**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.

<u>NOTE</u>: 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:	Chrysalyne D. Schmults MD, MSCE
Title:	Assistant Professor of Dermatology, Harvard Medical School Director, Brigham and Women's Mohs and Dermatologic Surgery Center Director, Dana Farber High-Risk Skin Cancer Clinic
Organization:	Brigham and Women's Hospital Department of Dermatology
Project Title:	Skin Cancer Expenditure and Equity Analysis
Date of Application:	07/14/2014
Project Objectives (240 character limit)	Estimate occurrence, treatment, and cost of care for skin cancer in Massachusetts. The cost of skin cancer diagnosis and treatment will be tabulated based on money paid by insurers. Patients will be stratified by skin cancer tumor type (squamous cell carcinoma, basal cell carcinoma, melanoma, or skin neoplasm of uncertain behavior), demographics (age, race, ethnicity, gender, and other) and type of private insurer.
Project Research Questions (if applicable)	1. What is the overall cost of various treatments for cutaneous skin cancers to private insurances? 2. What factors are associated with disparities in care delivered and cost? 3. How can we use this information to optimize both the treatment of cutaneous skin cancers and the cost of healthcare?

I. PROJECT SUMMARY

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

Skin cancer is the most commonly diagnosed cancer in the United States with over 3,750,000 new cases estimated to occur each year. An estimated $1.4 billion is spent on skin cancer each year in the Medicare population alone. Yet almost nothing is known about how the money is spent or whether disparities exist in care received. Comprehensive cost-assessment and identification of any disparities in care are vitally needed for policy makers and healthcare administrators to make optimal decisions about how best to serve this very large patient population.

The purpose of this research study is to estimate the occurrence, treatment, and cost of care for skin cancer in the United States state-by-state utilizing All Payer Claims Databases of healthcare expenditures in states with these systems, and via data from the Center for Medicare and Medicaid Services in all 50 states.

This study will be the first to evaluate how money is spent on skin cancer and whether care inequities

are present. Skin cancer health inequities in relation to socioeconomic status and race/ethnicity will be examined by linking area-based data derived from the APCD (such as zip code) with the United States Census Bureau data in order to create a socioeconomic metric. The results will provide comprehensive data regarding the economic impact of skin cancer and will provide patients, physicians, healthcare administrators, and policy makers with information they need to optimize skin cancer prevention and control efforts.

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	Multiple ▼	☑ 2009 ☑ 2010 ☑ 2011 ☑ 2012
☑ Pharmacy Claims	☑ Level 2	Multiple ▼	☑ 2009 ☑ 2010 ☑ 2011 ☑ 2012
☐ Dental Claims	☐ Level 2	Select.. ▼	
☑ Member Eligibility	☑ Level 2	Multiple ▼	☑ 2009 ☑ 2010 ☑ 2011 ☑ 2012
☑ Provider	☑ Level 2	Multiple ▼	
☑ Product	☑ Level 2	Multiple ▼	

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	1998-2013 Available (limited data 1989-1997) **2009-2012**
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	2002-2012 Available (2013 available 8/1/14) **2009-2012**

[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.

		2000-2012 Available (2013 available 9/1/14)
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	

III. FEE INFORMATION

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

APCD Applicants Only

☒   Academic Researcher

☐   Others (Single Use)

☐   Others (Multiple Use)

Case Mix Applicants Only

☒   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.

-See attached letter.

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.

-Data specification workbook attached.

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.

> The data will be used to examine whether the Medicaid patient population receives different skin cancer care as compared to the non-Medicaid patient population. We believe that the Medicaid population is different from the non-Medicaid population in terms of types of skin cancer diagnoses, treatment, and possibly outcomes, therefore it represents a vital group for healthcare decision makers to investigate when examining healthcare delivery. The analyses from this study will help guide future reforms in skin cancer care delivery and provide a better understanding of differences in skin cancer treatment utilization by insurance type.

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 FILTERS ARE REQUESTED	RANGE OF VALUES REQUESTED
Medical Claims	MC041	Skin cancer diagnoses only (ICD9 172.0-172.9, 173.0-173.9 [pre 10/01/2011], 173.01-173.91 [post 10/01/2011], 173.02-173.92 [post 10/01/2011], 232.0-232.9, 216.0-216.9, 702.0, 238.2)
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.

> Skin cancer is more common than lung, breast, prostate, and colon cancers combined and among the most costly cancer to treat in the Medicare population. However, precise data regarding skin cancer spending does not exist. Although they have a low mortality overall, skin cancers are associated with

considerable morbidity. The proposed study will be the first to quantify the cost of skin cancer care and determine whether inequities are present (based on gender, age, ethnicity, and other factors). The results will provide comprehensive data regarding the economic impact of skin cancer and provide patients, physicians, healthcare administrators, and policy-makers with information they need to optimize skin cancer prevention and control efforts.

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

   -**Attached.**

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.

Principal Investigator: Chrysalyne D. Schmults MD, MSCE
Dr. Schmults directs the Mohs and Dermatologic Surgery Center at Brigham and Women's Hospital and founded the High-Risk Skin Cancer Clinic at Dana-Farber/Brigham and Women's Cancer Center. In these roles, she has made several innovations in clinical care. She is one of the foremost experts on non-melanoma skin cancer specifically cutaneous squamous cell carcinoma. She is the first dermatologist to serve as principal investigator on an investigational chemotherapy trial at Dana-Farber Cancer Institute. She developed the Brigham and Women's staging system for cutaneous squamous cell carcinoma and will be directing the American Joint Committee on Cancer's 8th edition workgroup for cutaneous squamous cell carcinoma staging. She has also conducted broader-based cost-effectiveness research including a current study of cost effectiveness of sentinel lymph node biopsy in thin melanomas and a prior cost comparison of infection control techniques in skin cancer surgery.

Co-Investigator: Emily Stamell, MD
Dr. Stamell is a Procedural Dermatology fellow at the Mohs and Dermatologic Surgery Center, Brigham and Women's Hospital. She will be starting a two-year Master of Public Health (MPH) program in Clinical Effectiveness at Harvard School of Public Health in the Summer of 2014. She has extensive training in conducting skin cancer research.

Study Manager: Pritesh S. Karia, MPH
Mr. Karia is responsible for developing data collection systems-from surveys to electronic medical record databases- for a wide range of projects focusing on staging, prognosis, and treatment of cutaneous squamous cell carcinoma and other non-melanoma skin cancers at the Mohs and Dermatologic Surgery Center, Brigham and Women's Hospital. In addition, Mr. Karia ensures compliance with institutional research policies, trains research staff on data collection and data entry, and conducts statistical analysis of study data.

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.)

-Attached.

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 which data elements will be linked to outside datasets and how this will be accomplished.

   > Zip codes from the APCD will be linked to US Census bureau data. Variables in the US Census Bureau data such as median household income and race/ethnicity will be used as proxy variables to create a socieconomic metric. Disparities in skin cancer screening and treatment will be examined using this socioeconomic metric.

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

   > Only aggregate US census data will be used. This data cannot be linked to individual patients. The linked data will be stored and handled with the same level of security as the APCD files.

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.

   > Aggregate data resulting from this analysis will be compiled and presented at national dermatology meetings and published in peer-reviewed journals. No patient-level data will be disclosed.

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.

   > The results will be made publicly available via peer-reviewed journals. Article reprints will be available for free upon request.

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.

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XII. 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:	**There are no third party vendors or agents involved in this project**
Contact Person:	
Title:	
Address:	
Telephone Number:	
E-mail Address:	
Organization Website:	

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

☐ Yes

☒ No

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

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

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

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