

Public Health Authority Population Health Use Case

Version	Approval Date	Owner
2.0	TBD	Don Reed

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 12 million patients served. Such a community presents HealthShare Exchange (“HSX”) with an opportunity to leverage its resources to assist in projects relating to population health (“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. As noted in HSX’s Participation Agreement (“PAR”), population health management (“Population Health Management”) would permit access to and use of Data provided by HSX Participants through HSX’s Population Health technologies to support population based activities aimed at “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.

For purposes of this use case, Population Health uses of HSX Data are those where the starting point for Data use is for the 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), vaccination and/or testing status/results, where they reside or work, or other personal or demographic attributes. The entire population of patients within HSX’s Population Health technologies may be a group, the health of which can be measured by aggregated data.

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). Alternatively, analyses might lead to policy changes by providers or a Public Health Authority (defined below), to promote the health of the entire population.



The purpose of this use case is to allow for access to Data for community health, public health and population health missions of Public Health Authorities legally authorized to access and use Data for Public Health purposes and activities as permitted by both HIPAA (i.e., 164.512(b)) and other Applicable Law.

2. Scope

- Unless permitted or required by Applicable Law, only a Public Health Authority that has entered into a legally compliant agreement with HSX may be granted access to HSX's Clinical Data Repository (CDR) Data for Population Health activities that are also Public Health purposes.
- Patient consent is not required for the provision of HSX Data for purposes of this Use Case. However, 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.
- Data of a patient who has previously has Opted out of the HSX CDR, will not be shared unless and until the patient Opts-back-in unless the provision of such Data is required by Applicable Law regardless of such Opt-out.
- 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.
- 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 is De-Identified as per the HIPAA definition (see Definition Section below).
- A comprehensive list of data elements contained within the HSX Population Health technologies is in Appendix A.
- For Population Health activities that are Healthcare Operations and/or Public Health activities, 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.

Exceptions to the type of Data available through the use case is as follows:



- **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 or if required by Applicable Law regardless of such Opt-out.
- **Data Source Limitations-** Only Data from sources (i.e., Participants) that have not opted out of the Public Health Use Case will be used, except as required by Applicable Law including a declared State of Emergency in the jurisdiction of a Public Health Authority, in which case agreement to participate is not necessary. HSX may also provide Data to Public Health Authorities related to mandatory reportable conditions within their geographic jurisdiction.
- **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 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.

3. Policy

- Data provided for Population Health initiatives would be available for Public Health uses by a Public Health Authority including:
 - Population Health Management
 - Program evaluation
 - Quality improvement
 - Performance management
 - Disease or health risk monitoring/Public Health reporting
 - Outbreak investigations
 - Risk assessment
 - Vaccination/testing status and results
 - Population health assessments/Community Health Needs Assessments



- Prevention services¹
 - HSX could provide Identifiable Individual Data on reportable diseases, conditions, vaccination records that are legally mandated or in response to a possible outbreak investigation. The information provided from HSX would allow for epidemiologic investigation to be initiated in a timelier fashion by using Real-Time Data Feeds.
 - As required by Applicable Law including a declared State of Emergency, HSX may provide Identifiable Individual Data to Public Health Authorities without Participant consent and authorization. In such cases, HSX will notify Participants within 10 days of commencement of Data sharing, including the scope and detail of the Data being shared. Data shared will be based on the nature of the public health crisis and limited to the minimum necessary standards of HIPAA. It may include clinical and demographic information about affected patients or patients at risk, as well as contact information for individuals within relevant geographies for use in contact tracing.
 - Aggregate Data, De-Identified by both patient and provider, reported in aggregate on a zip code level basis may be made available to Public Health Departments for Population Health permitted purposes without the expressed consent of the HSX Participants. Examples of diseases/conditions may include but are not limited to: obesity prevalence, teenage births, asthma rates. See Appendix A for more details about the Data available within the Clinical Data Repository.
 - When a Public Health Authority accesses Data, it is required to warrant that its environment is HIPAA compliant.
 - Data provided **CANNOT** be used by a Public Health Authority or provided to a third party for comparative ranking, provider or health plan benchmarking, tiering or steering. In addition, Data **CANNOT** be used for market analysis.
 - Access to and use of Data by a Public Health Authority shall be in accordance with the approved Population Health initiative.
 - 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.
 - 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 based on approved projects:

¹ For more information about Permitted Uses, please see Additional Resources within the Reference Section

- 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 Public Health Department 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.
- All dissemination, distribution, and/or broadcasting of any programs, initiatives, analyses, etc. should reference HSX as the Data source used unless set forth to the contrary in the applicable agreement with the Public Health Authority or required by Applicable Law.
- Population Health Project Fees: HSX shall determine whether Public Health Authorities requesting or participating in any Population Health initiative shall be charged a fee and the amount of such fee, if any.

