

QI Power Hour with
Malori Keller

Unlocking Research Potential with Healthcare Data





Land Acknowledgement



Let's chat

Please share your questions, comments, and ideas in the chat during today's session.

| Past sessions

Embedding value in care: A roadmap for data-driven and clinically-led transformation

Speaker: Ani Galstyan

Crisis meets connection: How Saskatchewan reinvented mental health supports

Speaker: Michael Seiferling

saskhealthquality.ca/training-webinars/qi-power-hour-webinars



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| Introducing



Malori Keller

Director

Health Research Data Platform – SK

Health Research Data Platform – Saskatchewan

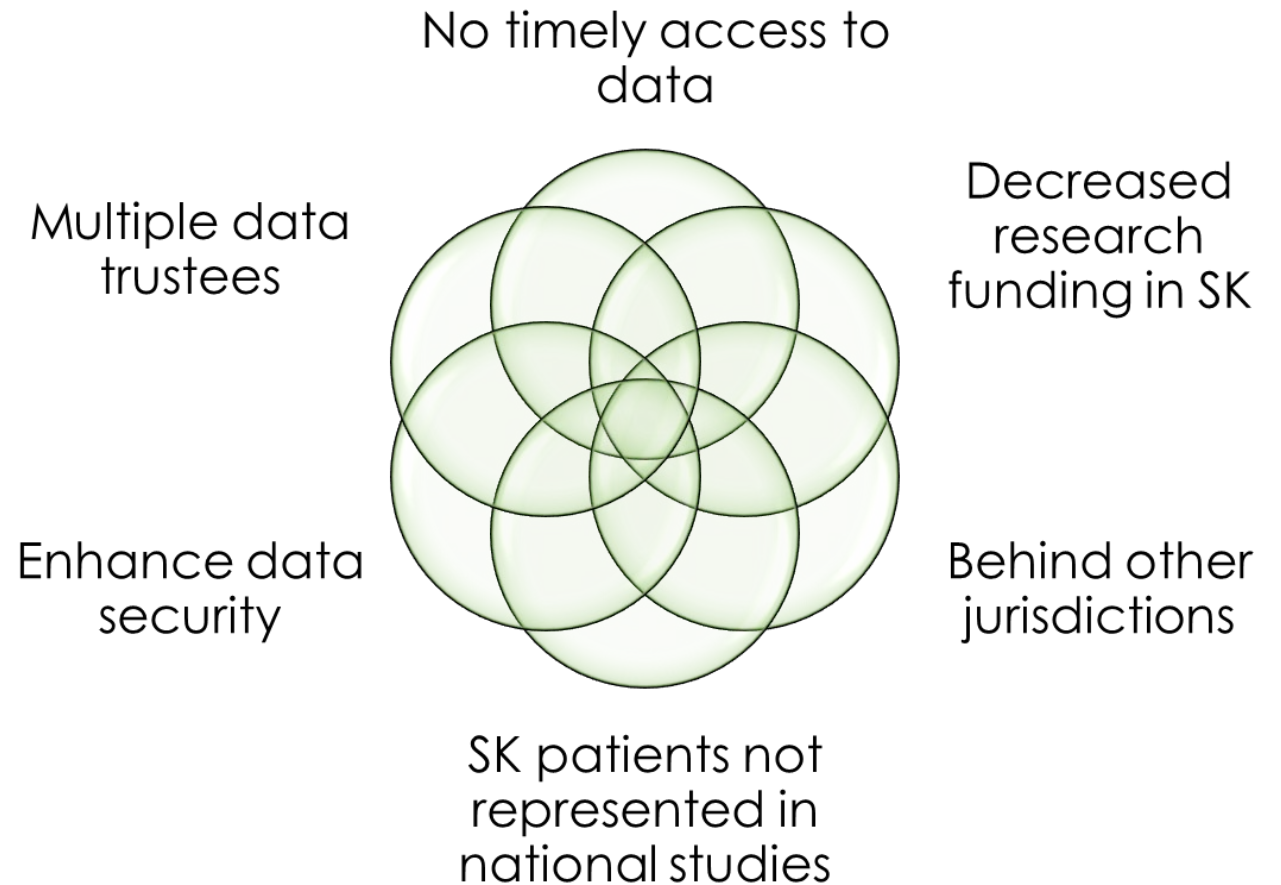


HRDP-SK

February 2026

Why was HRDP-SK Created?

- Saskatchewan health data from multiple sources and held by multiple trustees
- Access to data fragmented
- Individual data sharing agreements time-consuming for each trustee organization



Data Trustees of the MHDSA

- Signed August 1, 2022
- A single data sharing agreement between multiple partners to streamline data access for secondary data purposes.



