Use Case: Combining CRISP Patient Identifiers and Geocoding Data with HSCRC Case Mix Data for Research

DRAFT for Submission to Clinical Committee for Approval: Last updated 02/14/2017

Background

The Maryland Health Services Cost Review Commission (HSCRC) requires by legislative mandate (COMAR 10.37.06 and COMAR 10.37.04) that all acute care hospitals in Maryland submit confidential patient-level administrative data (referred to as “case mix data”) on all discharges and visits to the Commission. The case mix data includes demographic (including medical record and provider identifiers), financial (payers and charges), and clinical (including dates of service, diagnoses, disposition) information for approximately 800,000 annual inpatient discharges and 5.7 million outpatient visits (including clinic, surgery, and emergency department admissions).

The HSCRC has an established process for reviewing and approving access to the case mix data. Users may request HSCRC data for purposes that support commercial applications, research, studies, or projects referenced in the Application, which has been determined by HSCRC to demonstrate potential to improve the quality of care for Marylanders or reduce the health expenditures, including payment related projects. All requests are reviewed by the HSCRC Review Board, which makes the final decisions on the release of the public datasets. Information on requesting data from HSCRC is available at http://www.hscrc.state.md.us/hsp-data-request.cfm.

CRISP manages the case mix data as part of its CRISP Reporting Services (CRS) work. Once received from the State, CRISP tags case mix data with a unique patient identifier and a geocode for geospatial mapping of patient-level information. Researchers are interested in accessing the case mix data that includes CRISP enhancements to the information.

Use Case Description

This use case would allow researchers who have received approval from HSCRC for access to the case mix data to request access to the case mix data with enhancements (mapping to CRISP ID and geocodes). These two data enhancements can make the case mix data, which is submitted by each Maryland acute care hospital individually, more effective as a research tool as it links encounters across hospitals.

The CRISP ID itself can be anonymized so that the links between encounters for a single patient are preserved, but the data cannot be linked back to other data sets containing the CRISP ID or other identifiers. Similarly, the geocodes can be aggregated by census block, census block groups, or census tracts depending on the researcher’s need for granularity. The level of data protection through grouping will be evaluated by the Research Subcommittee and their decision based upon the particulars of the data request, following the principals of providing the minimum data necessary.

Researcher responsibilities

The researcher would have several responsibilities to participate in this service:

- Submit a data request to CRISP with the appropriate accompanying documentation for an IRB-approved study using case mix data that has been approved by the HSCRC. The request must include the name of the CRISP participant entity requesting the data; name of the IRB board; name and role
of principal investigator and any co-investigators; details about the purpose of the study and study protocol; the start and end date of the study; and a description of how the data request meets policy requirements and authorizes CRISP to allow the researcher access to the requested data sources to obtain the individual's information.

- Demonstrate adequate safeguards to ensure confidentiality of source data, prevent re-disclosure that would identify an individual, and prevent re-release of source data through signing a Data Use Agreement in a CRISP-approved form.
- Provide acknowledgement of the use of CRISP data in publications resulting from its use.
- Reimburse CRISP's chargeable costs and expenses.

**CRISP responsibilities**

CRISP would have the following responsibilities:
- Review and approve data access requests in accordance with CRISP's governance process.
- Establish secure mechanisms for researcher access to CRISP data.
- Provide boilerplate language that accurately describes the data provided for the study for use in publication.

**Permitted Purpose Category**

Permitted purpose #4, Research.

**Data Use Considerations**

The case mix data is managed by the HSCRC and is governed by their rules for access under legislative mandate. In this instance of data use, access to patient-level data would be approved under their review process. The Research Subcommittee will review requests that have been approved by the HSCRC and determine the level to which CRISP enhancements can be applied to the data where individual patient privacy is not compromised.

**Approval:**

This Use Case Policy has been approved by the Clinical Advisory Board.

![Signature](signature.png)

March 8th, 2017

Chairperson

Dated