PolicyWise
BUILD BETTER DATA

Data Lifecycle Resources: *Collect*

February 2021
PolicyWise for Children & Families

Introduction & Starting Point

The Data Lifecycle is a tool to proactively plan an organization's data journey. It provides a bird's eye view of how data can evolve from inception to reporting and beyond. The intent of the Data Lifecycle is to build a foundational tool for non-profit organizations to use when collecting data to inform service delivery and organizational planning. Good data collection can look different depending on each service organization and their client base and can be reflected upon throughout the Data Lifecycle. It is important to understand how to collect data and then use the data consistently in decisions being made for your organization.[1]

For non-profit organizations, the data lifecycle can be used as a way to inform the planning and implementation of services. The development of outcome measurements is important for the success of the organization and for the progression of clients.[2] Building appropriate processes in advance can also streamline the generation of reports and funding applications when that time comes. The clients are the primary drivers in guiding and generating desired outcomes.[1] It is important to recognize that non-profits are often responsive to community needs and are leaders for underrepresented or marginalized groups.[2]

Data lifecycles provide a structure to organize and think about the activities involved in managing and using data within a project or organization. The data lifecycle resources are organized into the following sections. Each of these topics can be explored in more detail within each section of the Data Lifecycle.

- Considerations & Lenses
- Plan
- Build
- Collect
- Prepare
- Analyze
- Inform

The Data Lifecycle addresses some of the main concerns around data collection, starting with the questions of why and how data is being collected. These sections explore how non-profit organizations can collect data in a manner that is sensitive to the realities of their clients and authentic to their mission. Furthermore, the Data Lifecycle discusses the importance of communication (both internal and external),

---

[1] Nonprofit hub & Everyaction. (n.d.). *The state of data in the non-profit sector.* https://nonprofithub.org/datareport/

[2] Benjamin, L.M. & Campbell, D.C. (2015). *Nonprofit performance: Accounting for the agency of clients*. DOI: 10.1177/0899764014551987

minimizing data collection, accuracy, interoperability, and good governance. These aspects are engaged in greater detail in the various sections. For instance, Plan explores best practices of data collection and Collect describes how organizations can increase the impact of their data. The Data Lifecycle serves as an organized guide to the most important facets of data collection, providing a roadmap for non-profit organizations as they work with clients.

> *Where to start in your data journey? We encourage starting with two key questions:*

1. Why are you collecting data?

Data may seem disconnected from the overall mission of an organization. Most staff are dedicated to helping clients first and foremost. Collecting data may seem like additional work. Collecting and using data well can contribute greatly to an organization's mission. Effective data collection and use can help improve programming to be more efficient and impactful.[3]

Data fits within an organization by:

- Building trust
- Demonstrating how organizations achieve their missions
- Creating buy-in from staff
- Providing essential information for funders

For more information, go to the following sections of the Data Lifecycle:

Considerations & Lenses 

Plan 

Inform 

2. How are you collecting data?

To support the needs of clients and provide effective services, data needs to be collected. Data is about people's journeys and stories However, in the rush to get the needed information it is possible to compromise relationships with clients. By thoughtfully considering how you are engaging with your clients, you can foster a more positive relationship.

When collecting data from clients, consider:

---

[3] Fruchterman, J. (2016). *Using data for action and impact*. Stanford Social Innovation Review. https://ssir.org/articles/entry/using_data_for_action_and_for_impact

- Ways to build trust including engaging in conversation as an accessible way to collect data. For example, questions and response choices reflect their individual circumstances.
- The way in which questions are asked, which depends on the sensitivity of the information that could be provided (e.g., asking about immigration status, emergency contacts vs. services required, postal code) and in demonstrating transparency and authenticity. For example, clients need to know how the information they give will be used to benefit them.

For more information, go to the following sections of the Data Lifecycle:

Build

Collect

Analyze

[4]

Disclaimer – the information provided in the Data Lifecycle could evolve. If you have ideas or feedback please email info@policywise.com

[4] Icons made by Freepik from www.flaticon.com.

Collect

Collect

In the collect phase, the processes of data collection and training must be established and carried out (e.g., how to ensure consistency and relatedness in collection methods).

Relational Aspects of Data Collection

Collecting qualitative and quantitative data often involves building relationships and trust with the individuals being interviewed or surveyed. There are certain characteristics about collecting data and the methods used when it comes to the relational aspects of collecting data.

Quantitative vs. qualitative. Data types in a Western context are often categorized as quantitative (i.e., information that is counted or compared on a numerical scale) and qualitative (i.e., information gathered through descriptive questions). Relationship-building is possible across all types of data collection, and with all types of data collection it must be an intentional aspect of the process. Data collection methods can be categorized across dimensions such as: quantitative and qualitative, and formal (i.e., requires structure and standardization) and formal (i.e., requires less structure, flexible). The choice to collect data must always match the intent (as stated in the "Plan" section), and also consider the ability to foster trust and rapport with the client.

Formal vs. informal. Formal methods could be structured interviews or focus groups, closed-ended questions, counts, and the use of administrative data. Informal methods could be open-ended questions, motivational or semi-structured interviews. The benefits of formal methods are that questions are consistent across clients, meaning everyone is asked the same question. The benefits of informal choices of data collection are that the conversation and responses evolve and address topics that may arise during conversation.

What helps clients to experience data collection as relational?

According to studies in healthcare and community settings,[34,35,36] there are ways to ensure that relationships are at the heart of the collection of data. The following is a compilation of these strategies:

- Availability and accessibility of the service provider
- Helping the client to feel emotionally and physically safe
- Helping the client to feel at home and valued as an individual

---

[34]Dinç, L., & Gastmans, C. (2013). Trust in nurse–patient relationships: A literature review. *Nursing Ethics, 20*(5), 501–516. https://doi.org/10.1177/0969733012468463

[35] Hall, K. Gibbie, T., & Lubman, D. (2012). Motivational interviewing techniques: Facilitating behaviour change in the general practice setting. *Australian Family Physician 41*(9), 1-8.

[36] Kelley, A., Piccione, C., Fisher, A., Matt, K., Andreini, M., & Bingham, D. (2019). Survey Development: Community Involvement in the Design and Implementation Process. *Journal of public health management and practice : JPHMP*, *25,* S77–S83. https://doi.org/10.1097/PHH.0000000000001016

- Being adequately informed
- Getting to know the person first before offering services
- Harm reduction strategies
- Honouring client autonomy
- Honouring unique language, culture, and history of clients in the intake design process
- Keeping number of questions to as short as possible

Easy Data Wins; Big Impact

The Build Better Data resources offer strategies to increase the impact of your data. Below, we highlight **three quick wins** to enhance your data and improve the impact of your data analysis.

Win #1

Clearly mark missing data. Indicating where data is missing or unknown with standard, easy to identify values (i.e., mark entries as 'missing ') and differentiating between different forms of missing data (i.e., not answered vs not applicable vs not asked) makes it easier to work with data and supports robust analyses.

Below are common examples of missing data entry issues and solutions:

- **Assigning a default value to missing data.** In this example, the default date (typically the intake date) may lead to a case of mistaken client identity.

	Date of Birth
Client answer	Not answered
Problematic entry	1/11/2021
Improved entry	999


[37]

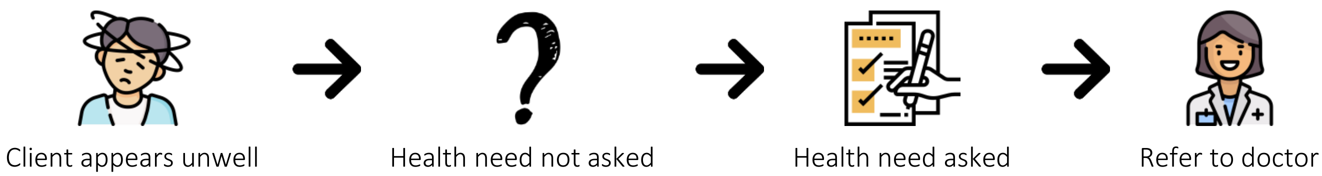
Jacob Reynolds 1/11/2021 | Jacob Reynolds 1/11/2021

- **Assigning an incorrect value to unknown or not applicable missing values.** In this example, the client was not asked the question but a response of 'no' rather than not asked was recorded. This would lead to incorrect analysis of this data.

	Health need expressed
Client answer	Not asked
Problematic entry	No
Improved entry	888

[37] Icons in this section made by Freepik from www.flaticon.com.

Collect



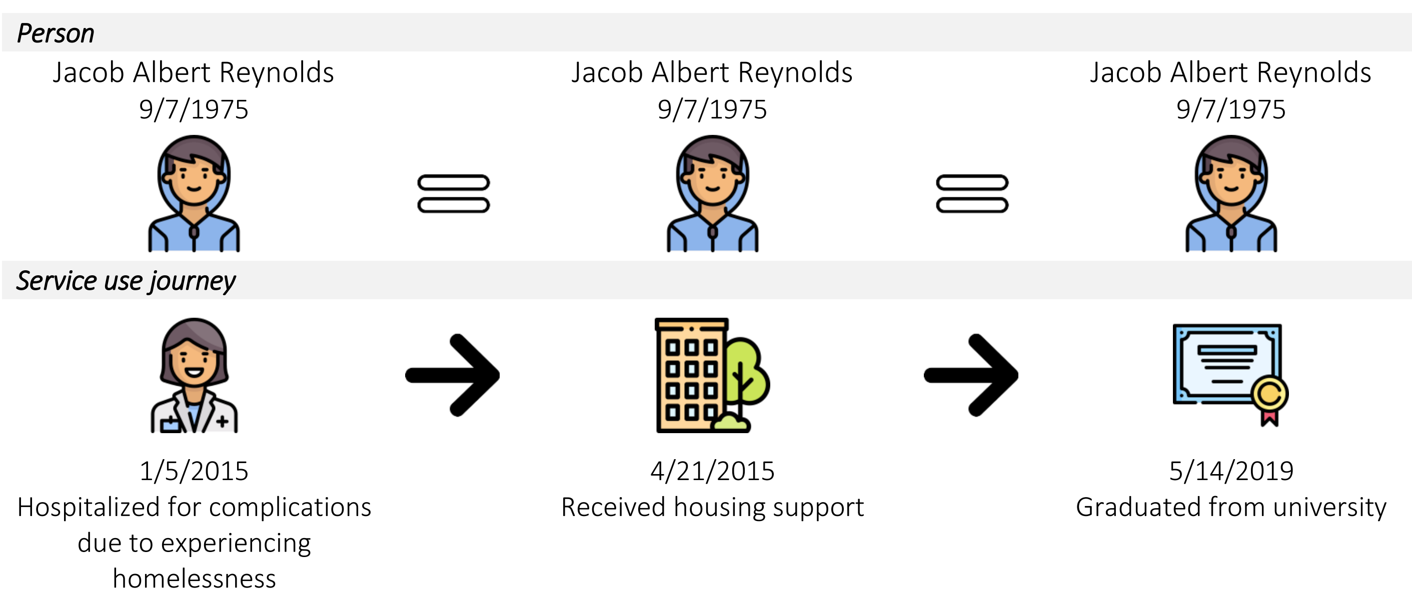
- **Assigning all entries missing when only part of data is missing.** In this example, the year of birth is valuable information that can be used to calculate age. If it is not recorded, it is a missed opportunity to analyze partial data.

	Month Birth	Day Birth	Year Birth
Client answer	Not answered	Not answered	1975
Problematic entry	Not answered	Not answered	Not answered
Improved entry	999	999	1975

Win #2

Collect name and date of birth: Collecting your clients' full legal name and date of birth helps you to track their journey through services, both internal and external to your organization. Other demographic information (e.g., gender, postal code.) is also helpful to collect.

Below is an illustration of the power of using demographic data to link identities. **Linking a person based on full name and date**. In this example, the same person can be connected to different programs and services over time.

