, a data scientist, and more generally a data engineer.

**Tyler Poliquin** is a Business Intelligence Developer who has worked extensively with claims data in healthcare provider and payer settings. He spent two years at SDLC Partners (Pittsburgh, PA) in their Business Intelligence & Analytics consulting practice working on clinical services improvement analytics projects at Highmark, Inc. and Allegheny Health Network, working primarily with clinical and healthcare claims data. Tyler later worked at the State of Rhode Island Executive Office of Health and Human Services where he regularly produced BI and analytics reports/products using claims data and served on the Rhode Island APCD Data Release Review Board.

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.)

**XIII. USE OF AGENTS AND/OR CONTRACTORS**

By signing this Application, the Agency assumes all responsibility for the use, security and maintenance of the CHIA Data by its agents, including but not limited to contractors. The Agency 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 all agents and contractors who will have access to the CHIA Data. [Add agents or contractors as needed.]

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

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

No agents or contractors will work on this project or have access to MA APCD data.
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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.

N/A
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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:	
Company Website:	
Contact Person:	
Title:	

E-mail Address:	
Address, City/Town, State, Zip Code:	
Telephone Number:	
Term of Contract:	

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

N/A
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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.

N/A
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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.

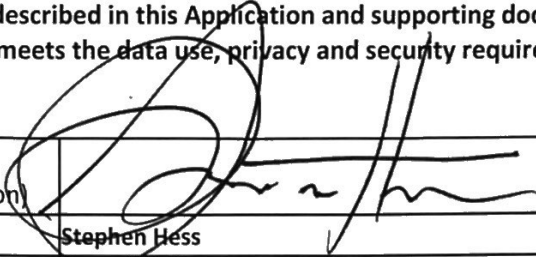
[INSERT A NEW SECTION FOR ADDITIONAL AGENTS/CONTRACTORS AS NEEDED]

#### IVX. 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.

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:	Stephen Hess
Title:	Senior Vice President, Product and Technologies

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.**