Project Title: DAR EXAMPLE 2: Evaluating Inequities in Refugee and Immigrant Women's Sexual Health Access

Date Generated: April 30, 2025

Section 1: General Project Information

1.1 Project Information

Enter the title of the Research Project/Program:
DAR EXAMPLE 2: Evaluating Inequities in Refugee and Immigrant Women's Sexual Health Access (IRIS)

If the project title entered above is different from the project title in your ethics and/or funding documentation, explain the reason for this discrepancy below:
:
If this application is related to a previously approved data access request, Explain here:
:
Enter the previous Project number, if applicable:
:

1.2 BC SUPPORT Unit

Does the work you plan to do in this project meet the criteria for patient-oriented research?

Has this data access request been informed by a BC Data Scout™ report?
This information will help PopData to determine the impact of the BC Data Scout™ Initiative.
:

Section 2: Safe People – Principal Investigator/Student

Redacted for privacy

Section 3: Safe People – Research Team Members

Redacted for privacy

Section 4: Safe Projects - Research Project Overview

Ensuring the Users Can be Trusted to Use the Data in an Appropriate Manner

Ministry of Health Policy Reference: Access to Health Data for Research Policy, Section 5 (a – b). See
https://www2.gov.bc.ca/assets/gov/health/conducting-health-research/data-access/access-to-health-data-for-research.pdf
 for more information.

4.1 Research Project Overview

Describe the Project's key aims and objectives/research questions:

Immigrant and refugee women in Metro Vancouver face serious health and social inequities, including limited access to culturally safe, language-specific, and low-barrier sexual and reproductive health (SRH) services. Although economic immigrants are sometimes considered healthier at arrival than the host population (known as the Healthy Immigrant Effect), immigrant and refugee women face suboptimal access to preventive care measures such as cervical cancer screening and contraceptive use, and higher rates of professionally identified postpartum concerns (e.g., mental health). Despite the large number of BC women who are im/migrants, there is a near-absence of population-level data on their healthcare access. Furthermore, most research on im/migrant women's health in BC has not been designed to generate population-based information, and has been limited to specific subgroups (e.g., Asian and Latin American women; refugees; sex workers) or their health providers. In particular, information is urgently needed regarding the unique features and experiences of the province's im/migrant population and health system to inform appropriately tailored service planning, including current proposals to develop BC's first Provincial Refugee Health Strategy.

In BC, we have the unique capacity to link administrative immigration and health services data to understand patterns of immigrant women's health access. To our knowledge, no studies in BC have used linked population-based data to examine determinants of SRH service usage amongst the entire population of im/migrant women. This information is needed by policymakers to ensure that services and emerging im/migrant health priorities appropriately address im/migrant women's needs and realities.

The overall aim of this project is to support the sexual and reproductive health needs, realities, and rights of immigrant and refugee women across Metro Vancouver through a program of community-based mixed-methods research. This work was developed in response to calls for more explicit efforts to include and meaningfully address the realities and needs of immigrant and refugee women in health research, service delivery, and policies. These priorities have been identified by community and clinical partners and collaborators, as well as by health authorities. Additional information redacted for privacy.

The specific objectives, research questions, and hypotheses of this project are:

Obj 1: Understand patterns and determinants of SRH service utilization for im/migrant women post-arrival in BC, including potential inequities amongst marginalized subgroups (ie, refugees, RC, precarious status); Research questions redacted for privacy.

Obj 2: Examine trajectories and lived experiences of changes in SRH service utilization amongst im/migrant women over the course of arrival and settlement in BC; Research questions redacted for privacy.

Obj 3: Evaluate impacts of 'natural policy experiments' (e.g., implementation of 'access without fear'; withdrawal/reinstatement of IFHP) on patterns of and experiences with SRH services use for im/migrant women post-arrival in BC Research questions redacted for privacy.

Describe the Project's basic methodology:

Methodology: Our study is mixed methods with both qualitative and quantitative approaches for each of the three Objectives. We will NOT link data between quantitative analysis of administrative data and qualitative methods, but will triangulate findings across study arms. Herein we describe only planned quantitive methods.

Objective 1: To evaluate H1.1, we will use cross-sectional analyses of quantitative data to compare patterns of Sexual and Reproductive Health (SRH) service use between im/migrant and non im/migrant women; outcomes include sexual health screenings, maternity care, contraceptive use, and opportunities for SRH service delivery. We will use multivariate models to estimate differences in each outcome by im/migrant and non-migrant status, adjusting for individual sociodemographic factors. We will use logistic models for STBBI testing, cervical cancer screening, C-sections, vaginal birth after caesarian, and receipt of 2- and 6-week visits postpartum. For count outcomes (# of visits to primary care, specialists, prenatal) we will use the Box-Cox test to determine the functional form of the link function within a GLM framework and the Park test to assess the relationship between the mean and variance. We will use Cox proportional hazards regression to assess gestational age at first contact with prenatal care. To identify determinants of SRH service use for im/migrant women (H1.2), we will conduct quantitative analyses via the logistic, count, and cox modeling procedures above. Outcomes will include use of maternity care, contraception, cervical cancer screening, and STBBI testing. Where relevant, we will explore interactions with immigration class and other covariates and/or estimate models stratified by immigration class. Our choice of covariates, as well as variables for stratification, will be informed by qualitative analysis.

