



Maximizing Impact through Administrative Data Sharing

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POWERED
BY
DATA

Briefing Document

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INTRODUCTION

Purpose of this document

This document serves as an introductory resource on administrative data-use in the social sector. We begin by clarifying what we mean by “administrative data sharing”—defining key terms and presenting two case studies of administrative data being leveraged for public benefit. We then outline the benefits, risks, and conditions for success of increased administrative data sharing in the Canadian context.

This document is part of Powered by Data's initiative to develop an **administrative data policy coalition**, which aims to work with a diverse set of stakeholders across civil society to co-create a Canadian policy agenda around administrative data-sharing for social impact. We have written this as a primer for potential partners, collaborators, and stakeholders.

About the administrative data policy coalition

In February 2017, Powered by Data hosted *Transform the Sector*, Canada's first national conference on the digital data needs of the social sector. Building on the insights and relationships that emerged from that conference, we identified administrative data sharing as a high-potential intervention that is mostly absent from Canadian conversations about using data for social impact.

In Canada, there has been no coordinated policy agenda for increasing social impact through administrative data use. Since early 2018, Powered by Data has been convening key stakeholders (funders, service providers, and advocacy groups), initiating a multi-stakeholder coalition to co-create a policy agenda for increased administrative data-sharing in Canada.

Our overall engagement process is outlined in the right-hand column of this page.



POWERED BY DATA'S POLICY CONSULTATION AND COALITION- BUILDING PROCESS

CONSULTATION (JAN-APRIL 2018)

Consultation events with 50+ participating stakeholder groups to assess relevance and feasibility of this initiative from multiple perspectives: Funders, Service Providers, Beneficiary Advocates

Examples of participating groups: Philanthropic Foundations Canada, the Ontario Nonprofit Network, Colour of Poverty - Colour of Change

RESEARCH & COALITION- BUILDING (MAY - JUNE 2018)

Identifying and evaluating use cases for administrative data, and developing a shared coalition governance framework

COALITION LAUNCH (MID-2019)

Confirming membership, roles, and governance, and articulating shared principles

PLANNING & AGENDA- SETTING (2019 - 2020)

Defining a shared policy agenda around ethical and effective administrative data sharing for the social sector

IMPLEMENTATION (2020)

Pursue policy advocacy and/or launch pilot projects to demonstrate potential impact of data sharing use cases

Goals of the administrative data policy coalition

DEVELOPING A POLICY AGENDA AROUND ADMINISTRATIVE DATA-SHARING

The ultimate goal of the coalition is to develop a shared policy agenda around administrative data sharing in Canada - what data should be shared, with whom, and under what conditions.

POLICY RESEARCH AND ANALYSIS

There are current policies in place that prohibit the linking of administrative data across government databases in Canada—and different ministries and organizations are currently governed by different privacy legislation. Because of the complexity of data-sharing in the Canadian context, significant research is required to inform an ethical and effective policy agenda around increased administrative data use.

AN INCLUSIVE PROCESS: CIVIL SOCIETY COALITION-BUILDING AND ONGOING CONSULTATION

Digital infrastructure planning often excludes communities at the margins who carry the greatest risks posed by these projects. Powered by Data is implementing a coalition-building process that centres the interests of civil society, with equitable participation of funders, service providers, and grassroots advocacy groups.

What is Administrative Data?

Government agencies and social services collect information about the people they serve. This administrative data is typically used for operational, rather than for research purposes. Examples of administrative data could include: physician visit records, high school completion records, birth and death records, and tax returns.

Administrative Data Sharing

Administrative data from different ministries—or even different services within the same ministry—are often collected, stored, and accessed separately. **Data sharing** is the practice of allowing more than one agency or organization to access and use administrative data for new purposes. Sharing could occur between ministries within government, as well as between government agencies and nonprofit partners. On the following page, the Justice Data Lab case study provides an example of data sharing between the UK Department of Justice and nonprofit agencies working to reduce recidivism.

A more specific form of data sharing is **data linking**: the joining of previously discrete personal records that results in a richer dataset; for instance, matching an individual's health records with their education records. On page 4 of this document, the Child and Youth Data Lab case study gives an example of data linking across four different government ministries.

Sharing and linking administrative data is very different from publishing open data. Administrative records generally include highly sensitive person-level data, which cannot be released to the general public.

Opportunities and Risks of Administrative Data Sharing

Sharing and linking administrative data can provide rich information about communities and the services they use—creating opportunities for impact evaluation, integrated service delivery, social research, and evidence-based advocacy. Administrative data sharing is already being leveraged for these purposes in limited ways, but the untapped potential is enormous. Indeed, a recent federal Commission on Evidence-based Policymaking in the USA recommended a review of relevant laws to create a more enabling policy environment for administrative data sharing.

In the Canadian context, there has been no coordinated policy agenda for increasing social impact through administrative data use. The use cases for administrative data sharing vary widely, and each presents a different set of opportunities and risks. In exploring the possibility of such an agenda, we need to explore what different use cases could look like, and address important questions around privacy, security, autonomy and consent—and draw on best practices for mitigating these risks.



CASE STUDY 1 ON DATA SHARING

JUSTICE DATA LAB

Understanding recidivism by accessing prison data

Organizations that work with past offenders to reduce recidivism often struggle to know whether their clients went back to jail or not after leaving their programs. What if they were able to know how many of their clients were re-incarcerated? The Justice Data Lab—a service run by the Ministry of Justice in the UK—helps access and analyze data about the recidivism of these organizations' service users.

These findings allow organizations to better understand their user's outcomes, which the non-profit can use to develop a richer understanding of the program's potential impact on reducing reoffending.

HOW IT WORKS



STEP 1

Client organization requests an analysis of their impact on re-offending.

Organization must send to the Justice Data Lab: a list of their service users, their date of birth and intervention start & end dates.



STEP 2

The lab searches for service user data in the Police National Computer database and returns aggregate statistics on re-offending rates.

E.g. "27% of those receiving intervention committed a proven reoffense in a one year period"



STEP 3

Reoffending rates of a matched control group are also provided.

This comparison gives an idea of whether the intervention made an *impact* on reoffending.



STEP 4

Aggregate data and key analyses are summarized in a report to the organization.

The report contains information around the organization's potential impact on: one-year reoffending rates, one-year reoffending frequencies, times to first re-offence.



CASE STUDY 2 ON DATA LINKING

CHILD AND YOUTH DATA LABORATORY

Research to inform health policy strategies in Alberta

How could data on health service usage and well-being indicators inform prevention strategies and resource allocation to address public health concerns?

In Alberta, the Child and Youth Data Lab is linking data across the Health, Education, Human Services, and Justice ministries to study Fetal Alcohol Spectrum Disorder (FASD) among young Albertans. Their findings, based on linking this data together for the first time, can help inform public policy and service delivery, with the ultimate goal of improving the well-being of individuals with FASD.

HOW IT WORKS



A LONGITUDINAL APPROACH

Research uses administrative data on Albertan children over a five year period

The data remains anonymous and the Child and Youth Data Laboratory ensures that privacy is protected.



CLIENT RECORDS LINKED ACROSS MINISTRIES

- **Ministry of Health:** physician visit data, hospitalization data
- **Ministry of Education:** primary and secondary education achievement
- **Ministry of Human Services:** income support data, Child Support Services dependents data, Persons with Developmental Disabilities data
- **Ministry of Justice and Solicitor General:** corrections data, offence data



RESEARCH IMPACT

Outcome data (e.g. education) and demographic data (e.g. SES) is compared against a control group of individuals with no FASD.

Research can help identify opportunities for prevention strategies, suggest a move towards more coordinated care, and may help policy makers understand how to transition youth with FASD to adult services.



ADMINISTRATIVE DATA SHARING

OPPORTUNITIES

By using administrative data in innovative ways, governments, funders, and non-profits can have a richer picture of the communities they serve. Sharing and linking administrative data present a range of opportunities to drive positive social impact, including—but not limited to: conducting valuable social research, evaluating outcomes in new ways, advocating for evidence-based policy, and improving service delivery.

Impact Evaluation

In order to understand the impact of their interventions, organizations require outcome data on their users. It can be a challenge for organizations to track the health, financial, or educational outcomes of their program recipients over time. Much of this information is already contained in administrative data held by government agencies. By accessing this data, organizations can better track outcomes and more effectively determine whether users have benefitted from services.

For instance, the Justice Data Lab provides an analysis of reoffending data with organizations that rehabilitate offenders in the UK (Case Study 1). This approach is generalizable across different areas: the UK government is currently establishing additional “data labs” that assess population outcomes in education, health, and employment. A similar infrastructure for leveraging administrative data in Canada could provide exciting ways for organizations to better understand the outcomes associated with their interventions.

Service Delivery

Linking administrative data across agencies would enable a more integrated approach to service delivery, which presents an enormous benefit to individuals who have complex needs. For example, survivors of interpersonal violence often require access to housing, mental health, and social assistance services. Navigating these on an individual basis can be a confusing and exhausting process. Data sharing across agencies would allow for greater collaborative care, more streamlined referral processes, and increased consistency across services.

“In a siloed and fragmented system...People are using what little energy they might have knocking on multiple doors, repeating their story, while getting further removed from solutions to their problems.”

- Ontario's Municipal Social Services Association

Social Research

By linking together client records on service-use, demographic information, and outcomes, researchers can address new and complex questions. In Case Study 2, for example, the Child and Youth Data Lab linked data across ministries to better understand the effects of fetal alcohol spectrum disorder on young Albertans. The group also researches questions such as how early childhood experiences affect later childhood, and whether repeat offending for youth in the criminal justice system is linked to mental health outcomes. These research findings can, in turn, drive advocacy efforts for evidence-based policy making.

Evidence-Based Policy

Administrative data can be leveraged to help inform public policy, guide decisions regarding service delivery, and provide a smarter approach to resource allocation. For example, the First Nations Child and Family Caring Society (led by Dr. Cindy Blackstock) educates on the need for evidence-based policies to support First Nations youth. Their efforts have often been frustrated by the fragmentation of data on Indigenous children in care, and they have expressed a need for coordinated child welfare data sharing. This could provide a more comprehensive picture of Indigenous youth navigating the system, allowing the Caring Society to spend less time on Access to Information requests—and more time sharing evidence with policymakers.

- Which of these opportunities resonate more or less strongly for you?
- How do you imagine other stakeholders would respond to these opportunities?
- After reading these examples, are there other ideas that come to mind for using administrative data to generate positive social impact?



ADMINISTRATIVE DATA SHARING

RISKS

What administrative data sharing looks like in practice can vary widely - certain use cases would involve very few risks, while others would require significant risk mitigation around privacy, security, autonomy and consent. Some of these potential risks are outlined below.

Consent

Central to administrative data sharing is the idea that data originally collected for operational needs can be used in new ways. **What could happen when data is used for purposes beyond what the user originally consented to?** In the UK, frontline outreach workers collect nationality, mental health, and gender data of the homeless for the Greater London Authority in order to help policy makers identify the needs of the homeless population. In 2017, it was discovered that Home Office immigration officials were secretly using this nationality data to identify the location of illegal immigrants sleeping on the streets and deport EU nationals¹.

Restricting Non-profit Autonomy

Non-profits make many decisions based on knowledge they gain through relationships with the communities they serve. Innovative uses of administrative data may provide valuable insights, especially when used to complement the experiences and knowledge of service providers. On the other hand, top down imposition of evidence-based decision making could prevent service providers from exercising their local discretion. This could result in programs that are less responsive to community context. Increased use of administrative data to drive decisions around resource allocation will need to be **explored with** non-profits, rather than **done to** them.

Misinterpretation of Data

Without appropriate data literacy and expertise, good data can lead to bad conclusions. Policy makers, funders, and service providers must be careful to interpret findings properly before using data to inform decisions. For example, despite the strong link between mental health and the prison system, early iterations of the Justice Data Lab's analyses (Case Study 1) excluded offenders with identified mental health issues. Generalizing these findings across a typical range of service users would likely be a very inappropriate comparison, leading to faulty conclusions and potentially harmful decisions.

Amplifying Inequities through Data-Driven Decision Making

Administrative data poses exciting opportunities to make evidence-based decisions on pressing social issues. However, administrative datasets themselves may reflect biases of the systems they are collected in. For example, data on the overrepresentation of Black and Indigenous people in Canadian prisons reflects discrimination in the criminal justice system and the over-policing of racialized groups. Using this data to inform decision-making could pose a danger of amplifying (and providing faulty validation for) further discrimination.

“Marginalized groups face higher levels of data collection when they access public benefits, walk through highly policed neighbourhoods, enter the healthcare system, or cross national borders. That data acts to reinforce their marginality when it is used to target them for suspicion and extra scrutiny.”

- Virginia Eubanks, *Automating Inequality* (2018)²

Security, Privacy, and Public Trust

Detailed person-level data, when aggregated across sources can be considered an invasion of privacy. Linking data in a centralized way also poses greater consequences in the event of a data breach. Breaches are not unprecedented: in 2007, 25 million child database records went missing in the UK. Public concerns around privacy and surveillance have the potential to shut down large-scale administrative data-sharing projects. The Australia Card, which was intended to be a national card to centralize different government ID systems, was withdrawn in 1987 due to public mistrust.

- Which of these risks resonate more or less strongly for you?
- How do you imagine other stakeholders would respond to these risks?
- After reading these examples, are there other risks of increased administrative data sharing that come to mind?

¹ [Home Office used charity data map to deport rough sleepers](#), The Guardian (2017)

² [Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor](#), Virginia Eubanks (2018)



ADMINISTRATIVE DATA SHARING

CONDITIONS FOR SUCCESS

Administrative data sharing is already a practice in the USA, UK, as well as some areas of Canada, but there has been no coordinated policy agenda for increasing social impact through the use of administrative data. In thinking about whether and how to develop such an agenda, we will need to explore the following considerations:

Policy, Regulations & Legislation

Data sharing needs to follow Canadian privacy law. There are current policies in place that prohibit the linking of administrative data across government databases. Different ministries and organizations are currently governed by different privacy legislation, making data sharing agreements extremely complex.

Governance Mechanisms

Each data sharing initiative would need to have governance mechanisms in place to ensure responsible and ethical use of data. This may look like an advisory board, oversight by independent bodies, a privacy commissioner assigned to review the initiative, and/or a research ethics board in cases where administrative data is used to conduct social research.

Public Consultation and Education

It is important that the public—especially communities who would be impacted by data sharing—participate in the development of data sharing initiatives. To engage in these conversations, the public requires accessible education around relevant opportunities and risks. Government must be transparent about what data is being shared, and for what purpose.

Expertise & Capacity Building

Policymakers and service providers require research and contextual expertise for drawing insights from administrative data. This can take the form of partnerships with university researchers—or “data labs” that provide specific research and data services, such as the Justice Data Lab. This could also include data literacy training within government and the social sector.

Technical Infrastructure & Protocols

For data linkage to occur across agencies, the data needs to be interoperable, stored securely, and have the proper privacy infrastructure built in. Data-linking may be further complicated in the Canadian context, where services are divided across provincial (education, health, driving permits, welfare) and federal (pensions, income tax, unemployment, disability benefits) levels.

- What do you think about these conditions for success? Are they the right ones?
- Which ones will be especially important, from your perspective?
- Which ones will be most difficult to get right, and do you know of any best practices we should be learning from?



RESOURCES

Reading

Building the Smarter State: The Role of Data Labs

Anirudh Dinesh, The GovLab (2017)

<https://medium.com/data-labs/building-the-smarter-state-the-role-of-data-labs-5b5428920f0f>

Our Opportunity for More Data-Driven Nonprofit Program Evaluation

Tracey Gyateng & Beth Simone Novek, Stanford Social Innovation Review (2018)

https://ssir.org/articles/entry/our_opportunity_for_more_data_driven_nonprofit_program_evaluation

The Lessons of Administrative Data: High-Profile Policy-Relevant Research Powered by Administrative Data

Abdul Latif Jameel Poverty Action Lab North America (2016)

<https://www.povertyactionlab.org/sites/default/files/resources/2016.11.14-The-Lessons-of-Administrative-Data.pdf>

Government Information Sharing: Is Data Going Out of the Silos, Into the Mines?

Stephanie Perrin, Jennifer Barrigar and Robert Gellman, Digital Discretion Inc. (2015)

https://www.oipc.ab.ca/media/389571/Report_Government_Information_Sharing_Jan2015.pdf

Case Studies

Justice Data Lab

New Philanthropy Capital

<https://www.thinknpc.org/our-work/projects/data-labs/justice-data-lab/>

Experiences of Albertan Children and Youth over Time

PolicyWise for Children and Families

<https://policywise.com/initiatives/cydl/p2/>



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Powered by Data is seeking partners, collaborators, and welcomes input from potential stakeholders for this project.

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About Powered by Data

Powered by Data's mission is to maximize the availability and impact of data for public good. Through an approach that blends data policy and data strategy development, Powered by Data helps establish infrastructure and governance frameworks that will enable the social sector to better share, use, and learn from data. Powered by Data works with nonprofits and civil society groups, government, funders, and global data initiatives.

Powered by Data operates on Tides Canada's shared platform, which supports on-the-ground efforts to create uncommon solutions for the common good.

For more information, visit <http://poweredbydata.org>.