

**Commonwealth of Massachusetts  
Center for Health Information & Analysis (CHIA)  
Non-Government MA APCD Request for Data**

*This form 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 MA APCD data 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:	Chrysalynne D. Schmults MD, MSCE
Title:	Associate 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
Mailing Address:	Brigham and Women's Faulkner Hospital Mohs and Dermatologic Surgery Center 1153 Centre Street, Suite 4349 Jamaica Plain, MA 02130
Telephone Number:	617-983-4626
Email Address:	cschmults@partners.org
Names of Co-Investigators:	Emily Stamell Ruiz, MD Pritesh Karia, MPH Frederick Morgan, BSPH
Email Addresses of Co-Investigators:	esruiz@partners.org pkaria@partners.org fmorgan@partners.org
Original Data Request Submission Date:	06/02/2016
Dates Data Request Revised:	06/20/2016
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?

**II. 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.

**III. FILES REQUESTED**

Please indicate which MA APCD file(s) you are requesting, the year(s) of data requested, and your justification for requesting each file. Please refer to the MA APCD Release 4.0 Documentation Guides for details of the file contents.

<b>MA ALL PAYER CLAIMS DATABASE FILES</b>	<b>Year(s) Of Data Requested Current Yrs. Available</b>  <input checked="" type="checkbox"/> 2010 <input checked="" type="checkbox"/> 2011 <input checked="" type="checkbox"/> 2012 <input checked="" type="checkbox"/> 2013 <input checked="" type="checkbox"/> 2014
<input checked="" type="checkbox"/> Medical Claims	Please provide justification for requesting Medical Claims file:  Medical claims are essential for the analysis of total skin cancer costs
<input checked="" type="checkbox"/> Pharmacy Claims	Please provide justification for requesting Pharmacy Claims file:  Pharmacy claims are essential for the analysis of total skin cancer costs
<input type="checkbox"/> Dental Claims	Please provide justification for requesting Dental Claims file:  N/A

<input checked="" type="checkbox"/> <b>Member Eligibility</b>	<p><b>Please provide justification for requesting Member Eligibility file:</b></p> <p>Member eligibility data is essential to properly analyze costs by type of insurer</p>
<input type="checkbox"/> <b>Provider</b> (encrypted NPI) Standard or <input checked="" type="checkbox"/> <b>Provider*</b> (unencrypted NPI)	<p><b>Please provide justification for requesting Provider file:</b></p> <p><b>*Please provide justification for requesting unencrypted NPI (if requested). Refer to specifics in your methodology:</b></p> <p>Unencrypted NPI is essential to analyze in detail the occurrence of skin cancer care. Specific items of interest include provider type, location, and affiliation.</p> <p>Unencrypted NPI will be used to ensure completeness of specialty information based on CMS public data.</p>
<input checked="" type="checkbox"/> <b>Product</b>	<p><b>Please provide justification for requesting Product file:</b></p> <p>Product data is essential to determine type of product, identify unique payers, and assess types of insurance models</p>

**IV. GEOGRAPHIC DETAIL**

Please choose one of the following geographic options for MA residents:

<input type="checkbox"/> 3 Digit Zip Code (MA)	<input checked="" type="checkbox"/> 5 Digit Zip Code (MA)
<p><b>***Please provide justification for requesting 5 digit zip code. Refer to specifics in your methodology:</b></p> <p>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 socioeconomic metric.</p>	

**V. DATE DETAIL**

Please choose one option from the following options for dates:

<input type="checkbox"/> Year (YYYY) (Standard)	<input checked="" type="checkbox"/> Month (YYYYMM) ***	<input type="checkbox"/> Day (YYYYMMDD) *** [for selected data elements only]
<p><b>*** If requested, please provide justification for requesting Month or Day. Refer to specifics in your methodology:</b></p> <p>To investigate temporal (by month) trends in skin cancer procedures. Previous studies have shown that dermatology specialist appointments, biopsies, and lesion or mole removals increase significantly in summer months.</p>		

## VI. FEE INFORMATION

Please consult the fee schedules for MA APCD data, available at [http://chiamass.gov/regulations/#957\\_5](http://chiamass.gov/regulations/#957_5), and select from the following options:

### APCD Applicants Only

- Academic Researcher
- Others (Single Use)
- Others (Multiple Use)

Are you requesting a fee waiver?

- Yes
- No

If yes, please refer to the Application Fee Remittance Form and submit a letter stating the basis for your request (if required). 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.

## VII. 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.

## 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 8<sup>th</sup> 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.

##### **Research Assistant: Frederick Morgan, BSPH**

Mr. Morgan is a full-time Brigham and Women's Hospital employee. He has experience analyzing hospital reimbursement data to assess the cost of skin cancer. Additionally, he assists with data collection and ensures compliance with institutional research policies.

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**

*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:

N/A

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

N/A

Individual Provider Level Data

What is the purpose of the linkage:

N/A

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

N/A

Individual Facility Level Data

What is the purpose of the linkage:

N/A

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

N/A

Aggregate Data

What is the purpose of the linkage:

Disparities in skin cancer screening and treatment will be examined using this socioeconomic metric.

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

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 socioeconomic metric.

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 it will link each dataset .

An algorithm has not been developed yet. However, we plan to work with a biostatistician to see if our desired goals are achievable.

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.

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.

#### **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. 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.)?

N/A

7. 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

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

Company Name:	<b>There are no third party vendors or agents involved in this project</b>
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.

N/A

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

N/A

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

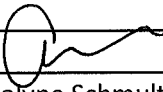
N/A

**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, as detailed in the DUA and the applicant’s CHIA-approved Data Management Plan.

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 procedures designed to protect CHIA data in a manner consistent with the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA).

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:	
Printed Name:	Chrysalynne Schmults, MD, MSCE
Title	Associate Professor of Dermatology, Harvard Medical School Director, Brigham and Women's Mohs and Dermatologic Surgery Center Director, Dana Farber High-Risk Skin Cancer Clinic
Original Data Request Submission Date:	06/02/16
Dates Data Request Revised:	06/20/2016