- eHealth designated as the Information Management Service Provider (IMSP)
- HRDP-SK is the first user of the MHDSA

Health Research Data Platform – Saskatchewan

HRDP-SK

The **Master Health Data Sharing Agreement** (MHDSA) enabled the creation of the Health Research Data Platform - Saskatchewan (HRDP-SK)

- ▶ HRDP-SK is the **first platform of its kind** in the province.
- ▶ HRDP-SK **integrates health data** into a **secure data environment** and provides data access to researchers in a **privacy-protective manner**.
- ▶ **Standardized process** for researchers to request data.
- ▶ Users access data in a **virtual environment** from **anywhere in Canada**.

What is HRDP-SK?



Why is Data Driven Research Important?

Scale and Representation

Population-based

Representative sample

Linkable

Real-world evidence

Enhances clinical and lab data

Real-life data

Cost- and time-effective

Data collected by the health system

Follow people over time

Privacy

Privacy built into access process

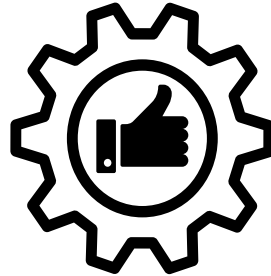
Not intrusive

HRDP-SK Benefits



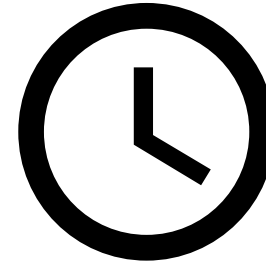
Secure

- ✓ Secure virtual research environment
- ✓ Privacy training
- ✓ Five Safes model for data security



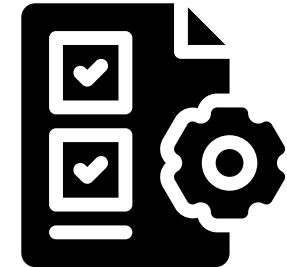
Consistent

- ✓ Data aligned and linkable
- ✓ Standardized data dictionaries
- ✓ Transparent, reliable process for data access



Efficient

- ✓ Accessible from anywhere in Canada
- ✓ Project approval process reduced to ~3 months



Systematic

- ✓ Reduces workload for one-off data sharing agreements
- ✓ Able to support more users
- ✓ Alignment with other provinces and territories

Privacy & Protections

Data is de-identified

- ✓ Masked Health Services Number
- ✓ No names
- ✓ No birth dates
- ✓ Less than 6 people, they can't use the data
- ✓ Geographic considerations

Limited user access

- ✓ Privacy training
- ✓ Confidentiality agreement
- ✓ Conflict of Interest Declaration
- ✓ Criminal Record Check

Secure Research Environment

- ✓ No printing, saving
- ✓ Must have permission to remove data

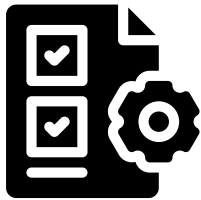
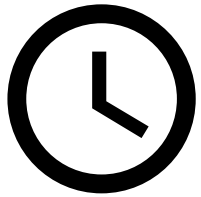
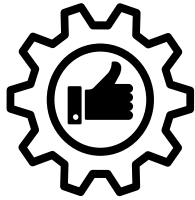


Extra Protections for First Nations & Métis Data

- We **do not** allow researchers to do research on indigenous people without consent
 - They must be working with community, or
 - Have individual consent from each individual
- We **do not provide** the First Nations Identifier collected on Health Services Card
- We **do not** allow First Nations people/ reserves to be identified by postal code

- ✓ We will support First Nations & Métis communities to partner with researchers to use HRDP-SK to understand and learn
- ✓ We **do require** researchers to demonstrate that they are collaborating and work First Nations and Métis Communities, using the IRLET
- ✓ We **do require** research team members to have completed training including BRRIC
- ✓ We **do promote** and seek to advance OCAP/ OCAS principles and data sovereignty.

What does this mean for the province?



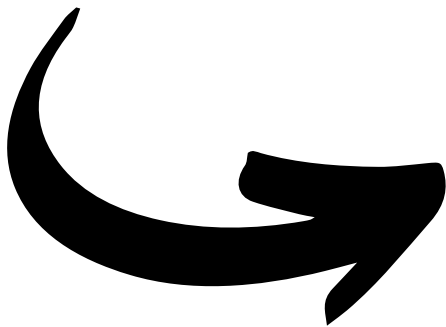
Secure, consistent, systematic and efficient access to **local data** by **local investigators** enables:

Provision of safe, effective, patient-centred, and equitable **health care**

An increase in **research funding** for health projects in SK



Better **recruitment** and **retention** of clinicians in the province



Datasets in HRDP-SK

Ministry of Health

Discharge Abstract Database

National Ambulatory Care Registration System

Medical Service Branch: Physician Billing Claims

Prescription Drug Plan



eHealth

Person Health Registry System

Saskatchewan Health Authority

Mental Health & Addictions Information System

Long Term Care-Facilities (expected 2026)

Saskatchewan Cancer Agency

Saskatchewan Cancer Registry dataset

◆ Available now

◆ In progress

Linking external data

Pending approvals, projects can link HRDP-SK datasets to:

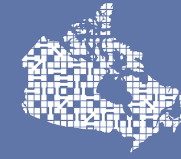
- Patient-level survey or supplemental data
- Patient-level cohorts
- Supplemental data (e.g., socio-economic, geographical)
- First Nations, Métis, or Inuit data*
- Data from other organizations/departments

To be linkable, data must:

- Contain HSN
- Demonstrate appropriate consent
- Be agreed upon by the trustee
- Projects undergo additional review steps

*Additional protections apply to the usage of Indigenous data

Harnessing National data



Réseau de recherche sur les données de santé du Canada
Health Data Research Network Canada

HDRN Canada is a pan-Canadian network of member organizations that hold linkable health and health-related data.

Through HDRN Canada's Data Access Support Hub (**DASH**), researchers can **access data in multiple regions** with support for coordinated concepts and analysis.



Innovative Resources

- **Data Assets Inventory:** hdrn.ca/en/dash/inventory/
- **Algorithm Inventory:** hdrn.ca/en/dash/algorithms/
- **Pan-Canadian Privacy Legislation Tool:**
hdrn.ca/en/dash/resources/privacy/privacy-legislation/
- **Ethics & study design** considerations: hdrn.ca/en/dash/resources/
- **Web portal** for centralized forms & tools: dash.hdrn.ca/en/accounts/login/



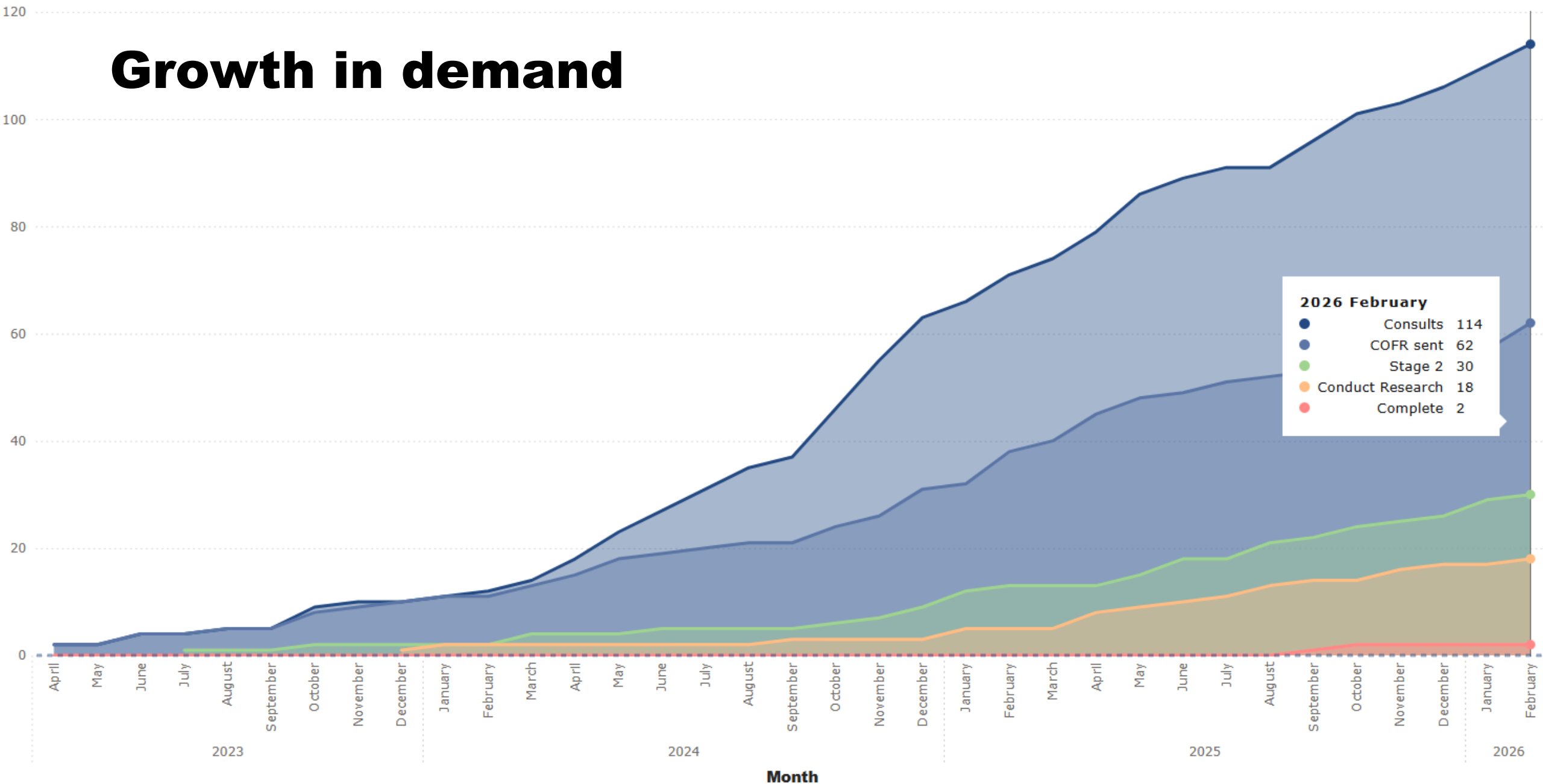
DASH

DASH is a service for researchers conducting multi-regional research

- Service provided by a coordination team of representatives from 13 data centres across Canada
- Facilitates data access in provincial/territorial & pan-Canadian data centres & helps navigate local requirements
- Data are available & accessible through the data centres

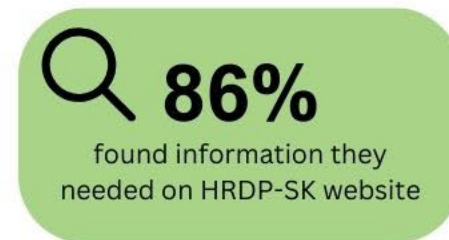
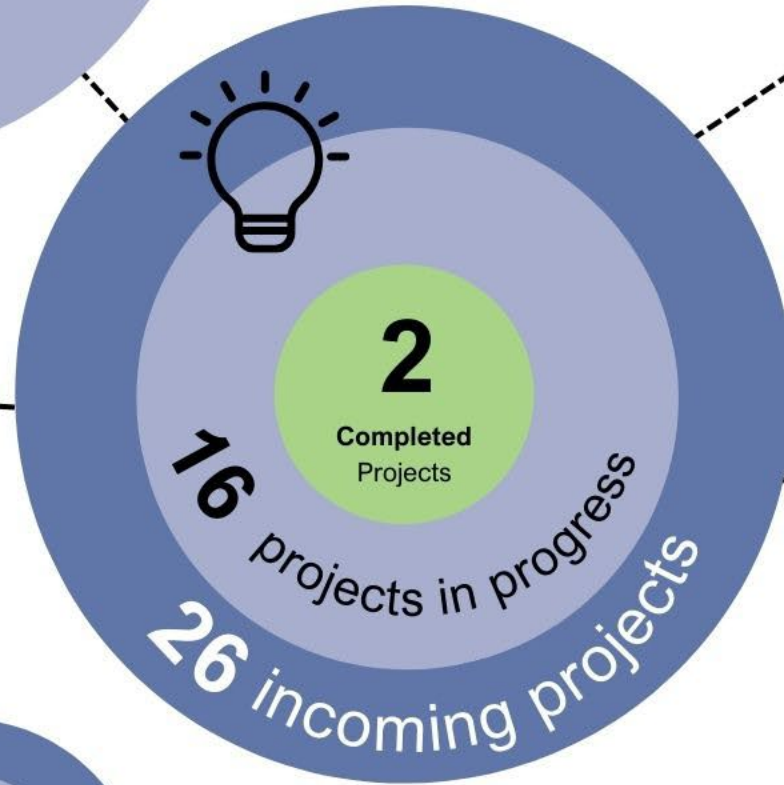
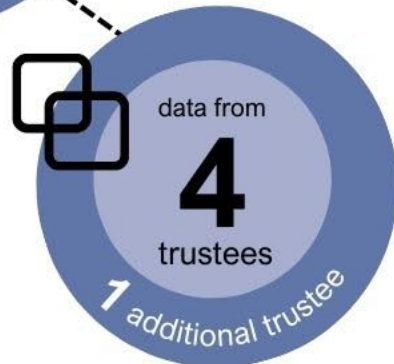
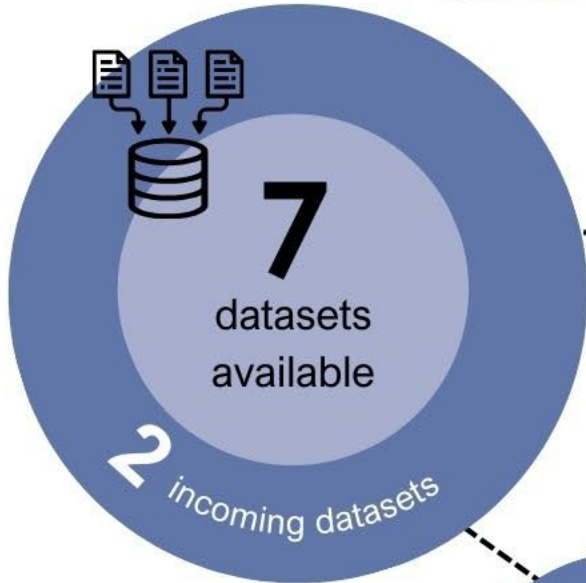


