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

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

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

I. GENERAL INFORMATION

APPLICANT INFORMATION	
Applicant Name:	Russell Gross
Title:	Senior Director Strategic Planning and Analysis
Organization:	Lifespan
Project Title:	Market Data Update
Date of Application:	12/10/2014
Project Objectives (240 character limit)	Lifespan monitors the health care delivery system in Southern New England to understand how changes in population, care delivery models, payer mix, physician practice patterns, payment and access impact utilization of hospital based services across geographic communities and groups of patients. Massachusetts patients receive a host of services at Lifespan and are an integral part of the community served.
Project Research Questions (if applicable)	1. Are age and disease specific use rates different in MA versus RI? 2. How is use changing in RI and MA before and after the ACA ? 3. What impact do regional shifts in use have on the need for additional hospital and community based resources including surgery suites, beds, procedure labs,urgent and emergent care, hospitals, and physician specialists. 4. How do Lifespan's patients compare to community patients, and are there groups who appear to be underserved?

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

In planning health services to the population in our service area, Lifespan examines the population and its demographics and assesses how hospital based utliization is changing over time to determine how best we can plan for the future. As physician and hospital practice evolves under new reimbursement approaches that include a substantial focus on quality parameters, inpatient, observation, and ED use rates are changing. They change by payer types, patient characteristics, and disease types. To effectively size our enterprise and introduce appropriate programs based on the both changing population demographics and the changing health care environment we require a window into these changing utilization patterns of the community we serve. We achieve this by purchasing data on both hospitals' service use and community health care service use. We put these together every year to portray a snapshot of the community and the the directions we need to take in the future by type of care and service. Specific questions we use these data to address:

1. Based on historical trends and population projections for the future what is the expected demand for pediatric and adult med/surg admissions, and OR suites for inpatient surgery?
2. How will changes in ambulatory sensitive admissions impact the need for inpatient, emergency, and observation resources in the future?
3. How will changes in both demand, as identified in 1 and 2, and changes in LOS by type of patient impact the demand for beds?
4. How have the use rates for inpatient care been impacted by the two midnight rules and have observations increased? How has this varied by community, by payer, by disease type and by age group? Do these changes materially affect the model for beds by type of service?
5. How do physicians admissions patterns vary? What is the frequency of admissions by type of physican specialty and how is this changing?

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

ALL PAYER CLAIMS DATABASE	Level 1[1] or 2[2]	Single or Multiple Use	Year(s) Of Data Requested Current Yrs. Available 2009 - 2012
☐ Medical Claims	☐ Level 1[3] ☐ Level 2	Select... ▼	☐ 2009 ☐ 2010 ☐ 2011 ☐ 2012
☐ Pharmacy Claims	☐ Level 2	Select... ▼	☐ 2009 ☐ 2010 ☐ 2011 ☐ 2012
☐ Dental Claims	☐ Level 2	Select... ▼	☐ 2009 ☐ 2010 ☐ 2011 ☐ 2012
☐ Member Eligibility	☐ Level 2	Select... ▼	

[1] Level 1 Data: De-identified data containing information that does not identify an individual patient and with respect to which there is no reasonable basis to believe the data can be used to identify an individual patient. This data is de-identified using standards and methods required by HIPAA.
[2] Level 2 (and above) Data: Includes those data elements that pose a risk of re-identification of an individual patient.
[3] Please note that Level 1 APCD data is not available as of 4/30/2014. This is scheduled to be available later in 2014.

| ☐ Provider | | ☐ Level 2 | Select... ▼ | |
| ☐ Product | | ☐ Level 2 | Select... ▼ | |

CASEMIX	Level 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	<u>1998-2013 Available</u> (limited data 1989-1997) 2013
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	<u>2002-2012 Available</u> <u>(2013 available 8/1/14)</u> 2009 - 2013
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; Stated Reason for Visit ☐ Level 5 – Date(s) of Admission; Discharge; Significant Procedures ☐ Level 6 – Date of Birth; Medical Record Number; Billing Number	<u>2000-2012 Available</u> <u>(2013 available 9/1/14)</u> 2013

III. FEE INFORMATION

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

<u>**APCD Applicants Only**</u>
☐ Academic Researcher
☐ Others (Single Use)
☐ Others (Multiple Use)

<u>**Case Mix Applicants Only**</u>
☐ 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.

IV. REQUESTED DATA ELEMENTS [APCD Only]

State and federal privacy laws limit the use of individually identifiable data to the minimum amount of data needed to accomplish a specific project objective. Please use the APCD Data Specification Workbook to identify which data elements you would like to request and attach this document to your application.

V. MEDICAID DATA [APCD Only]

Please indicate here whether you are seeking Medicaid Data:
☐   Yes
☐   No

Federal law (42 USC 1396a(a)7) restricts the use of individually identifiable data of Medicaid recipients to uses that are directly connected with the administration of the Medicaid program. If you are requesting Medicaid data from Level 2 or above, please describe in detail why your use of the data meets this requirement. Applications requesting Medicaid data will be forwarded to MassHealth for a determination as to whether the proposed use of the data is directly connected to the administration of the Medicaid program. MassHealth may impose additional requirements on applicants for Medicaid data as necessary to ensure compliance with federal laws and regulations regarding Medicaid.

> N/A

VI. REQUESTS PURSUANT TO 957 CMR 5.04

If you are a payer, provider, provider organization or researcher seeking access to Level 1 (de-identified) data, 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. Please provide this information below.

VII. FILTERS

If you are requesting APCD elements from Level 2 or above, describe any filters you are requesting to use in order to limit your request to the minimum set of records necessary to complete your project. (For example, you may only need individuals whose age is less than 21, claims for hospital services only, or only claims from small group projects.)

APCD FILE	DATA ELEMENT(S) FOR WHICH	RANGE OF VALUES REQUESTED

	FILTERS ARE REQUESTED	
Medical Claims		
Pharmacy Claims		
Dental Claims		
Membership Eligibility		
Provider		
Product		

VIII. PURPOSE AND INTENDED USE

1. Please explain why completing your project is in the public interest.

> Lifespan is the largest provider of health services in Southeastern Mass and RI and has the only Acadamic Medical Center with a Level One Trauma Center outside Boston/Worcester. We provides access to the complete array of both pediatric medical and surgical and psychiatric services as well as the full compliment of adult medical and surgical services. Both RI and MA patients rely on our services and in planning for the future, we rely on comprehensive and accurate data for understanding the supply and demand for services. Access to timely accurate data allows quanitative and qualitative analyses that support the evaluation of existing and new services, the correct sizing of services, and understanding issues of access and quality. To be responsive to the community's health care needs in an economically sound fashion, Lifespan uses data and analytic tools. The public is served best if we plan and operate based on a sound and accurate view of the environment within which we reside. The Massachusetts data we are requesting has been in use by us for the last 18 years as a core part of that understanding and has allowed us to ensure that we can provide needed services as the population grows and changes.

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

    See Attachment A

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.

IX. APPLICANT QUALIFICATIONS

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

> Lifespan uses these data to monitor its performance relative to the supply and demand for services in the community it serves, and to identify how it can adapt in the changing health

care environment. The evaluation of health care use is a core analytic activity of our planning function. This is not research in the classic sense but rather ongoing analysis of this dataset in concert with census data, other purchased data sets, and internal data of our system. The Senior Director for Strategic Plannning and Analysis, who leads this effort for the corporation, and whose CV is attached, has been engaged in providing healthcare strategic planning and analysis and advice to the corporation's leaders for 17 years. In addition, our Senior Healthcare Planner has an MS in Community Health and 16 years of experience in healthcare analysis and health sevices research and has an extensive backround in performing and leading complex quantitative studies. In addition, She has been mentoring Brown University graduate students from the MPH program for 11 years. She works with 3 analysts in her office who have extensive experience analyzing a range of data sets including the Massachusetts data as well as data from RI, claims data, survey data, clinical data, and census data.

Priniciple Investigator:
Russell Gross
Senior Director

Analysts:	Database Administrators:
Jessica Gelinas, MS	Douglas Browning
Sr. Healthcare Planner	DBA
Dorothy Peckham	Manuel A Moitoso
Sr. Healthcare Analyst	DBA
Susan Thompson	Ernest L Rheaume
Information Analyst	DBA
Timothy Stearns, MS	Joseph A. Braga
Strategic Planning Analyst	DBA

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.)

See Attachment B

X. DATA LINKAGE AND FURTHER DATA ABSTRACTION

1. Does your project require linking the CHIA Data to another dataset?
   ☒ Yes
   ☐ No

2. If yes, will the CHIA Data be linked to other patient level data or with aggregate data (e.g. Census data)?
   ☐ Patient Level Data
   ☒ Aggregate Data

3. If yes, please identify all linkages proposed and explain the reasons(s) that the linkage is necessary to accomplish the purpose of the project. Please be specific in describing vwhich data elements will be linked to outside datasets and how this will be accomplished.

Aggregate level census data is used with aggregate casemix data to determine population use rates of inpatient, observation, and emergency healthcare services.

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

Data is only linked in aggregate to calculate utilization rates, therefore individual patients would not be able to be identified.

XI. 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 data is for internal planning purposes only and will not be published or otherwise disseminated.

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.

No

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

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

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

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

N/A

XII. USE OF AGENTS AND/OR CONTRACTORS