Objective 2: We will use hierarchical cross-classified random effects models to assess how patterns of service use change among im/migrant women by year since arrival in BC, while accounting for period and cohort effects (H2.1). Functional form and individual covariates will correspond to models in H1.2. Qualitative findings will be used to inform group-based trajectory modeling to explore changes in SRH usage over time; trajectory modeling will examine how time-fixed covariates (e.g., im/migration class, language ability at time of arrival) and time-dependent covariates (e.g., income, health insurance coverage) explain variation from the average trajectory within groups over the duration of arrival and settlement in BC (H2.2).

Objective 3: We will use interrupted time series analysis with comparison groups to examine impact of 'natural policy experiments' (e.g. withdrawal/reinstatement of IFHP, telephone interpretation for GPs, closure of a specialized clinic) on SRH service use. Outcomes will include SRH service measures from Obj 1, as well as new outcomes informed by qualitative data. Time series analysis will account for unobservable (but time-invariant) patient characteristics and secular trends surrounding the implementation of the policy changes, while producing clearly interpretable results.

Detailed methodology redacted for privacy.

Describe how data requested from each data file (including external data sources) are necessary to achieve your research objectives (e.g. MSP, DAD, etc.). Include each data file, date range and a brief rationale. If sensitive/Non-Core data variables are being requested (e.g. 6 digit postal code) also provide a rationale: Achieving Objectives:

In BC, we have the unique capacity to link administrative immigration and health services data to understand patterns of immigrant women's health access. To our knowledge, no studies in BC have used linked population-based data to examine determinants of SRH service usage amongst the entire population of im/migrant women.

The data sources requested and the variables needed to achieve our research objectives are as follows: databases.

Immigration, Refugees and Citizenship Canada (IRCC) (Records for all landed immigrants from 1985 onward): Information on immigration class, income in country or origin, education, marital status, language ability, year of arrival needed to identify and describe im/migrant cohort. Data from IRCC will be used to determine if women immigrated to Canada, and when that occurred. We are interested in the experiences of both recent and longer-term immigrant women. To identify women who immigrated prior to the study period as immigrants, we require IRCC data that predate the period of service use examined using other databases. (Cohort: women)

Medical Services Plan (MSP) registration file (BC residents who receive or are eligible to receive publicly-funded health care services): Information on age, neighbourhood income, location of residence needed to describe im/migrant and Canadian/born cohort of women and their babies. (Cohorts: women, infants)

Medical Services Plan (MSP) payment file (All fee-for-service medical services claims paid to physicians as well as shadow billing data): Information to capture health primary care and specialist sexual and reproductive health services received by women, also including STI testing, cervical cancer screening, IUD insertions, abortions, prenatal and postpartum visits. Encounter data needed to capture PHCO and nurse practitioner services. MSP will also be used to identify care provided to babies within the first 6 weeks of life.(Cohorts: women, infants)

BC Perinatal Data Registry (BCPDR) (Records for all births in BC): Information on reported prenatal visits, mode of delivery, vaginal birth after c-section to characterize perinatal outcomes among im/migrant and Canadian-born cohort of women and their babies. (Cohorts: women, infants)

PharmaNet (All prescriptions filled in BC, regardless of payer): Information on contraceptives dispensed and treatment for perinatal mental disorders for women, as well as information on PharmaCare plan C useful in identifying women with low income. (Cohort: women, infants)

Vital Statistics Deaths: This will be used to identify women who died within the study period and exclude them from analysis. (Cohort: women, infants)

Vital Statistics Marriages: Marital status may differ between immigrant and non-immigrant women, and is important to understand need and in some cases access to SRH care. (Cohort: women)

Vital Statistics Births: Information on all babies born to women in the cohort, including date of birth (needed to identify postnatal care received in first 6 weeks) (Cohorts: women, infants)

Vital Statistics Stillbirths: Information to confirm any stillbirths not recorded in other sources (Cohorts: women) National Ambulatory Care Reporting System: Needed to identify ED visits for reasons related to sexual and reproductive health (Cohort: women, infants)

Discharge abstract database: Needed to identify hospitalizations for reasons related to sexual and reproductive health and hospitalizations related to childbirth (Cohort women, infants)

CPSBC/MSP Practitioner File data: This will provide physician-level information relevant to the SRH experiences of im/migrants. Physician sex will allow us to identify women receiving care from female doctors.

Location of MD training provides information on training external to Canada and will allow us to examine care received from International Medical Graduates. Other physician characteristics (age, year of graduation) will be adjustment variables in multilevel analysis.

Vancouver Coastal (EXTERNAL): Identifiers for women receiving care in HA-funded clinics (i.e. Contact with perinatal public health programs, reproductive mental health programs, specialized services for im/migrant populations). (Cohort: women) [Note this dataset was not provided or used for this study, but was included in the DAR submission and included here for illustrative purposes]

Additional dataset name redacted for privacy (EXTERNAL): (Cohort: women)

Provide a brief description of the public interest/public benefit of the project:
Canada's high proportion of im/migrants is only expected to continue increasing, making it essential to understand and address gaps in SRH care faced by im/migrant women. Through integrated knowledge translation with community and policymakers, results will directly inform emerging immigrant health priorities in BC, such as proposals to develop BC's first Provincial Refugee Health Strategy and initiatives to tailor sexual health programs to im/migrants and young people. Health authorities and community partners will use findings to improve the responsiveness of health and community-based services to im/migrant women's SRH needs. Our results will be of relevance to other jurisdictions in Canada and elsewhere that face similar challenges of ensuring access to health services for im/migrants.