Growth in demand



Impact

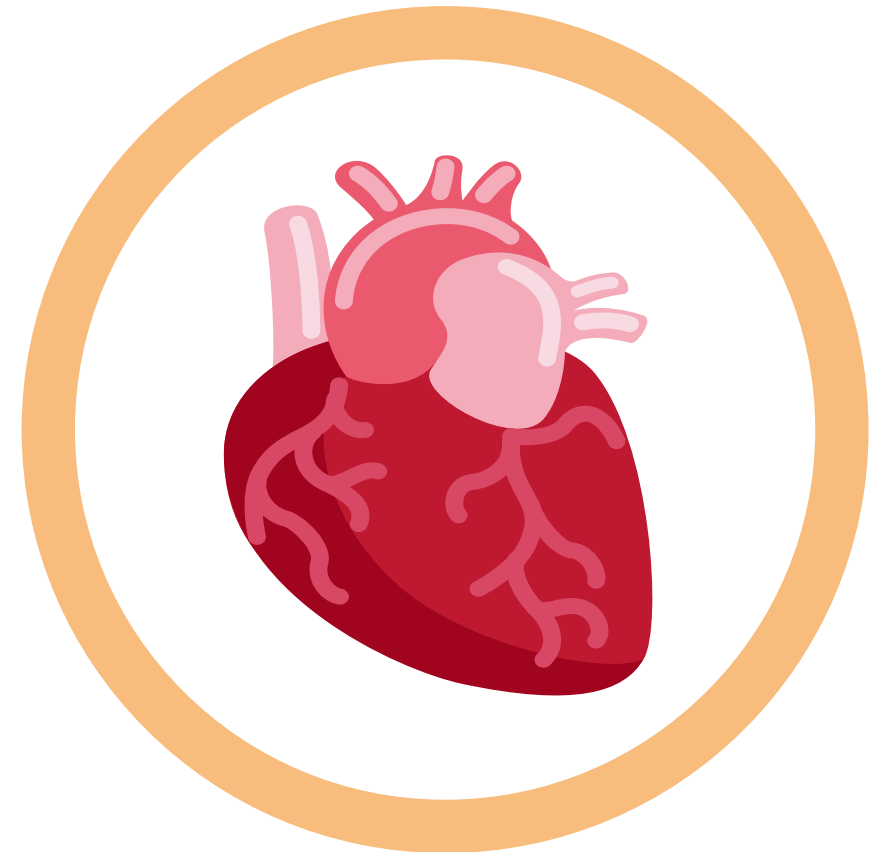
114
research
consults



HDRP-SK in Action: Active research

Optimal Dosage and Duration of Venous Thromboembolism (VTE) Prophylaxis Post-Abdominal Aortic Aneurysm (AAA) Repair in Saskatchewan to Reduce VTE Incidence in 30-day Post-Operative Period

Dr. David Kopriva
Vascular Surgery



HDRP-SK in Action: Active research

Head and neck injuries in
domestic violence victims

Dr. Liran Levin
Dentistry



HDRP-SK in Action: Active research

Pan-Canadian Perinatal Use Surveillance System

Dr. Hilary Brown
Physiotherapy

Dr. Andi Camden
Physiotherapy

Dr. Astrid Guttman
Physiotherapy



Réseau de recherche sur les données de santé du Canada
Health Data Research Network Canada

HDRP-SK in Action: Active research

Utilization of Virtual Health Care in Saskatchewan: A Strategic Framework and Roadmap for Implementation

Dr. Scott Adams
Radiology

Dr. Ivar Mendez
Anatomy



HDRP-SK in Action: Active research

An Interprofessional Model for Chronic Pain Management

Dr. Derek Jorgenson
Pharmacy



Video
Project Results



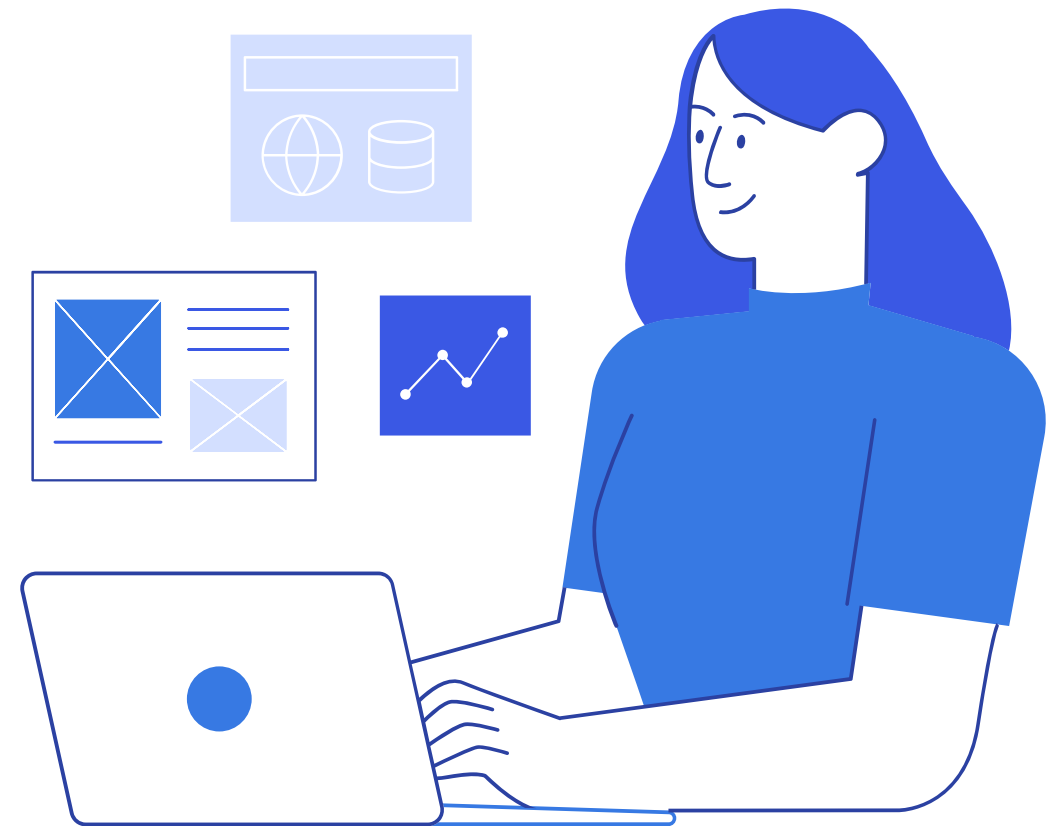
Research Support

Is HRDP-SK data the right fit for your research question?

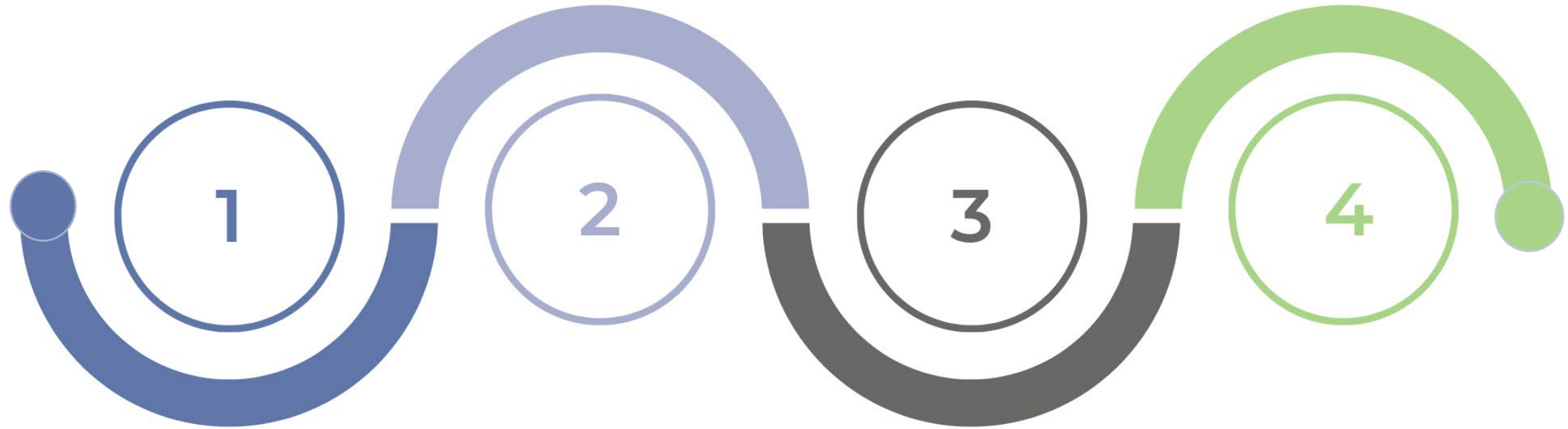
- ✓ Our Data Access team and Researchers will help you **understand the data** and **refine your research questions**

Are population data questions new to you and your team?

- ✓ Researchers and Analyst support is available to **complete analysis** in the HRDP-SK environment



Data Access Request Process



Feasibility & Resource Check

Initial review of project, letter provided for grant applications.

Assessment & Authorization

Identify data needed, create analysis plan and variable list. Ethics and Trustee Approval.

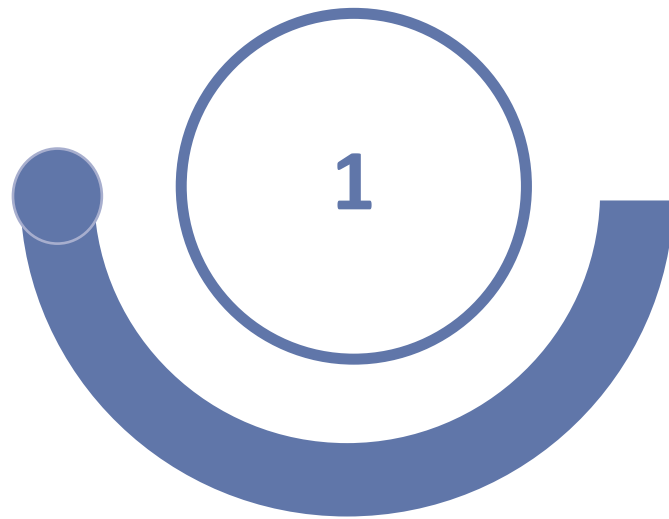
Onboard & Account Request

Users complete Privacy training. HRDP-SK assesses safety of user and approves account creation.

Access & Analyze Data

Data is linked and extracted based on the approved variable list and analysis plan. Data is put in secure environment & researcher conducts analysis.

Data Access: Stage 1



Feasibility & Resource Check

Initial review of project, letter provided for grant applications.

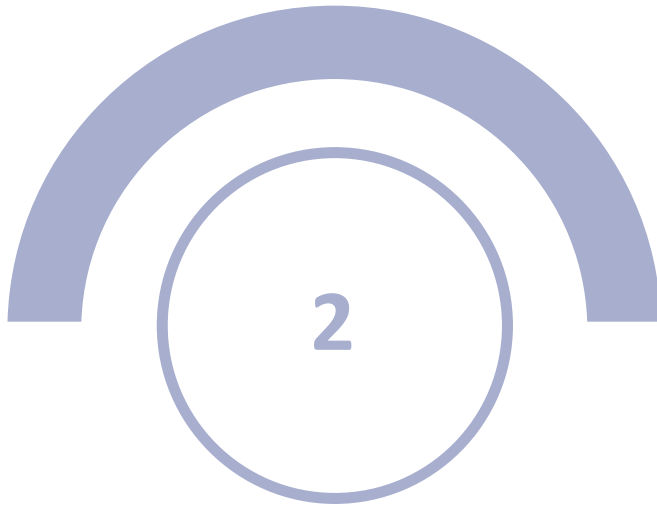
Researcher provides:

- ✓ Stage 1 form
 - Layperson project summary
 - Funding information (if applicable)
 - Request for HRDP-SK **analytical support** (if applicable)
- ✓ Principal investigator CV
- ✓ Grant/funding information (if applicable)
- ✓ Patient Oriented Research Level of Engagement Tool

To determine:

- Databases needed for project
- Availability of HRDP-SK resources
 - Analytical support
 - Database availability
 - Viability within grant deadlines

Data Access: Stage 2



Assessment & Authorization

Identify data needed, create analysis plan and variable list. Ethics and Trustee Approval.

Researcher Drafts:

- ✓ Assessment & Authorization form
 - Detailed project plan
- ✓ List of all variables for project (Appendix A)
- ✓ Project-Specific Data Integration Request form (if required)

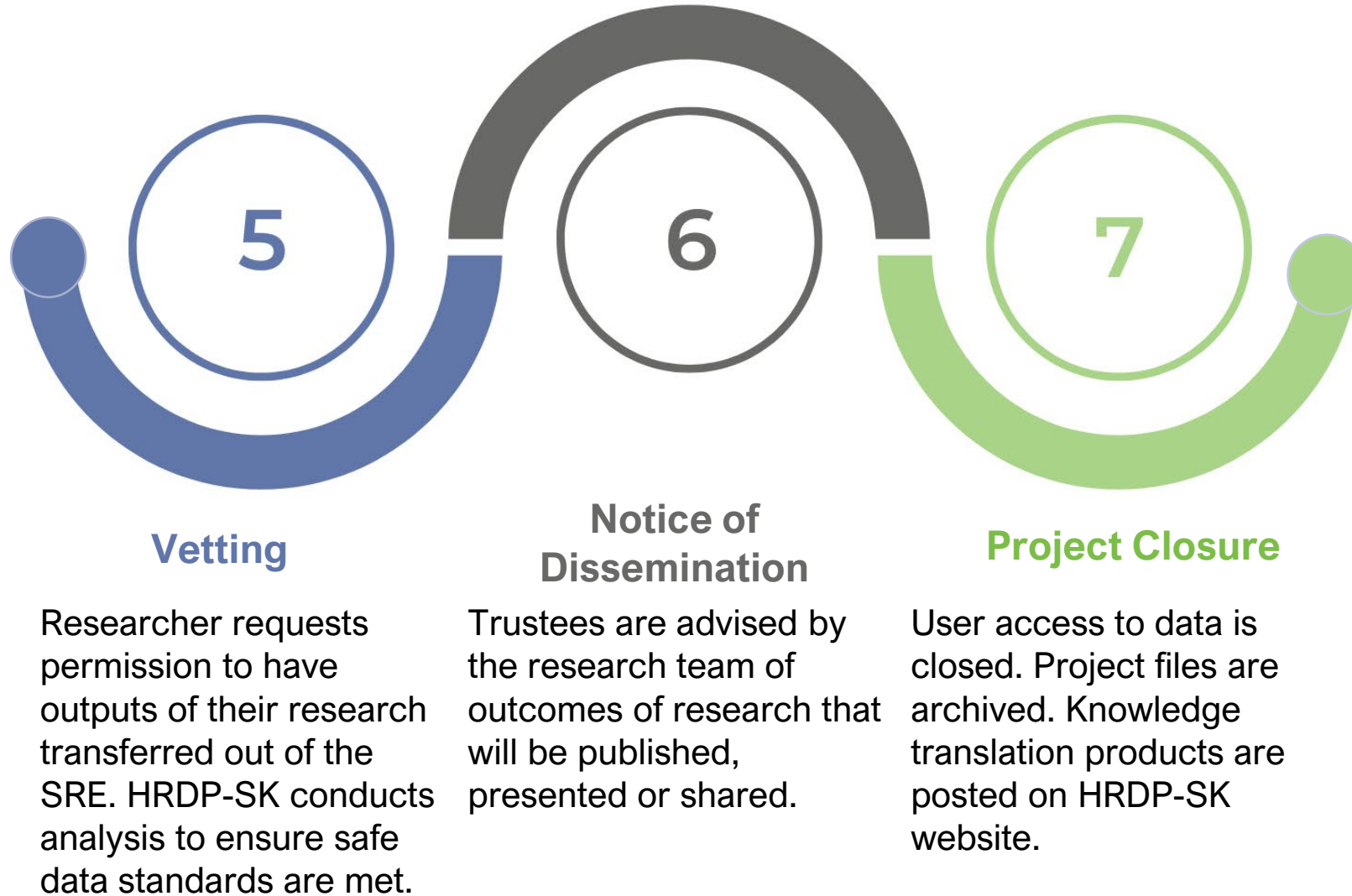
HRDP-SK Support & Coaching

- Data extraction plan
- Analysis plan
- Ethics application
- Finalize documents

Data trustee review

- Projects undergo conditional and final review

Data Access Request Process



Common challenges for researchers accessing data

- Applying for data is a detail-oriented process and it takes time
- Defining the research cohort carefully and correctly
- Selecting the relevant data and variables
- Skills with analytical tools available (SAS; R available April 2026)

We can help!

HRDP-SK Coaching

HRDP-SK staff provides support and coaching throughout the application and analytical process.

Data User Community of Practice

Researchers engaged in all stages of HRDP-SK projects collaborate and share best practices

HRDP-SK

is funded by

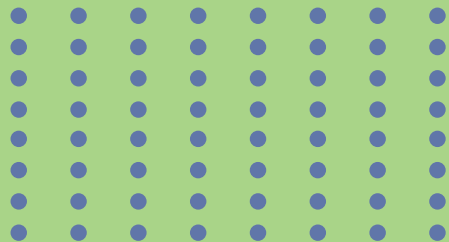


Réseau de recherche sur les données de santé du Canada
Health Data Research Network Canada



SCPOR Saskatchewan Centre for
Patient-Oriented Research

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HDRN Canada Member Organizations



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Present

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