

Participants Population Health Use Case

Version	Approval Date	Owner
1.0	July 18, 2017	Pam Clarke

1. Purpose

Greater Philadelphia is home to a variety of different institutional and health care providers including several premier universities, academic medical centers, community hospitals, large provider organizations, community health centers, Federally Qualified Health Centers, accountable care organizations, health plans, and local health departments representing a strong healthcare and public health community with over 4 million patients served. Such a community presents HealthShare Exchange (HSX) with an opportunity to leverage its resources to support projects relating to improving the health of particular patients as well as individuals in a broader defined patient population (“Population Health”).

HSX offers services which enable the exchange of transitions of care and care coordination information on an individual patient level and for pre-defined populations. However, with the transition from fee-for-service to value-based care models, HSX will need to expand its services to offer controlled and authorized access to more robust population level data to support Population Health initiatives aiming to improve overall patient outcomes in addition to individual health.

Population health management (Population Health Management) needs access to Data provided by HSX Participants through HSX’s Population Health technologies in order to support population based activities for “improving the overall health of a targeted group”. This will also allow HSX to expand services beyond its current scope to support Population Health interventions. Furthermore, HSX’s mission “to provide secure access to health information that enables preventive and cost effective care; improves the quality of care; and facilitates the transitions of care” supports treatment models focused on prevention, better outcomes and enhanced quality of care.

For purposes of this use case, Population Health uses of HSX Data are those where the starting point for Data use is for purposes of characterizing or defining a group or class of patients. Such groups might be defined based on where they receive care, how they are insured, their diagnoses (e.g. people with hypertension or diabetes), where they reside, or

other personal or demographic attributes. Analyses of this Data might ultimately lead back to the care of individual patients (e.g. an examination of the blood pressure measurements among people with diabetes might prompt follow-back to individuals whose blood pressure is not adequately controlled). This use case will allow Data to be accessed and used, in accordance with the policies and procedures set forth herein, to identify patients with whom Participant's have a treatment relationship or members who are attributed to them, who have unmet needs. This could include the need for routine care or screening or for individualized support in complex patients at high risk which would allow the Participants to reach out to these people to ensure their needs are met.

The purpose of this use case is to set forth the policies, procedures and criteria that must be met before HSX can provide access to Data for Population Health activities. This use case does NOT cover Data sharing with Public Health Departments for public health functions, which will be considered and covered in a separate use case(s).¹

2. Scope

- Only Participants that have entered into participation agreements with HSX will have the right to access Population Health technologies for Population Health purposes.
- A patient's consent generally controls dependent upon if a proper consent has been obtained, specifically stating what Data can be used/shared and for what purpose.
- In accordance with HSX policy, notwithstanding the foregoing bullet point, if a patient previously has Opted out of the HSX CDR, the Data will not be shared unless and until the patient Opts-back-in.
- Sharing of behavioral health Data for Population Health purposes would be permitted only in compliance with state and federal laws. Appropriate consents must first be obtained in accordance with state and federal requirements.
- Access to and use of the Data by a third party must be a contracted HIPAA Business Associate (or HSX subcontractor) performing services and functions on behalf of Participants agreeing to participate in a particular Population Health project, and shall be in accordance with the approved Population Health initiative. The Data shall be deleted by the third party when the initiative is completed.

¹ Although the Population Health Workgroup considered the interests and potential population health uses of HSX data by local health departments in the HSX region, members agreed that the issues raised by such uses were sufficiently distinct to merit consideration in a separate use case.

- De-identified Aggregated Data can be shared (i.e., aggregate counts of numbers of patients with certain characteristics).
- De-identified Individual Data can be shared as long as the Data are De-Identified as per the HIPAA definition (see Definition Section below).
- A comprehensive list of data elements which may be contained within the HSX Population Health technologies is in Appendix A.
- For Population Health activities that are Healthcare Operations, as defined by HIPAA, only Minimum Necessary Data would be used and disclosed.
- HSX staff will encrypt all transmissions of Personal Health Information (PHI) in accordance with the Secretary's Guidance to Render Unsecure Protected Health Information Unusable, Unreadable, or Indecipherable to Unauthorized Individuals (See Reference #6) and encryption shall be maintained throughout all storage and transmission processes.

The following type of Data and access will NOT be available for this use case:

- **Opt Out patients:** There shall be no access to or use of Data of patients who have opted out of HSX, except when Data is De-Identified.
- **Data Source Limitations:** Only Data from sources (i.e., Participants) that have expressly agreed to participate in the use case and for a particular Population Health project will be used.
- **Self Pay Patients:** There shall be no access by a health plan to the patient Data for any patient who had a self-pay encounter unless the Data are De-Identified and Aggregated.
- **42 CFR Part 2 Program Data:** Access to Data that is patient identifying information originating from a Part 2 program (as defined in 42 CFR Part 2) may be provided only with a patient's signed consent which complies with Part 2 and Pennsylvania law, or otherwise pursuant to an exception(s) under Part 2 and applicable state and federal laws which allows such Data to be accessed without consent. De-Identified Aggregated Data that is not patient Identifiable may be available without consent.
- **Access to Data that contains "HIV-Related Information":** (as defined in 35 P.S. 7601 et seq.): HIV-Related Information may be permitted only with a patient signed consent which complies with Pennsylvania law, or otherwise pursuant to an exception(s) under Pennsylvania law which allows such Data to be accessed without such consent. De-Identified, Aggregate patient Data may be shared excluding any HIV-Related Information without patient consent.

- **Health Plan and Accountable Care Organization Access to Data:** shall be limited only to Data of Participants that have affirmatively agreed to be active members/attributed members of such entities.
- **Provider Participants:** are prohibited from using the Data for health plan benchmarking and may not request Data for only one health plan's members without the expressed permission of the health plan.
- **Source Documents Provided by Participants:** The individual Source Documents provided by Participants are not available for access or use.

3. Policy

- Data provided for Population Health initiatives would be available for Treatment or Health Care Operation uses that are not Research, including:
 - Population Health Management
 - Program evaluation
 - Quality improvement
 - Performance management
 - Disease or health risk monitoring/Public Health reporting
 - Outbreak investigations-exclusive of health department investigations²
 - Population health assessments/Community Health Needs Assessments
 - Prevention services³
- Data provided CANNOT be used by Participant or provided to a third party for Research, comparative ranking, provider benchmarking, tiering or steering. In addition, Data CANNOT be used for market analysis.
- Access to Data contained in the HSX Population Health technologies is subject to the HSX Opt-Out and Opt-Back-In Policy with the exception of De-Identified Aggregate Data.

² Although outbreak investigations are typically considered an activity that is managed by health departments, an individual HSX member might be involved in an outbreak investigation, such as an investigation of a cluster of cases of healthcare-associated infections. The potential interest of public health departments in using HSX data as part of outbreak investigations will be addressed separately in another population health use case.

³ For more information about Permitted Uses, please see Additional Resources within the Reference Section

- **Dissemination of Population Health Information:** The following describes situations in which HSX may disseminate Population Health information to its Participants and or when HSX Participants may choose to receive Population Health information:
 - When there is an HSX approved project for a Population Health initiative, HSX will notify its Participants by sending out a notification to the Participants and listing it under the Population Health Use Case on the HSX website. HSX Participants who may want to participate in a new initiative being developed and or to receive reports generated from an approved project can contact HSX directly.
 - HSX Generated Reports/Custom Reports which include De-Identified Aggregate information about a population consolidated by HSX Staff may be made available for other Participants upon request.
 - When a Participant receives an Extraction of Historical Data for Population Health purposes, the results of the analysis may be made available for distribution to other HSX Participants as long as the scope of the approved project would allow for such distribution.
 - Analysis derived from Participant's patient base using the Data for patients with whom the Participant has a treatment or care coordination relationship shall not be disseminated to other Participants.
 - HSX Participants who do not consent to their Data being available for Population Health purposes would not be eligible to receive Data or analyses derived through HSX approved Population Health initiatives.
 - In the rare instance that analysis identifies providers specifically, if the providers identification cannot be redacted, before any dissemination occurs, the providers must have the opportunity to review the results and decide whether or not the pertinent results would be included in the dissemination.
 - All dissemination of the results of analyses conducted from HSX Data should reference HSX as the Data source used.
- **Population Health Project Fees:** HSX shall determine whether Participants requesting or participating in any Population Health initiative shall be charged a fee with such determination based upon whether such initiative had been contemplated in the HSX annual budget among other factors. When it is determined that there is a fee for the Population Health initiative, the fees charged for the non-standard service will be based on the cost of providing the service. HSX Participants may be charged an additional fee for receipt of Population Health information disseminated via extraction, generated reports and or subscribed reports.

Technology Mechanisms

From a privacy and security perspective, the Population Health technologies and mechanisms for Data sharing that HSX employs shall comply with the parameters set forth in the Scope and Policy sections of this use case.

HSX has the following mechanisms for providing Population Health information to HSX Participants for Population Health purposes:

- **Extraction of Historical Data**
 - Data will be extracted from the HSX Population Health technologies in an un-aggregated method. An HSX template will be provided as to which columns can be extracted on an encounter or Individual Data. Data regarding provider and health plan would be excluded. Filters can be applied to limit the amount of information contained in the data set.
 - Data extractions can vary in file size. Delivery method would be evaluated per scope of work.
- **HSX Generated Reports and Custom Reports**
 - HSX may provide custom aggregated or calculated reports upon request. These reports would have the full scope and expected outcome agreed upon prior to development. The scope for any report would outline all calculations, filters and parameters necessary.
 - The report may be delivered in multiple media formats depending on the requested characteristics of reporting.
- **Participant Subscribed Reports**
 - Subscribed Reports are a subset of HSX Custom Reports. HSX may provide a custom report that can be run on Daily/Weekly/Monthly/Quarterly basis depending on the subscriptions.
 - The report will run and be delivered to the specified destination automatically at the agreed upon cadence via multiple media formats depending on the requested characteristics of reporting.
- **Dashboards (Live Data)**
 - Dashboards would provide a visual representation of the Data in HSX's Population Health technologies. Dashboards may be updated on a real-time, hourly, daily, weekly or monthly basis.
 - Dashboards may be published to an HSX secure site with an account to the requested dashboards would be provided. This would be a feature HSX would offer at a monthly subscription rate.

Examples of Population Health Permitted Uses

The following Examples of Population Health Permitted Uses (Examples) illustrate acceptable uses but are not an exclusive list of permissible Population Health scenarios:

1. A selection of primary care physicians is interested in improving patient care. Having limited access to claims-based Data particularly for uninsured patients, the physicians want to submit a patient panel to HSX to receive information concerning emergency department use, admissions, and length of stay. The purpose of receiving the information would be to develop interventions for this population of patients.

The information received would be Identified Data, excluding specific provider and health plan identities, to be incorporated into the patient's electronic health record and the practices' care management system for purposes of treatment, care coordination, continuity of care, and Population Health.

HSX may provide the information via Participant Subscribed Reports (see Technological Mechanisms section above).

2. With the aim of identifying barriers to accessing behavioral healthcare in communities and gaining a better understanding of emergency department utilization, HSX Participants are conducting retrospective Data analysis in order to increase the quality of care.

An HSX business associate would conduct the Data analysis of the specified patient population using De-Identified Data Only. Based on the analysis, the Business Associate would provide Aggregate reports back to the Participants to develop interventions for the specialty patient population. Except as set forth in this use case to the contrary, Aggregate reports may be shared with the HSX community at large.

HSX may provide this information through a Data Extraction of Historical Data (see Technological Mechanisms section above).

3. A primary care practice is interested in better understanding their patient population related to birth outcomes specifically birthweights and post-partum visits over a specified period of time. Based upon the submission of a patient panel included with a subscription to HSX services, HSX would provide the requested Data on a regularly agreed upon frequency of reporting.

The Data, as it pertains to the physician panel, would be Identified Data, excluding specific provider and health plan identities, pertaining to the patients within the submitted patient panel. The information received could be used for purposes of treatment, care coordination, continuity of care, and Population Health. Outcomes may be disseminated within the boundaries of the Research definition previously

stated (see Definitions section above) and the Dissemination Policy (see Policy Section above).

HSX may provide this information through a Participant Subscribed Report (see Technological Mechanisms section above).

4. An HSX Participant Accountable Care Organization (ACO) is interested in increasing the quality of care received by its patient population by reducing hospital re-admission rates. To do so, the ACO is interested in improving care coordination by notifying its participating primary care providers when a patient of theirs has been readmitted within a specific time frame (designated by the ACO) for the duration of the established reporting period. This would be an extension of HSX's ENS by including intelligent routing and auto-subscription.

The information received would be Identified Data to be distributed to the pertinent physician(s).

HSX may provide this information through Subscribed Reports (see Technological Mechanisms section above).

5. A partnership of HSX Members is interested in increasing the support of a high utilizer population within a defined high risk geographic location by creating and implementing interventions for the identified at-risk patients cared for by each Participant. The partnership is also looking at emergency department visit rates leading to hospitalizations and in-patient procedures to detect where improvements and interventions could be made.

Each individual member would receive Identifiable Data, excluding specific provider and health plan identities, pertaining to the high utilizer patients frequenting the respective member's Emergency Departments. The partnership as a whole would receive Aggregated De-Identifiable Data pertaining to the sum total of the high utilizer population within the geographic region designated by the initiative. Both sets of Data would be received at the regularly agreed upon frequency of reporting.

HSX may provide this information through HSX Generated/Custom Reports (See Technological Mechanism section above).

6. A Participant is interested in detecting patients in need of cancer screenings, addressing potential gaps in patient care. The Participant is seeking to notify the patients with whom the Participant has a treating relationship who have not undergone the standard screenings and schedule follow-up visits to occur.

The Participant would receive Identifiable Data, excluding specific provider and health plan identities, pertaining to the HSX Participant's patients who fit the

characteristics provided to HSX. HSX would need to be provided the specific variables of interest to locate the selected patient population.

HSX may provide this information through Participant Subscribed Reports (see Technological Mechanisms section above).

4. Procedures

1. Participants may request Data for Population Health purposes as per the Examples for Population Health Permitted Purposes (see section below). Participant will work with HSX staff to submit requests in writing to the HSX management team using the HSX Project Approval Form (Appendix B).
2. HSX's management team will review requests for Population Health endeavors as part of the regular project review process.
3. When the HSX management team determines that a Population Health project should be considered for approval, it shall be presented to the HSX Executive Committee for final review and approval.
4. Decisions regarding approval of a Population Health project are based on the following criteria:
 - a. Alignment with HSX's business plan, mission and vision.
 - b. Alignment with the Examples for Population Health permitted purposes.
 - c. Resource capacity to effectively respond to the request for Data for Population Health purposes.
 - d. Availability of the technical mechanism to provide the Data for the Population Health endeavor.
 - e. Necessary privacy and security controls in place to support the project and in accordance with HSX policies.
 - f. Conflicting Participant interests evidenced by the project request.
 - g. Alignment with regional, state and/or federal programs.
5. A project that is not aligned with an Example for Population Health Permitted Purposes or the above criteria (see section below) or the above criteria may be reviewed by the Clinical Advisory Committee or its designee(s) for a decision regarding accepting the project as a new Population Health initiative. When a project is approved as a new Population Health initiative, the project may be reviewed per the HSX project review process.