Provide a brief consideration of how the research will be eventually presented, communicated and utilized: :
Note to PI

The research project overview provides the context for your data access request.

The more complete and clear the information provided in the project overview, the more likely PopData will be able to review and submit your request without delays.

Your clarity and consistency also will assist PopData, the Health Data Platform, the Health Data Platform Council, The Data Stewardship Committee, or other Data Stewards to review and process your DAR with minimal questions and iterations.

All information provided must be consistent with the relevant ethics application and any information supplied in the DAR.

4.2 Study Population/Cohorts

Enter details of your study population/cohort by clicking the "Create Cohort" button:

| 9l hYfbU BUa Y | Cohort 1: Women | Description | All women (im/migrant women OR non-im/migrant) in BC from 1985 to 2020. We will divide this cohort into two study populations: 1) women included in the IRCC database at any point since 1985 (earliest year available) and who link to Population Data BC holdings between 2009/10 and 2019/20 (im/migrant women) and 2) all other women (non-im/migrant women). Note: In the CIHR application we proposed a 30%random sample of non-im/migrant women but we have since determined that given im/migrant women are not evenly distributed throughout the province we will need the full population to draw from in order to develop a propensity-matched sample of non-im/migrant women. Also, the CIHR application describes analysis for women resident in BC >5 years the study period. The research team will apply this exclusion criterion as we need to know how many im/migrant women were resident <5 years for descriptive purposes. | Dcd8 UHU 5 gg]ghYX | False |
| 9l hYfbU 5 Xa]b]ghfUhjj Y | False | Researcher-collected | False | Dcd8 UHU< YX | True |

Name	Cohort 2: Infants	Description	All babies born to cohort 1 in BC from April 1, 2009 to March 31, 2020.	PopData Assisted	False
External Administrative	False	Researcher-collected	False	PopData Held	True

Section 5: Safe Projects - Ethics

Redacted for privacy

Section 6: Safe Projects - Funding

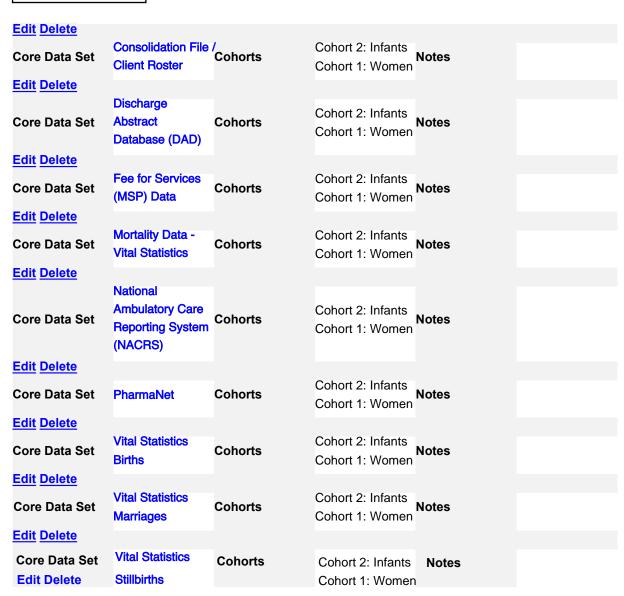Redacted for privacy

Section 7: Safe Projects - Peer Review

Redacted for privacy

Section 8: Safe Data - Core Data Sets - PopData Managed

8.1 Core Data Sets

Edit Delete				
Core Data Set	Consolidation File / Client Roster	**Cohorts**	Cohort 2: Infants Cohort 1: Women	**Notes**
Edit Delete				
Core Data Set	Discharge Abstract Database (DAD)	**Cohorts**	Cohort 2: Infants Cohort 1: Women	**Notes**
Edit Delete				
Core Data Set	Fee for Services (MSP) Data	**Cohorts**	Cohort 2: Infants Cohort 1: Women	**Notes**
Edit Delete				
Core Data Set	Mortality Data - Vital Statistics	**Cohorts**	Cohort 2: Infants Cohort 1: Women	**Notes**
Edit Delete				
Core Data Set	National Ambulatory Care Reporting System (NACRS)	**Cohorts**	Cohort 2: Infants Cohort 1: Women	**Notes**
Edit Delete				
Core Data Set	PharmaNet	**Cohorts**	Cohort 2: Infants Cohort 1: Women	**Notes**
Edit Delete				
Core Data Set	Vital Statistics Births	**Cohorts**	Cohort 2: Infants Cohort 1: Women	**Notes**
Edit Delete				
Core Data Set	Vital Statistics Marriages	**Cohorts**	Cohort 2: Infants Cohort 1: Women	**Notes**
Edit Delete				
Core Data Set Edit Delete	Vital Statistics Stillbirths	**Cohorts**	Cohort 2: Infants Cohort 1: Women	**Notes**

Identify the Core data sets that are required to conduct your research by clicking "Create Core Data Set":

Create PopData BC Core Data Set

Note to PI

Core vs Non-Core data

Some BC Ministry of Health data sets available through PopData and HDPBC are called '**Core Data**'. A Core Data set is a standardized 'bundle' of commonly requested variables. A Core Data set may not include **ALL** the variables available in the data set. For example, some Core Data variables, such as geography or organisational codes, are suppressed to meet privacy legislation requirements.

Non-Core Data: Non-Core Data are variables that are **NOT** included in the standardized Core Data set. Non-Core Data is available for request **as an addition** to the Core Data set.