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 Public Health Authorities for Population Health purposes:

- Real Time Data Feeds
 - Real Time Data Feeds provides organizations Real-Time Data for a specific population based on diagnostic and/or disease characteristics. This service will be available for Public Health reporting and disease management purposes only. This Real Time Data Feed may be Individual Data excluding specific information about health plan or source provider.
- Extraction of Historical Data
 - Data will be extracted from the HSX Population Health technologies in a unaggregated method. An HSX template will be provided as to which columns can be extracted on an encounter level 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 can 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 for Public Health Departments

The following examples of Population Health Permitted Uses for Public Health Departments (Examples) illustrate acceptable uses but are not an exclusive list of permissible Population Health projects:

1. When an outbreak investigation is initiated by a Public Health Authority, HSX may provide Data support to ensure all those affected receive the necessary treatment/care and that potential sources of the outbreak can be quickly identified and rectified including Individually Identifying Data pertaining to patients affected by the outbreak.
2. If the Public Health Authority would like assistance in the evaluation of a program or initiative, HSX may provide clinical Data relevant to the outcomes of the program/initiative. The Data provided would be De-Identified Aggregate Data corresponding to the targeted community and would be used to determine the



success of the Public Health Authority's activities. The De-Identification process would exclude the providers and sources of the Data from the provided dataset.

3. Immunization data may be exchanged with immunization registries operated by Public Health Authorities.
4. Public Health Authorities may receive Encounter Notifications related to individuals known to be carriers of mandatorily reportable communicable diseases.
5. HSX may share data on mandatory reportable conditions with Public Health Authorities through automated services, such as Electronic Laboratory Reports (ELR) and Electronic Case Reports (eCR).

Public Health Department may use Aggregate, De-Identified Data to measure health conditions or risk factors for populations and subpopulations. For example, HSX Population Health technologies Data could be used to measure the prevalence of obesity, diabetes, hypertension, asthma, or smoking, for the entire patient population of a county or subpopulations defined by race/ethnicity, gender, age group, and/or neighborhood.

4. Procedures

1. Public Health Authorities may request Data for Public Health activities and purposes as per the examples for Population Health Permitted Purposes for Public Health Authorities (see section below). The Public Health Authority will work with HSX to submit requests in writing to a member of 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 for Public Health activities.
 - c. Resource capacity to effectively respond to the request for Data for Public Health activities and Population Health purposes.
 - d. Availability of the technical mechanism to provide the Data for the Public Health/Population Health endeavor.



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- 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.
 - h. HSX shall require verification of Public Health Authority to meet the standard for any Population Health initiative that is a Public Health activity.
5. A project that is not aligned with an Example for Population Health Permitted Purposes for Public Health Authorities (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 Public Health/ Population Health project, the requesting Public Health Authority and HSX Participants shall be notified about the project.
 8. The HSX Board or a delegated committee shall receive regular reports on the Population Health projects and how they are progressing toward meeting the project's objectives.
 9. When there is fee associated with the request, HSX shall advise the Public Health Authority of the projected fee associated project and shall seek approval of the fee prior to commencing the project. The Public Health Authority will be invoiced according to the mutually agreed upon schedule.
 10. Once the project is approved, HSX staff will work with the Public Health Authority on implementation based on the technological mechanisms required and on the implementation schedule to be mutually determined.
 11. HSX staff will require the Public Health Authority 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.

If a project is denied, the Public Health Authority will be notified with the reason for denial. The Public Health Authority may appeal the denial to HSX management team for reconsideration.

5. Enforcement

- In the event that HSX or an HSX Participant identifies that a Public Health Authority 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 President.

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. Kessler, 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/D-e-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*



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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 <https://www.hhs.gov/hipaa/for-professionals/privacy/guidance/permitted-uses/index.html>
8. 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)
https://www.hhs.gov/sites/default/files/exchange_health_care_ops.pdf
9. 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)
https://www.hhs.gov/sites/default/files/exchange_treatment.pdf
10. U.S. Department of Health and Human Services. Public Health 45 CFR 164.512(b)
<https://www.hhs.gov/hipaa/for-professionals/special-topics/public-health/index.html>

Policy Owner	Privacy Officer	Contact	Don.reed@healthshareexchange.org
Approved By	HSX Executive Committee HSX Board	Approval Date	July 18, 2021 July 28, 2021
Date Policy In Effect	July 28, 2021	Version #	2.0
Original Issue Date	July 28, 2017	Last Review Date	July 19, 2021
Related Documents	Audit Logging and Monitoring Policy Data Misuse Policy Glossary Participants Population Health Use Case Use Case Governance		

Appendix A: Data Elements

Data Available within the Clinical Database Repository (CDR)

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

Instructions: Complete numbers 1-4 before submission to the Project Review Committee. Numbers 5-7 will be reviewed and documented during the meeting.

1. General Description

Project Name	ENTER PROJECT NAME.		
Prepared by <i>(List who completed the form.)</i>	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	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.
	Project Manager: Engineer: