Promise and coming of age:

Lessons for the future of the EDI data

Magdalena Janus
The Promise
The world in late 1990’s

Source: NOAA
The world and Canada in late 1990’s

The world in late 1990's

Child Poverty Rates for Canada and British Columbia, LIM After Tax, 2000-2014

Source: Statistics Canada. Table F-18. Family Data. CANSIM Table 111-0015.
The world in late nineties

• Clyde Hertzman, Dan Offord, Fraser Mustard
• National Longitudinal Study of Children and Youth (NLSCY) – Canadian sample-based comprehensive provincially representative study
• Speech from the Throne – 1997 Commitment to: “...measure and report on the readiness to learn of Canadian children so that we can assess our progress in providing our children with the best possible start...”
Globally, 20+ years ago:

WE CAN END POVERTY 2015 MILLENNIUM DEVELOPMENT GOALS
No progress without progress for all

Need to monitor child development for all children
The Promise(s)
- Establish the status of early child development in BC/Canada
- Monitoring is essential to know that things “work” for children
- Understand the mechanisms behind the “community resilience” - community/neighbourhood differences
School readiness?

• Developmental health concept: encompasses a wide range of developmental outcomes, physical, mental, behavioural adjustment, academic achievement (Keating & Hertzman, 1999)

• It is a reflection of the early childhood experiences, at home and in the community
Population-level measure of child development in 5 major developmental domains

Completed by Kindergarten teachers for each child
Domains of child development

- Physical Health and Well-being
- Social Competence
- Emotional Maturity
- Language and Cognitive Development
- Communication Skills and General Knowledge
Vulnerability on the EDI

• Percent of children vulnerable in each domain: scoring below the lowest 10\textsuperscript{th} percentile threshold

• Percent of overall vulnerable children: those who are vulnerable in one or more domains
1,402,919
Completed EDIs
The EDI information collected for five-year-old children in Canada since 2004

12 of 13
Provinces & territories
EDI has been implemented in Canadian provinces and territories

27%
Of children vulnerable
The number of children vulnerable in at least one developmental domain

34%
Males vulnerable
The number of children vulnerable in at least one developmental domain by gender

20%
Females vulnerable
The number of children vulnerable in at least one developmental domain by gender

EARLY DEVELOPMENT INSTRUMENT
EDI Vulnerable on One Or More Scales
Off-diagonal communities, vulnerability rates higher than predicted

Off-diagonal communities, vulnerability rates lower than predicted

Fictitious data used for illustrative purposes

Correlation Line

% of lone-parent families in neighbourhood

Overall EIU - vulnerability rate, Wave 7

Percent lone parent families, 2016
Are social determinants of health destiny after all?
Promises fulfilled?
- Between 25% and 40% of children in Canada are vulnerable in their developmental health at school entry
  - The rate is growing in BC
- Monitoring is essential – but it does not solve the problems
- We still do not understand why some communities do better than others
Coming of age is supposed to mean that we gained wisdom...
Why BC vulnerabilities are not going down?

• Perhaps because we still do not know enough about why they are there in the first place
• Example 1: Coverage
Why BC vulnerabilities are not going down?

• Perhaps because we still do not know enough about why they are there in the first place
• Example 2: demographics
  • Sex – we do know but somehow ignore
  • Race/ethnicity – we do not know
For boys, the likelihood of achieving developmental expectations by kindergarten is more prone to influence of neighbourhood disadvantage than it is for girls (Webb et al. 2020)
https://doi.org/10.1016/j.ssmph.2019.100512
Race/ethnicity in US EDI data

**Exhibit 2**

Vulnerability of children on one or more EDI domains, by child race/ethnicity

- African American/Black
- Asian/Native Hawaiian/other Pacific Islander
- Hispanic/Latinx
- White
- Other

Percent of children vulnerable

- 35%
- 30%
- 25%
- 20%
- 15%
- 10%
- 5%
- 0%
Race/ethnicity in US EDI data

Vulnerability of children on one or more EDI domains, by race/ethnicity and neighborhood median income

- African American/Black
- Hispanic/Latinx
- Other
- White
- Asian/Native Hawaiian/other Pacific Islander

Percent of children vulnerable

Neighborhood median income

Quintile 1 (lowest) | Quintile 2 | Quintile 3 | Quintile 4 | Quintile 5 (highest)
Why BC vulnerabilities are not going down?

We still do not know true impact of early intervention and prevention programs at the community-level – such as parenting support program
Examples of parenting support programs for parents of young children include:

- Home visiting programs like the Nurse Family Partnership for first-time mothers (BC, evaluation ongoing), Families First Home Visiting (Manitoba, evaluation complete)
- Parenting supports, like the intervention program Triple P–Positive Parenting Program (evaluation ongoing)
- The Public Health Agency of Canada’s Nobody’s Perfect Program, a facilitated, community-based parenting program
- The Community Action Program for Children, a PHAC program
- Community-based and/or religious organizations across Canada offer programming for various ethnic and cultural groups to strengthen parental and family capacity

Source: Enns et al. 2019
"Supporting children in the early years requires expertise and input across multiple sectors and disciplines"

https://www.evaluationcapacitynetwork.com
What if the vulnerabilities are not improving proportionally, no matter what we are doing?
EDI Vulnerable on One Or More Domains
Overall Neighbourhood Vulnerability in BC

Vulnerability range per school 0 - 100%
Lesson learned: we cannot stop now
Legacy
18. We are announcing today 17 Sustainable Development Goals with 169 associated targets which are integrated and indivisible.
**SUSTAINABLE DEVELOPMENT GOAL 4**
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

<table>
<thead>
<tr>
<th>TARGETS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.1</strong> By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes</td>
<td></td>
</tr>
</tbody>
</table>

| **4.1.1** Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex |

| **4.2** By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education |

| **4.2.2** Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex |

| **4.2.2** Participation rate in organized learning (one year before the official primary entry age), by sex |
Healthy and Ready to Learn: A New National Outcome Measure of Kindergarten Readiness

As custodian agency of SDG indicator 4.2.1 on ECD, UNICEF was tasked to lead the development of a new measure to track progress against the related target. In response, in 2015 UNICEF initiated a process of methodological development that involved extensive consultations with experts, partner agencies and national statistical authorities. This led to the development of the ECD2030. More information about the ECD2030, including access to the questionnaire (in 8 languages) and implementation tools, can be found here.
“Yes we can” flatten the growing curve of children’s vulnerability!

My heartfelt thanks to Clyde, Dan and Fraser, and my team and colleagues at the Offord Centre and at HELP without whom none of this would have been possible
THANK YOU!