For the majority of DARs, requesting access to Core Data **ONLY** may make the data access approval process quicker and may expedite data provision. Data requests that include Non-Core Data will be subject to regular rather than expedited processes, both for application review and data provisioning.

Please note that the overall data access request is subject to meeting ALL of the Five SAFEs requirements. For more detail on the Five SAFEs, [visit the Eligibility and the Five SAFES model page of our website.](#)

PIs can view all accessible data and thus have the flexibility to create their own study population/cohort and select their variables of interest.

Providing the opportunity to see all available data will assist PIs to make informed decisions as to which data best suits their needs as well as decreasing the possibility of omission when selecting variables.

Data Refresh Schedule

Data refreshes may be available on a quarterly, annual or ad hoc basis depending on the data file. Data refreshes will be automatically available within the SRE.

Section 9: Safe Data - Core Data Sets - HDPBC Managed

9.1 Core Data Sets

Identify the Core data sets that are required to conduct your research by clicking "Create Core Data Set":

Create HDPBC Core Data Set

Note to PI

Core vs Non-Core data

Some BC Ministry of Health data sets available through PopData and HDPBC are called '**Core Data**'. A Core Data set is a standardized 'bundle' of commonly requested variables. A Core Data set may not include **ALL** the variables available in the data set. For example, some Core Data variables, such as geography or organisational codes, are suppressed to meet privacy legislation requirements.

Non-Core Data: Non-Core Data are variables that are **NOT** included in the standardized Core Data set. Non-Core Data is available for request **as an addition** to the Core Data set.

For the majority of DARs, requesting access to Core Data **ONLY** may make the data access approval process quicker and may expedite data provision. Data requests that include Non-Core Data will be subject to regular rather than expedited processes, both for application review and data provisioning.

Please note that the overall data access request is subject to meeting ALL of the Five SAFEs requirements. For more detail on the Five SAFEs, visit the Eligibility and the Five SAFES model page of our website.

PIs can view all accessible data and thus have the flexibility to create their own study population/cohort and select their variables of interest.

Providing the opportunity to see all available data will assist PIs to make informed decisions as to which data best suits their needs as well as decreasing the possibility of omission when selecting variables.

Historical Data

For DAD, MSP, NACRS and PNet, pre-approved years of data are included in the HDPBC Core Data Set; however, additional historical data is available upon special request. In order to request historical data for these files please fill out section 12.2 of this DAR form. Please visit the HDPBC website to view the pre-approved vs special request data availability for these data files.

Data Refresh Schedule

Data refreshes may be available on a quarterly, annual or ad hoc basis depending on the data file. Data refreshes will be automatically available within the HDPBC Secure Environment.

Section 10: Safe Data - Non-Core Data PopData Managed

10.1 Non-Core Data Sets

Please identify the Non-Core data sets that are required to conduct your research by clicking "Create Non-Core Data Set":

Edit Delete

Non-Core Data Set	Consolidation File - 2019-06-10 (Approved)	Notes		Cohorts	Cohort 1: Women Cohort 2: Infants
Start Date	2009-04-01	End Date	2020-03-31	Justification	N/A

Edit Delete

Non-Core Data Set	PharmaNet - 2018-01-11 (Approved)	Notes		Cohorts	Cohort 2: Infants Cohort 1: Women
Start Date	2009-04-01	End Date	2020-03-31	Justification	Information on contraceptives dispensed and treatment for perinatal mental disorders for women, as well as information on PharmaCare plan C useful in identifying women with low income.

Edit Delete

Non-Core Data Set	Vital Statistics Births - 2016-02-22 (Approved)	Notes		Cohorts	Cohort 1: Women Cohort 2: Infants
Start Date	2009-04-01	End Date	2020-03-31	Justification	Information on all babies born to women in the cohort, including date of birth (needed to identify postnatal care received in first 6 weeks)

Edit Delete

Non-Core Data Set	Immigration, Refugees and Citizenship Canada (IRCC) -2016-02-22 (Approved)	Notes		Cohorts	Cohort 1: Women

Start Date	1985-04-01	End Date	2020-03-31	Justification	Information on immigration class, income in country or origin, education, marital status, language ability, year of arrival needed to identify and describe im/migrant cohort. Data from IRCC will be used to determine if women immigrated to Canada, and when that occurred. We are interested in the experiences of both recent and longer-term immigrant women. To identify women who immigrated prior to the study period as immigrants, we require IRCC data that predate the period of service use examined using other databases.
Edit Delete					
Non-Core Data Set	BC Perinatal Data Registry - 2016-02-22 (Approved)	Notes		Cohorts	Cohort 1: Women Cohort 2: Infants

Start Date	2009-04-01	End Date	2020-03-31	Justification	Information on reported prenatal visits, mode of delivery, vaginal birth after c-section to characterize perinatal outcomes among im/migrant and Canadian-born cohort of women and their babies.(Cohorts: women, infants)

[Create Non-Core Data Set](#)

Non-Core Data

Non-Core Data are variables that are **NOT** included in the standardized Core Data set.

To select the fields needed in the data access request, please first choose the data set by clicking Create Non Core Data Set in this section and then go to Section 11.1: Non-Core Data Checklists

Non-Core Data is available for request **as an addition** to the Core Data set.

For the majority of DARs, requesting access to Core Data **ONLY** may make the data access approval process quicker and may expedite data provision.

Data requests that include Non-Core Data will be subject to regular rather than expedited processes, both for application review and data provisioning.

PIs must provide additional detail and justification for requests to databases /data elements that:

a) are not included in the list of data sets/data elements within the PopData or HDPBC Core data offerings

b) data sets that are not internally managed by PopData (**"Externally Managed Data"**)

c) have been collected by the researcher (**"Researcher-collected Data"**)

PopData Managed Data

Non-Core-PopData Managed Data includes:

Data elements suppressed for privacy and excluded from Core Data (e.g. full date of birth from Cental Demographics File/Client Roster).

Additional data sets internally managed by PopData but currently not offered as Core (e.g. BC Perinatal Data Registry).

To access Non-Core PopData Managed Data you need to complete the relevant data checklist(s) and for data elements only you must also provide justification and rationale (where necessary) to explain why each data element is necessary to conduct your proposed research.

Please ensure that all data requested are consistent with your Research Project Overview, including all date ranges.

During review of the submitted DAR, PopData will review this information to ensure that it offers sufficient information to assist the relevant Data Stewards in their adjudication of risk associated with data release.

PopData may contact the PI by telephone or email to request additional clarification or justification

Section 11: Safe Data - Non-Core Data PopData Managed Checklists

11.1 Non-Core Data PopData Managed Checklists

Please select the fields that are required for the data access request.

Navigation
- Select a checklist's name in order to fill out the checklist. To see what has been previously selected in a checklist please click on the "+" symbol
- Click "Save" or "Cancel" to return to the main list of checklists
- Please note clicking "Prev", "Next", or "Save & Next" will take you out of the checklists section

+**Central Demographics File 2019-06-10** (46 fields selected)

From: 2009-04-01 to 2020-03-31
Cohorts Included:
Cohort 1: Women
Cohort 2: Infants

+**PharmaNet (January 1, 1996 onwards) 2018-01-11** (56 fields selected)

From: 2009-04-01 to 2020-03-31
Cohorts Included:
Cohort 1: Women
Cohort 2: Infants

+**Vital Statistics Births (January 1, 1986 onwards) 2016-02-22** (44 fields selected)

From: 2009-04-01 to 2020-03-31
Cohorts Included:
Cohort 1: Women
Cohort 2: Infants

+**Immigration, Refugees and Citizenship Canada (IRCC) (January 1, 1985 onwards) 2016-02-22** (33 fields selected)
From: 1985-04-01 to 2020-03-31
Cohorts Included:
Cohort 1: Women

+**BC Perinatal Data Registry (April 1, 2000 to March 31, 2021) 2016-02-22** (73 fields selected)
From: 2009-04-01 to 2020-03-31
Cohorts Included:
Cohort 1: Women
Cohort 2: Infants

Note to PI
Values marked by an asterisk (*) denote fields that will be replaced by a project-specific identification number prior to release.
Fields included in Core will have their checkbox greyed out or be denoted by (CORE).
Visit PopData's Metadata Central web page for more information on a field's availability.

Section 12: Safe Data - Non-Core Data HDPBC Managed

12.1 Data Sets - Special Data Requests

Identify the Special Data Requests that are required to conduct your research by clicking "Create Special Data Request":

Create Special Data Request

12.2 Data Sets: Historical Data Special Request

If required, identify the Historical Data Special Requests that are required to conduct your research by choosing from the options below:

DAD 1991-2011 data False

MSP 1991-2009 False

NACRS 2011-2014 False

PNet 1991-2016 False

Please describe why historical data is required for your research.

Section 13: Safe Data - External Data Sets

13.1 External Data Sets

ONLY complete this section if you are requesting Externally Managed Data, otherwise, proceed to the next section.

If you are requesting access to Externally Managed data, please upload the following:

• The application(s) and approval(s) (if available) for use of Externally Managed Data that will be linked to the requested data

• If applicable, the consent form used by the external Data Steward to collect the data

• A plain language description of all Externally Managed Data fields to be linked to the requested data and retained for analysis

Please identify the external data sets that are required to conduct your research by clicking "Create External Data Set"

Edit Delete

External Data Set	External dataset name redacted for privacy			**Cohorts**	Cohort 1: Women
				Justification	Redacted for privacy
Start Date	2009-04-01	**End Date**	2020-03-31		
Linkage	PHN, Name, Date of Birth	**Notes**			

Edit Delete

External Data Set	Vancouver Coastal Health Authority			**Cohorts**	Cohort 1: Women
Start Date	2009-04-01	**End Date**	2020-03-31	**Justification**	Identifiers for women receiving care in HA-funded clinics (i.e. Contact with perinatal public health programs, reproductive mental health programs, specialized services for im/migrant populations)
Linkage	PHN	**Notes**			
	[Note this dataset was not provided or used for this study, but was included in the DAR submission and included here for illustrative purposes]				

Create External Data Set

Definition
Externally Managed Data refers to data coming from other organizations, i.e. data that are not internally managed by PopData or HDPBC and are not collected by the researcher.
Private databases, such as those maintained by private laboratories, are considered external data.

Section 14: Safe Data - Researcher-collected Data

14.1 Researcher-collected Data

Identify the Researcher-collected data sets that are required to conduct your research by clicking the "Create Researcher-collected Data Set" button:

[Create Researcher-collected Data Set](#)
Successfully uploaded files:

Note to PI

Researcher-collected Data refers to data collected and governed by the Researcher e.g. survey data.

14.2 Consent Forms

Has informed consent been obtained?

Has informed consent been obtained?: False

If yes, upload a blank copy of the informed consent and any attachments provided to participants, as approved by the Research Ethics Board. Consent documents should explicitly identify proposed linkages and the data involved. Consent form guidelines are available [on the PopData website.](#)

If no, please provide rationale below. If other methods have been used to obtain consent to access this information (e.g. verbal consent), please describe as well.

Informed Consent Rationale:
Successfully uploaded files:

14.3 Consent Form Requirements

Complete and upload the MoH Consent Form Attestation form. (This will indicate that the process has been followed and ensure that consent form requirements have been met.)
Successfully uploaded files:

If applicable, enter the details of your consent form pre-approval below:

Note to PI

For more information and a copy of the MoH Consent Form Attestation, [visit the PopData Website](#).

Section 15: Safe Settings

Ensuring the Data Access Environment has Appropriate Safeguards and Limits Unauthorized Use

Ministry of Health Policy Reference: Access to Health Data for Research Policy, Section 9. See
https://www2.gov.bc.ca/assets/gov/health/conducting-health-research/data-access/access-to-health-data-for-research.pdf
 for more information.

15.1 Data Analysis Tools

Which set of tools are needed for your analysis

PopData Secure Research Environment (SRE) tools

- ArcGIS
- Epi Info
- JoinPoint
- GeoDa
- Gephi
- graphViz
- MS Visio
- MPlus
- MS Office
- MS Project
- Rtools
- Python
- R
- Rstudio
- Stat Transfer
- SAS
- SaTScan
- SPSS
- Stata
- WinBugs

Health Data Platform (HDPBC) Secure Environment (SE) tools:

- DataBricks
- R
- SAS
- MSOffice
- Rstudio
- SQL
- Python
- Rtools

Tools needed

All the tools needed for this project are in the PopData SRE

All the tools needed for this project are in the HDPBC SE Other - if you need additional tools or tools from both platforms, please explain below Other

Note to PI

The PI is required to access the project data and perform their analysis using a secure environment (SE) that is deemed acceptable by the Health Data Platform Council, the Data Stewardship Committee, and/or other Data Stewards depending on the data requested.

The two main secure environments are:

- the Secure Research Environment (SRE) maintained and operated by PopData
- the Health Data Platform Secure Environment (HDPBC SE)

Determining which secure environment (SE) is to be used will depend on the type of data needed for the project and the tools needed to complete the data analysis.

For more information on the PopData SRE, including a list of the software available, visit the my.popdata website.

15.2 Safe Settings

Will data be handled within either the PopData SRE or the HDPBC SE?
True

If No, identify which of the HDPBC Data Council approved SEs you propose to use:

Note to PI

Use of an alternative SE must be approved by the Health Data Platform Council, the Data Stewardship Committee, and/or other Data Stewards depending on the data requested.

In all but the most exceptional cases, use of an alternative secure environment **located outside of BC will not be approved**.

15.3 Archival Storage

Archival Storage for SRE

Data files for completed projects will be archived at Population Data BC Red Zone for up to 7 years, or until the Data Steward(s) request the destruction of the files. Researchers may extend the archive period by obtaining approval from the Data Steward(s).

Immediately following the archival expiry date, Population Data BC will destroy all copies of the data in its custody. Should extenuating circumstances require research results to be revisited, Researchers may request permission from Data Stewards to access archived data during the archive period. Requirements to access archived data include reactiving ethics and associated costs.

15.4 Physical Location and Security of Data (if not using PopData SRE or the HDPBC SE)

If you are not using the PopData SRE or HDPBC SE, please indicate the physical location(s) where research data will be used or accessed. Describe physical and network security measures in place by clicking the "Create Data Storage" button:
Create Data Storage

Section 16: Safe Output

16.1 Safe Output

What outputs do you intend to transfer out of the PopData SRE or HDPBC SE? Please be specific and outline your proposed output in detail (e.g. aggregated data tables) below.
Our outputs to be extracted from the PopData SRE will only include aggregated data, including tables (e.g., sample descriptives, bivariate statistical tests, regression modelling results), or graphs. No record-level data will be extracted and no information that would allow identifying individuals would be extracted.

Describe how small cell sizes will be managed to mitigate the risk of re-identifiability of the information disseminated below.
This study is considered minimal risk. All data will be de-identified, and only non-identifying fields will be retained for analysis. Only aggregate results will be reported. Cell size equal to or fewer than five individuals will not be reported.

Data will be stored in a Secure Research Environment developed by Population Data BC. This a central server that is physically located in premises that are access controlled. Access to these data requires two factor authentication through the Yubikey® system.

We will archive the electronic data for 7 years in BC and then the files will be permanently deleted off of the computers according to PopData guidelines. The PI will be responsible for the data at all times, including retention and destruction of the data.

Describe for what reasons output is required, what the intention of using the data will be, and how it will be published below.
The output will be used by the study team to discuss interpretation of results, and create figures and tables for knowledge dissemination. Descriptive tables will also help the study team plan for further analyses and future studies. Results will be published in academic journals, presented at academic conferences, and other knowledge translation materials to study partners.

Note to PI

PIs and their research teams are required to conduct project analyses within the PopData Secure Research Environment (SRE) or Health Data Platform (HDPBC) Secure Environment (SE).

Only statistical products and non-data will be permitted as outputs from the PopData SRE or Health Data HDPBC SE.

Statistical products are, generally, information dissemination products that describe, estimate, forecast, or analyze the characteristics of groups, customarily without identifying the persons, organizations, or individual data observations that comprise such groups (e.g. aggregated data tables, regression results, etc.).

All outputs will be reviewed.

Section 17: File Uploads Summary

Redacted for privacy

Project Number:

Project Title: DEMO: Evaluating Inequities in Refugee and Immigrant Women's Sexual Health Access (IRIS)

___

<u>**Central Demographics File**</u>

Notes:

Extract Period: 2009-04-01 to 2020-03-31
Checklist Version: 2019-06-10

Cohorts Selected:
- Cohort 1: Women
- Cohort 2: Infants

Fields Selected

Demographic Fields:
Year of birth
Month of birth
Day of birth: **To support linkage to external data**
Born in period flag
Year of death
Month of death
Died in period flag
Death date source
Sex
PCCFVER

Geographic Fields:
BC resident flag
Neighbourhood income (SES) quintile / decile
Neighbourhood income per single person equivalent
Health authority (HA)
Health service delivery area (HSDA)
Local health area (LHA)
Local health area (LHA) urban/rural classifications
Community health service area (CHSA) urban/rural classifications
Economic region (ER)
Census division (CD)
Census subdivision (CSD)
Federal electoral district (FED)
Census metropolitan area / census agglomeration area(CMA/CA)
First three characters of the postal code (forward sortation area)
Community Size Code
Community size and Metropolitan Influence Zone (MIZ)
Immigrant Tercile
Population centre and rural area classification
Population centre/rural area type

Registration Fields:
MSP start date

MSP end date
Start day registered in year (point in the year registration started)
Total days registered in year
Days eligible for MSP coverage
MSP eligible label
Non-registered BC infant died in hospital flag
Non-registered former BC client receiving service within a year

Grouping Economic Family Fields:
MSP contract number *
Account subscriber flag
Account role

Premium Coverage or Subsidy Fields:
Coverage start date
Coverage end date
MSP premium assistance code
Supplemental MSP benefits flag
Account holder not covered flag
Account holder only covered flag

PharmaNet (January 1, 1996 onwards)

Notes:

Extract Period: 2009-04-01 to 2020-03-31
Checklist Version: 2018-01-11

Cohorts Selected:
- Cohort 2: Infants
- Cohort 1: Women

Fields Selected

Patient Information:
PHN (Replaced by project-specific patient id)
Gender
Date of birth (YYYYMM)
Age (calculated as of Jan 1 for each year of data)
Patient health authority (HA)
Patient health services delivery area (HSDA)
Patient local health area (LHA)
Patient forward sortation area (FSA)

Pharmacy Information:
Pharmacy identification number* (Replaced by project-specific id)
Pharmacy health authority (HA)
Pharmacy local health area (LHA)
Pharmacy health services delivery area (HSDA)
Pharmacy forward sortation area

Practitioner Information:
Practitioner MSP billing number* (Replaced by study id)
Practitioner identification number* (Replaced by study id)
Practitioner identification reference (code identifying the governing body from which practitioner receives licence)

Practitioner health authority (HA)
Practitioner health services delivery area (HSDA)
Practitioner local health area (LHA)
Practitioner forward sortation area
Practitioner type (e.g. physician, dentist, nurse practitioner, podiatrist, midwife, veterinarian, pharmacist)
Recent MSP billing practitioner specialty
Practitioner specialty flag (Y/N)
Practitioner specialty type description (e.g., cardiology, neurology, paediatrics, urology)

Records Requested For (Choose one of the following):
All health products (drugs and non-medication records) are requested: In addition to using PharmaNet data to track prescriptions dispensed, we use information on coverage under BC Fair Pharmacare as a proxy for low-income in some analysis (among people who have one or more prescriptions). For this reason we need as complete data on products dispensed as possible.

Drug Information:
DINPIN (drug information number as per drug list provided)
Canadian brand name
Chemical/generic name
GCN sequence number (random number assigned by Health Canada)
Drug strength
Drug form units (e.g., ml, grams, each)
Dosage form code and description (e.g., aerosol, tablet, capsule, liquid)
AHFS code (American Hospical Formulary code assigned and maintained by Health Canada): Obtaining AHFS codes provides an alternative approach to confirm classification of contraceptives (AHFS 32:00) in addition to DINPINs.
PharmaCare Theraclas (PharmaCare therapeutic class assigned and maintained by PharmaCare)

Medication/Dispensing Information:
Date of service (date dispensed)
Quantity dispensed
Days supply (estimate of number of days of treatment)
Directions for use (80 character free format text field)

Claims Information:
Account code and description
Quantity accepted (pro-rated based on days supply accepted by PharmaCare)
Days supply accepted (submitted amount may be reduced if greater than Special Authority, plan or DINPIN amount)
Drug cost claimed by pharmacist
Drug cost accepted by pharmacist
Drug cost paid (submitted drug cost amount paid by PharmaCare)
Professional fee (dispensing fee claimed by pharmacist)
Professional fee accepted (dispensing fee accepted by PharmaCare)
Professional fee paid (dispensing fee amount paid by PharmaCare)
Special services fee (total amount claimed by pharmacist for special service e.g., consulted prescriber, action Rx issue)
Special services fee paid (PharmaCare paid to pharmacy for special service)
Copay to collect (patient paid amount per claim)
Total amount paid (PharmaCare paid for drug cost and prof. fee)
Special authority flag Y/N
Special authority type (e.g., non-benefit, low cost alternative (LCA) or reference drug program; RDP)
Accumulated expenditure amount (first included in 2000)
Claim status
Intervention type code