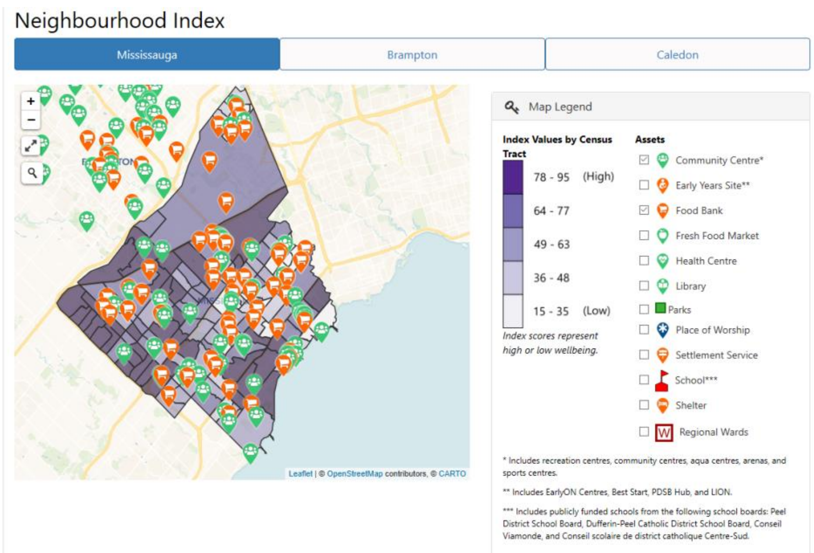


Win #3 | **Collect client postal codes with other demographic data.** When possible, collect the full, 6 digit postal code rather than just the first 3 digits. Postal codes can be used to examine geography, health, and socio-economic variables.

Examples of questions that geographic analyses can answer:

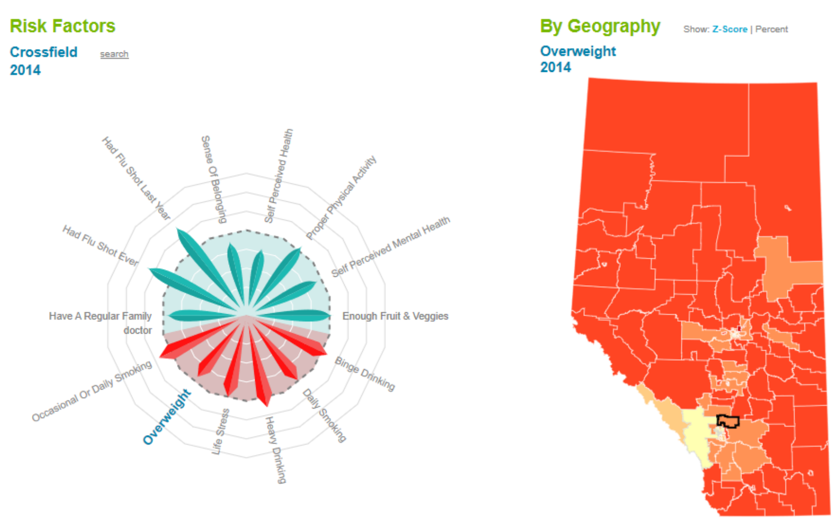
- **Where do people live?**
  This can help for strategic initiatives to expand services or target different client groups.

- **What other services are accessible nearby?** This can help identify local supports.



Source: Neighborhood Information Tool, https://www.peelregion.ca/planning-maps/nit/

- **How 'healthy' are peoples' neighborhoods?** This can help examine client vulnerabilities to other risks.



Source: AEPHIN Public health risk factors: http://aephin.alberta.ca/risk/

Acknowledgements

Primary Contributors

Robert Jagodzinski, Sharon Farnel, Saira John, Carley Piatt, Lauren Albrecht, Matthew Russell, Maria Savidov, Shannen Shott, Rebecca Taylor, Naomi Parker, Cathie Scott, and Xinjie Cui

Project Funders

This project was made possible by generous support from the Government of Alberta Community Initiatives Program grant, a Connection grant from the Government of Canada's Social Sciences and Humanities Research Council, funding from the Edmonton Community Foundation, and the Common Approach to Impact Measurement, as well contributions from an anonymous donor.

Acknowledgements

It is with thanks that we acknowledge the individuals who have contributed their wisdom, experience, and perspectives to this project. PolicyWise would like to thank the participating agencies that shared their intake and registration forms with us, as well as the many advisors who guided us along the way from agencies across Alberta and Canada.

Suggested Citation

Jagodzinski, R., Farnel, S., John, S., Piatt, C., Albrecht, L., Russell, M., Savidov, M., Shott, S., Taylor, R., Parker, N., Scott, C., Lau, J., & Cui, X. (2021). Build better data: Data lifecycle resources. Edmonton, AB: PolicyWise for Children & Families.