6. A project that is not in concert with HSX's technical capacities, architecture and/or infrastructure, shall be reviewed by the HSX Technical Standards Committee or its designee(s).
7. Upon approval of a Population Health project, HSX Participants, including the Participant who made the request, would be notified about the project.
8. The HSX Board shall receive regular reports on the Population Health projects and how they are progressing toward meeting the project objectives for improving population health.
9. When there is a fee associated with the request, HSX shall advise the Participant of the projected non-standard fee associated project and shall seek approval of the fee prior to commencing the project. The HSX Participant will be invoiced according to the mutually agreed upon schedule.
10. Once the project is approved, HSX staff shall work with the Participant on implementation based on the technological mechanisms required and on the implementation schedule to be mutually determined.
11. HSX staff would require the Participant provide the appropriate levels of security for the entire duration of the project, dependent on the scope of the project and in compliance with HSX's privacy and security requirements.
12. If a project is denied, the HSX Participant would be notified with the reason for denial. The HSX Participant may appeal the denial to HSX management team for reconsideration.

5. Enforcement

- As per the HSX Participation Agreement, Participants will attest to using the Data in accordance with treatment and non-treatment use cases on an annual basis.
- In the event that HSX or an HSX Participant identifies that a Participant is misusing the Data, HSX shall follow the procedure outlined in the HSX Data Misuse Policy. HSX monitors the use of Data through the HSX Population Health technologies in accordance with the Audit and Monitoring Policy.
- HSX's Chief Security Officer and Chief Privacy Officer are responsible for ensuring compliance with this use case under the direction of the HSX Executive Director.

6. Definitions

For a complete list of definitions, refer to the *Glossary*.

7. References

Regulatory References:

1. HIPAA Privacy Rule (45 CFR 164.514)
2. Committee on Strategies for Responsible Sharing of Clinical Trial Data; Board on Health Sciences Policy; Institute of Medicine. Sharing Clinical Trial Data: Maximizing Benefits, Minimizing Risk. Washington (DC): National Academies Press (US); 2015 Apr 20. Appendix B, Concepts and Methods for De-identifying Clinical Trial Data. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK285994/>
3. The Centers for Disease Control and Prevention (CDC). "Distinguishing Public Health Research and Public Health Nonresearch" Policy. 07/29/2010. <https://www.cdc.gov/od/science/integrity/docs/cdc-policy-distinguishing-public-health-research-nonresearch.pdf>
4. Kassler, W. J., Tomoyasu, N., & Conway, P. H. (2015). Beyond a traditional payer — CMS's role in improving population health. *N Engl J Med*, 372(2), 109-111. doi:10.1056/NEJMp1406838
5. Office for Civil Rights. Guidance Regarding Methods for De-Identification of Protected Health Information in Accordance with Health Insurance Portability and Accountability (HIPAA) Privacy Rule (2012). https://www.hhs.gov/sites/default/files/ocr/privacy/hipaa/understanding/coveridentities/De-identification/hhs_deid_guidance.pdf
6. U.S. Department of Health and Human Services. Guidance to Render Unsecured Protected Health Information Unusable, Unreadable or Indecipherable to Unauthorized Individuals. <https://www.hhs.gov/hipaa/for-professionals/breach-notification/guidance/index.html>
7. U.S. Department of Health and Human Services. Understanding Some of HIPAA's Permitted Uses and Disclosures
8. <https://www.hhs.gov/hipaa/for-professionals/privacy/guidance/permitted-uses/index.html>
9. The Office of the National Coordinator for Health Information Technology. Permitted Uses and Disclosures: Exchange for Health Care Operations 45 Code of Federal Regulations (CFR) 164.506(c)(4)
10. https://www.hhs.gov/sites/default/files/exchange_health_care_ops.pdf
11. The Office of the National Coordinator for Health Information Technology. Permitted Uses and Disclosures: Exchange for Treatment 45 Code of Federal Regulations (CFR) 164.506(c)(2)

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12. https://www.hhs.gov/sites/default/files/exchange_treatment.pdf
13. U.S. Department of Health and Human Services. Public Health
14. 45 CFR 164.512(b)
15. <https://www.hhs.gov/hipaa/for-professionals/special-topics/public-health/index.html>

Policy Owner	Privacy Officer	Contact	Pam.clarke@healthshareexchange.org
Approved By	HSX Board	Approval Date	July 18, 2017
Date Policy In Effect	July 18, 2017	Version #	1.0
Original Issue Date	July 18, 2017	Last Review Date	July 18, 2017
Related Documents	Audit Logging and Monitoring Policy Data Misuse Policy Glossary Public Health Authority Population Health Use Case		

Appendix A: Data Elements

Data Available within the Clinical Database Repository (CDR) as of April 2017

Patient	Encounter	Allergy	Insurance	Diagnosis
Patient ID and Alternative ID	Encounter ID and Code	Allergen ID and Code	Insurance Company Name	Diagnosis ID and Code
Name	Encounter Admit Source	Allergen Label	Insurance Company Address	Diagnosis Type
Date of Birth	Admission Type	Allergen Description	Insurance Group Name	Diagnosis Description
Gender	Subject of Encounter	Allergic Reaction Severity Code	Insurance Employer ID	Diagnosis Activity Time
Race	Location	Allergic Reaction Type	Insurance Employer Name	
Address	Facility Name and ID Code		Insurance Plan Effective Date	
Ethnicity	Name of Admitting Provider		Insurance Plan Expiration Date	
Indicator if Patient Has Died	Attending and Referring Physician Names		Insurance Plan Type Code	
Patient's Primary Care Provider	Ambulatory Status of Patient		Name of Insured	

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Patient	Encounter	Allergy	Insurance	Diagnosis
Patient's Primary Care Facility	Encounter Start and End Times		Insurance Company Plan Code	
Observation Vital Signs and Units	Encounter Discharge Disposition and Destination			
Prescription Code	Medication ID and Code	Procedure Code	Immunization Start Time	Condition ID and Code
Prescription Label	Medication Label	Procedure Label	Immunization ID and code	Condition Label
Prescription Requested Dispense Amount	Medication Dose Quantity	Procedure Description	Immunization Label	Condition Diagnosis Date
		Procedure Activity Time	Immunization ID	Condition Activity Time



Appendix B: Project Request Form

PMO PROJECT REQUEST FORM			
<p>Instructions: Complete numbers 1-4 before submission to the Project Review Committee. Numbers 5-7 will be reviewed and documented during the meeting.</p>			
1. General Description			
Project Name	ENTER PROJECT NAME.		
Prepared by <small>(List who completed the form.)</small>	ENTER YOUR NAME.	Date of Request	CLICK HERE TO ENTER A DATE.
Business Area	CLICK HERE TO ENTER TEXT.		
Project Type	<input type="checkbox"/> PRODUCT ENHANCEMENT <input type="checkbox"/> SERVICE DEPLOYMENT <input type="checkbox"/> SECURITY/PROCESS DEVELOPMENT/PROCESS IMPROVEMENT <input type="checkbox"/> NEW SERVICE/TECHNOLOGY INNOVATION <input type="checkbox"/> SUPPORT ASSISTANCE		
Project Description	<i>Use as much detail as necessary to fully describe the proposed project's scope of work and impact to business processes and systems/applications.</i>		
Project Objectives	<i>Describe the organizational objective(s) and departmental objective this project supports. Make sure the objectives are clear, realistic and measurable.</i>		
2. Effort Level and Value			
Effort Level	<input type="checkbox"/> Low (Less than a week to completion) <input type="checkbox"/> Medium (Two to three weeks to completion) <input type="checkbox"/> High (Four week or longer to completion)		
Estimated Time to complete (in hours/week)			
Value	<i>Provide a description of the Value this project has for HSX. Please describe any cost savings, benefits, and other inputs of working on this project.</i>		
Is this a Grant Dependent Project	<input type="checkbox"/> Yes (Specify the Grant) <input type="checkbox"/> No		
3. Resources			
Internal	<p>Identify anticipated business and IT resources required. Provide an estimated FTE count and specify whether internal resources have the skills and capacity required to start and successfully complete the project.</p> <p>Project Manager: Engineer:</p>		