Vital Statistics Births (January 1, 1986 onwards)

Notes:

Extract Period: 2009-04-01 to 2020-03-31
Checklist Version: 2016-02-22

Cohorts Selected:
- Cohort 1: Women
- Cohort 2: Infants

Fields Selected

Immigration, Refugees and Citizenship Canada (IRCC) (January 1, 1985 onwards)

Notes:

Extract Period: 1985-04-01 to 2020-03-31
Checklist Version: 2016-02-22

Cohorts Selected:
- Cohort 1: Women

Fields Selected
Year of Birth
Month of Birth
Gender
Age Grouping
Country of Birth
Marital and Family Status
Family Status
Immigrant Category
Immigration Class
Immigration Special Programs
Year of arrival
Month of arrival
Day of arrival: BC has a 3-month waiting period for MSP eligibility. To identify with precision the date on which immigrants are eligible for MSP we need the day of arrival/landing (depending on immigration class).
Year of landing (as a Permanent Resident)
Month of landing (as a Permanent Resident)
Day of landing (as a Permanent Resident): BC has a 3-month waiting period for MSP eligibility. To identify with precision the date on which immigrants are eligible for MSP we need the day of arrival/landing (depending on immigration class).
City of Intended Destination in Canada
CMA/CA of Intended Destination in Canada
Province of Intended Destination in Canada
Region of Intended Destination in Canada
Country of Citizenship
Country of Last Permanent Residence
Source Area (CIC World Regions)
Educational Qualification
Level of Education
Years of Schooling
Intended National Occupation Codes (NOC7)
Intended National Occupation Codes (NOC4)
Intended National Occupation Codes (NOC3)
Intended National Occupation Codes (NOC2)
Skill Level (based on National Occupational Classification)
Mother Tongue

Official Language

BC Perinatal Data Registry (April 1, 2000 to March 31, 2021)

Notes:

Extract Period: 2009-04-01 to 2020-03-31
Checklist Version: 2016-02-22

Cohorts Selected:
- Cohort 1: Women
- Cohort 2: Infants

Fields Selected

Linked/Unlinked Records:
Linked mother/baby records
All mother/baby records even if unlinked

Live/Stillbirths:
Live births and stillbirths: .

Late termination of pregnancy:
Records involving TAs should be included in the cohort(s) but do not need to be identified; TA records may be abstracted as either stillbirths or neonatal deaths: **Abortion is a critical component of comprehensive Sexual and Reproductive Health Care, which is the focus of this project.**

BCPDR Mother Delivery:

Episode of Care Information:
Baby sequence
Number of births
Admission date - Year
Admission date - Month
Admission date - Day: **This is required to cross-reference with DAD and remove duplicate admissions.**
Discharge date - Year
Discharge date - Month
Discharge date - Day: **This is required to cross-reference with DAD and remove duplicate admissions.**
Fiscal year
Total length of stay
Antepartum length of stay
Postpartum length of stay

Past Obstetric History:
Gravida
Parity
Number of previous term deliveries
Number of previous preterm deliveries
Number of living children
Number of previous spontaneous abortions: .
Number of previous cesarean sections
Number of previous vaginal deliveries
History of mental illness - Any: .
History of mental illness - Anxiety: .
History of mental illness - Depression: .

History of mental illness - Bipolar: .
History of mental illness - Postpartum depression (past pregnancy): .
History of mental illness - Other: ..
History of mental illness - Unknown: ..

Current Pregnancy:
First contact with physician/midwife date - Year
First contact with physician/midwife date - Month
First contact with physician/midwife date - Day: We will examine gestational age at first contact with provider as a measure of health care access.
Number of antenatal visits
Total antenatal hospital admissions (prior to delivery admission)
Lone Parent
Gestational age at first ultrasound - completed weeks
Gestational age at first ultrasound - days
Gestational age at delivery (by LNMP)
Gestational age at delivery (by first ultrasound date)
Gestational age at delivery (by algorithm)

Labour and Delivery:
Baby delivery date - Year
Baby delivery date - Month
Baby delivery date - Day: We will examine postpartum care within 6 weeks of delivery as a measure of access. We need to know the delivery date to calculate this.
Mode of delivery
Mode of delivery - detailed
Caesarean section type
Cesarean section incision
Vaginal birth after cesarean (VBAC) eligible
Vaginal birth after cesarean (VBAC) attempted
Vaginal birth after cesarean (VBAC) successful
Deliverer provider type
Baby position in labour
Baby position at delivery

Other Episode of Care Information:
Health care provider(s) service
Health care provider(s) type
Midwife involved in maternal or neonatal care
Midwife cases only - Intended place of delivery
Midwife cases only - Actual place of delivery

BCPDR Mother Postpartum Transfer/Readmission:

BCPDR Newborn Admission:

Episode of Care Information:
Baby Sequence
Number of births

Current Admission Information:
Place of birth: .
Gestational age at birth by newborn exam
Gestational age at birth from maternal chart
Gestational age at birth, in completed weeks - calculated by algorithm
Newborn feeding
Breast feeding initiation
Health care provider(s) service

Health care provider(s) type

Birth Information:
Apgar 1 minute
Apgar 5 minutes
Apgar 10 minutes

BCPDR Baby Transfer/Readmission: