ECE Data Collection: Canadian Case Studies

Irina Kaliazine and Kerry McCuaig

Atkinson Centre for Society and Child Development, OISE, University of Toronto

INTRODUCTION

- Data linking is the process of creating links between records from different sources based on common features present in those sources. [1]
- Data linking allows for longitudinal analysis as well as assessing the impact of programs and interventions on child and family outcomes.
- In the field of early childhood education (ECE), data on child and program outcomes gives unlimited possibilities to evaluate and potentially, to better child outcomes.
- Most ECE data in Canada is collected by individual organizations.
- Unlinked data considerably limits possible ways to analyze and potentially, to better child outcomes.

DATA LINKING

- The research included online reviews of the government and program administration websites, as well as follow-up phone interviews with several officials from various jurisdictions.
- The research included online reviews of the government and program administration websites, as well as follow-up phone interviews with several officials from various jurisdictions.
- Four case studies were conducted to investigate Canadian examples of data collection systems with the capacity to link data on child and program outcomes.

RESEARCH QUESTIONS

1. What data on children is collected in different jurisdictions across Canada, and whether there are mechanisms to link the data?
2. What are the challenges of data linking?
3. What is the process of data storage (in data repositories) and usage in the provinces that systematically collect and store integrated linkable data on children?

METHODS

1. Jurisdictional scan

- A cross-jurisdictional scan of best practices on the collection and linking of data on children’s development and programming was conducted.
- The research included online reviews of the government and program administration websites, as well as follow-up phone interviews with several officials from various jurisdictions.
- Four case studies were conducted to investigate Canadian examples of data collection systems with the capacity to link data on child and program outcomes.

Findings

1. Although there are a wide variety of programs and initiatives available for families and children, the study was focused on programs where personal data is collected, and has the potential to be linked. The following categories of programs were identified:

2. Outside of small scale, time limited research projects there are few Canadian examples of data collection systems with the capacity to link all or even some health, socio-economic, educational, program quality assessment and child outcome findings over time. This review does however provide four models to build on. Case studies were developed for four Canadian provinces: Manitoba, British Columbia, New Brunswick, and Ontario. Summary of the findings from the case studies is provided in the table below.


<table>
<thead>
<tr>
<th>Province</th>
<th>Type of Data Collection</th>
<th>Data Linkage</th>
<th>Data Sharing</th>
<th>Data Access</th>
<th>Data Use</th>
<th>Data Quality Assessment</th>
<th>Data Privacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario</td>
<td>Health, Social, and Economic</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>Health, Social, and Economic</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Province</th>
<th>Type of Data Collection</th>
<th>Data Linkage</th>
<th>Data Sharing</th>
<th>Data Access</th>
<th>Data Use</th>
<th>Data Quality Assessment</th>
<th>Data Privacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manitoba</td>
<td>Health, Social, and Economic</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>British Columbia</td>
<td>Health, Social, and Economic</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

DISCUSSION

- In order to obtain more comprehensive information on program efficacy and child outcomes, it is critical to improve systematic data collection and analysis.
- Unlinked data considerably limits possible ways to analyze and use this data.
- Data collection and reporting are essential to evidence-based decision making and democratic accountability.

Future Discussion: How can datasets be linked and analyzed while preserving individual privacy?

REFERENCES