Commonwealth of Massachusetts
Center for Health Information & Analysis (CHIA)
Non-Governmental Application for Case Mix Data

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

<u>NOTE</u>: In order for your application to be processed, you must submit the required application fee. Please consult the fee schedule for the appropriate fee amount. A remittance form with instructions for submitting the application fee is available on the CHIA website.

I. GENERAL INFORMATION

APPLICANT INFORMATION	
Applicant Name:	James Strunk
Title:	VP Product Development, Data and Innovation
Organization:	iVantage Health Analytics
Project Title:	INVISION data support
Mailing Address:	509 Forest Avenue, Suite 250, Portland, ME 04101
Telephone Number:	207.245.6751
Email Address:	jstrunk@ivantagehealth.com
Names of Co-Investigators:	Sharon White, Sarah Wilson
Email Addresses of Co-Investigators:	swhite@ivantagehealth.com, swilson@Ivantagehealth.com
Original Data Request Submission Date:	July 8, 2015
Dates Data Request Revised:	
Project Objectives (240 character limit)	Use the data to provide clients with hospital analytics derived from the data.
Project Research Questions (if applicable)	1. 2. 3.

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

> iVantage Health Analytics collects and uses publicly available data sets to assist hospitals and health agencies in their strategic planning, operational improvement, quality and marketing initiatives. Databases from CHIA purchased as part of this application are the basis for the reporting and analysis done for the hospitals in the state of Massachusetts.

III. FILES REQUESTED

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

CASE MIX	Levels 1 – 6	Fiscal Years Requested
Inpatient Discharge	☐Level 1 – No Identifiable Data Elements ☒Level 2 – Unique Physician Number (UPN) ☐Level 3 – Unique Health Information Number (UHIN) ☐Level 4 – UHIN and UPN ☐Level 5 – Date(s) of Admission; Discharge; Significant Procedures ☐Level 6 – Date of Birth; Medical Record Number; Billing Number **PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE CHOSEN LEVEL:** Full 5 digit zip codes are needed to enable determination of market share and to enable mapping of data.	<u>1998 – 2014 Available</u> (limited data 1989-1997) 2014
Outpatient Observation	☐Level 1 – No Identifiable Data Elements ☐Level 2 – Unique Physician Number (UPN) ☐Level 3 – Unique Health Information Number (UHIN) ☐Level 4 – UHIN and UPN ☐Level 5 – Date(s) of Admission; Discharge; Significant Procedures ☐Level 6 – Date of Birth; Medical Record Number; Billing Number **PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE CHOSEN LEVEL:**	<u>2002 – 2014 Available</u>
Emergency Department	☐Level 1 – No Identifiable Data Elements ☒Level 2 – Unique Physician Number (UPN) ☐Level 3 – Unique Health Information Number (UHIN) ☐Level 4 – UHIN and UPN ☐Level 5 – Date(s) of Admission; Discharge; Significant Procedures ☐Level 6 – Date of Birth; Medical Record Number; Billing Number **PLEASE PROVIDE JUSTIFICATION BELOW FOR REQUESTING THE CHOSEN LEVEL:** Full 5 digit zip codes are needed to enable determination of market share and to enable mapping of data.	<u>2000 – 2014 Available</u> 2014

IV. FEE INFORMATION

Please consult the fee schedules for Case Mix data, available at http://chiamass.gov/regulations/#957_5, and select from the following options:

☐   Single Use

☐   Limited Multiple Use

☒   Multiple Use

Are you requesting a fee waiver?

☐   Yes

☒   No

If yes, please submit a letter stating the basis for your request.   Please refer to the fee schedule for qualifications for receiving a fee waiver. If you are requesting a waiver based on the financial hardship provision, please provide documentation of your financial situation. Please note that non-profit status alone isn't sufficient to qualify for a fee waiver.

V. REQUESTS PURSUANT TO 957 CMR 5.04 (Researchers, Payers, Providers, and Provider Organizations)
Please complete only if you are requesting Level 1 (de-identified) Case Mix.
Please describe how you will use such data for the purposes of lowering total medical expenses, coordinating care, benchmarking, quality analysis or other administrative research purposes.

VI. ALL OTHER REQUESTS - PURPOSE AND INTENDED USE
1.   Please explain why completing your project is in the public interest.

iVantage Health Analytics reporting allows hospitals to make strategic and operational decisions so that they may better service their community members in the future. Results of the project can be used by hospitals to better understand the patient population they serve, improve access to care, reduce cost of providing care to patients, and improve quality of care.

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

3.   Has your project received approval from your organization's Institutional Review Board (IRB)? Please note that CHIA will not review your application until IRB documentation has been received (if applicable).

☐ Yes, and a copy of the approval letter is attached to this application.

☐ No, the IRB will review the project on _____.

☐ No, this project is not subject to IRB review.

☒ No, my organization does not have an IRB.

    4.

VII. APPLICANT QUALIFICATIONS
1.   Describe your qualifications to perform the research described or accomplish the intended use of CHIA data.

iVantage employees who will handle the data have years of experience with health care data from multiple state, CMS, and private sources. All employees have passed training in HIPAA regulations.

2.   Attach résumés or curricula vitae of the applicant/principal investigator, key contributors, and of all individuals who will have access to the data.   (These attachments will not be posted on the internet.)

VIII. DATA LINKAGE AND FURTHER DATA ABSTRACTION
Note: Data linkage involves combining CHIA data with other databases to create one extensive database for analysis.

Data linkage is typically used to link multiple events or characteristics that refer to a single person in CHIA data within one database.

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

    ☒ Yes

    ☐ No linkage or merger with any other database will occur

2. If yes, will the CHIA Data be linked or merged to other individual patient level data (e.g. disease registries, death data), individual provider level data (e.g., American Medical Association Physician Masterfile) , facility level (e.g., American Hospital Association data) or with aggregate data (e.g., Census data)? [check all that apply]

    ☒ Individual Patient Level Data

    What is the purpose of the linkage:

    > Patient's 5 digit zip code is linked to a geocoding database to determine the zip code's latitude/longitude for mapping purposes. This allows us to plot a patient as apoint on a map - but does not provide any additional identification information that could be used to identify the patient.

    What databases are involved, who owns the data and which specific data elements will be used for linkage:

    > The database is provided by SAS Corp. from Cary, NC and is not proprietary information. The terms under which we use SAS software allows us to use this information. The only element used to get geocoding info is the zip code.

    ☐ Individual Provider Level Data

    What is the purpose of the linkage:

    >

    What databases are involved, who owns the data and which specific data elements will be used for linkage:

    >

    ☒ Individual Facility Level Data

    What is the purpose of the linkage:

    > Linking facility level information to CMS Cost Reports is done to be able to estimate cost of care.

    What databases are involved, who owns the data and which specific data elements will be used for linkage:

    > The CHIA data is linked to CMS Cost Reports as publically released by CMS as the "HCRIS" data. Facility ID and a year are the only data elements used in the linkage.

☐ Aggregate Data

What is the purpose of the linkage:

What databases are involved, who owns the data and which specific data elements will be used for linkage:

3. 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 that algorithm will link each dataset.

Facility ID provided by CHIA is manually mapped to CCN, CCN plus date range of the data (CY 2013 for example) is used to find the best match with the Cost Report filed by each CCN.

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

The linkage does not require patient level info - each patient has the CHIA facility ID and a date range already attached.

5. If yes, and the data mentioned above is not in the public domain, please attach a letter of agreement or other appropriate documentation on restrictions of use from the data owner corroborating that they agree to have you initiate linkage of their data with CHIA data and include the data owner's website.

IX. PUBLICATION / DISSEMINATION / RE-RELEASE

1. Describe your plans to publish or otherwise disclose CHIA Data, or any data derived or extracted from such data, in any paper, report, website, statistical tabulation, seminar, conference, or other setting.

The results of the studies we create are made available to clients via a secure web site.

2. Will the results of your analysis be publicly available to any interested party? Please describe how an interested party will obtain your analysis and, if applicable, the amount of the fee.

Hospitals interested in obtaining the results of studies can purchase access to the iVantage products utilizing the data. Fees are adjustable based on hospital size and nature of product use.

3. Will you use the data for consulting purposes?
☒ Yes
☐ No

4. Will you be selling standard report products using the data?
☒ Yes
☐ No

5. Will you be selling a software product using the data?
☒ Yes
☐ No

6. Will you be reselling the data?
☐ Yes
☒ No
If yes, in what format will you be reselling the data (e.g., as a standalone product, incorporated with a software product, with a subscription, etc.)?

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

Our INVISION product is a SAAS market planning tool.

X. USE OF AGENTS AND/OR CONTRACTORS

Third-Party Vendors. Provide the following information for all agents and contractors who will work with the CHIA Data.

Company Name:	N/A
Contact Person:	
Title:	
Address:	
Telephone Number:	
E-mail Address:	
Organization Website:	

8. Will the agent/contractor have access to the data at a location other than your location, your off-site server and/or your database?

☐ Yes
☐ No
If yes, please provide information about the agent/contractor's data management practices, policies and procedures in your Data Management Plan.

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

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

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

XIII. ASSURANCES

Applicants requesting and receiving data from CHIA pursuant to 957 CMR 5.00 ("Data Recipients") will be provided with data following the execution of a data use agreement that requires the Data Recipient to adhere to processes and procedures aimed at preventing unauthorized access, disclosure or use of data.

Data Recipients are further subject to the requirements and restrictions contained in applicable state and federal laws protecting privacy and data security, and will be required to adopt and implement policies and practices to protect CHIA data in a manner consistent with the requirements of the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA).

Data Recipients must promptly notify CHIA of any unauthorized use or disclosure of CHIA data.

By my signature below, I attest to: (1) the accuracy of the information provided herein; (2) my organization's ability to meet CHIA's minimum data security requirements; and (3) my authority to bind the organization seeking CHIA data for the purposes described herein.

Signature:	*James Strunk*
Printed Name:	James Strunk
Original Application Submission Date:	July 8, 2015
Dates Application Revised:	February 1, 2016