



Policy Wise
for Children & Families

The Power of a Longitudinal Study

Presented by:

Hesam Izakian, PhD

Data Scientist

Jan 2017

Outline

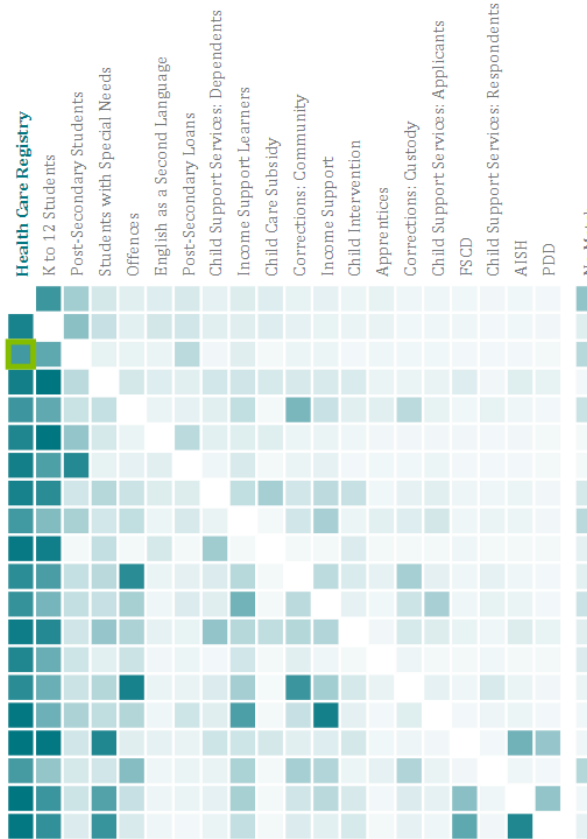
- Program Overlap Matrix: Overview
- Population Profiles (Dashboards): Overview
- The Power of Matrix and Dashboard
- Policy-Related Questions (Group Discussion)
- From Data to Knowledge (Group Discussion)

Program Overlap Matrix- Overview

Rows
Columns
Cells
Age ranges
Individuals
Study years
Sort

Program Overlap Matrix

Health Care Registry
K to 12 Students
Post-Secondary Students
Students with Special Needs
Offences
English as a Second Language
Post-Secondary Loans
Child Support Services: Dependents
Income Support Learners
Child Care Subsidy
Corrections: Community
Income Support
Child Intervention
Apprentices
Corrections: Custody
Child Support Services: Applicants
FSCD
Child Support Services: Respondents
AISH
PDD



Matrix:

Sort matrix by:

Minimum Age	Maximum Age	Total Individuals	% of study Population
0	30	1,766,604	84.1%
5	19	882,874	70.7%
	17	390,358	36%
3	19	163,597	12%
	12	115,084	8.1%
4	19	111,184	8.5%
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	12	29,288	2.1%
	18	19,838	1.9%
0	17	17,515	1.2%
	18	11,280	1.1%
	18	9,448	0.9%
	18	4,369	0.4%

[Download the linkage tables](#)

[Matrix overview](#)

[Program overlap summary](#)

[Video tutorial](#)

69.4% of individuals in Post-Secondary Students matched to an individual in Health Care Registry



270,868 of 390,358 age overlapping individuals.

<https://visualization.policywise.com/P2matrix/>

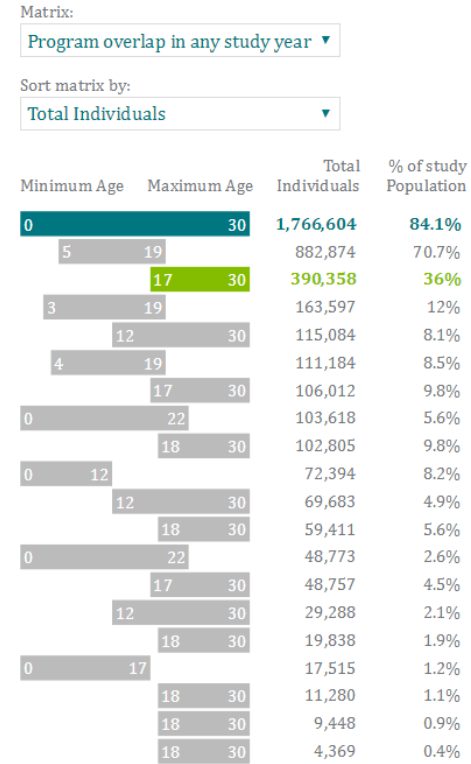
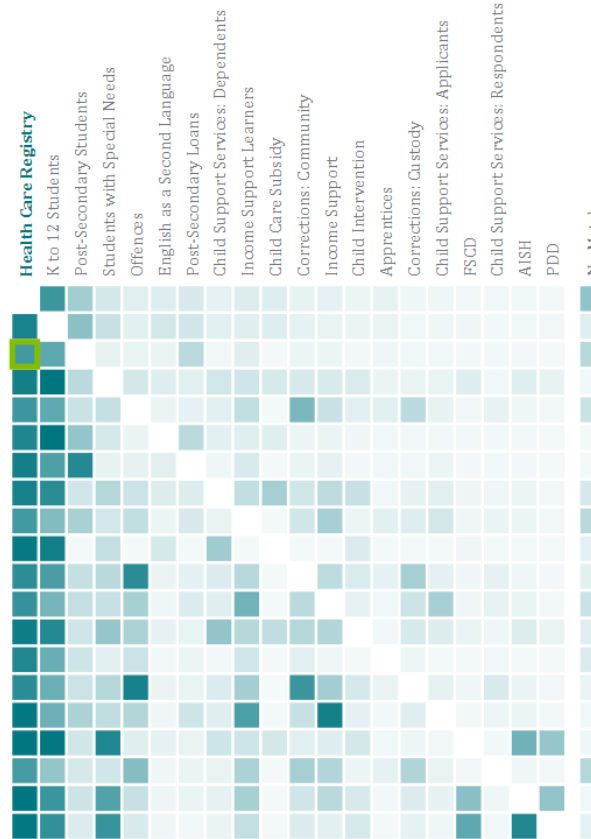
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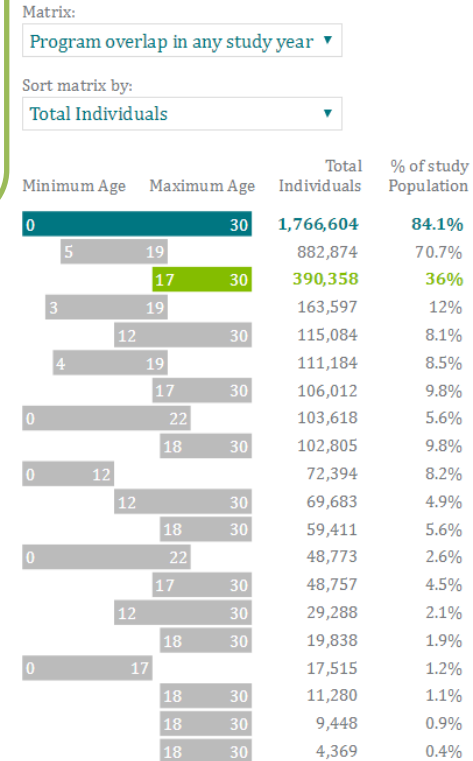
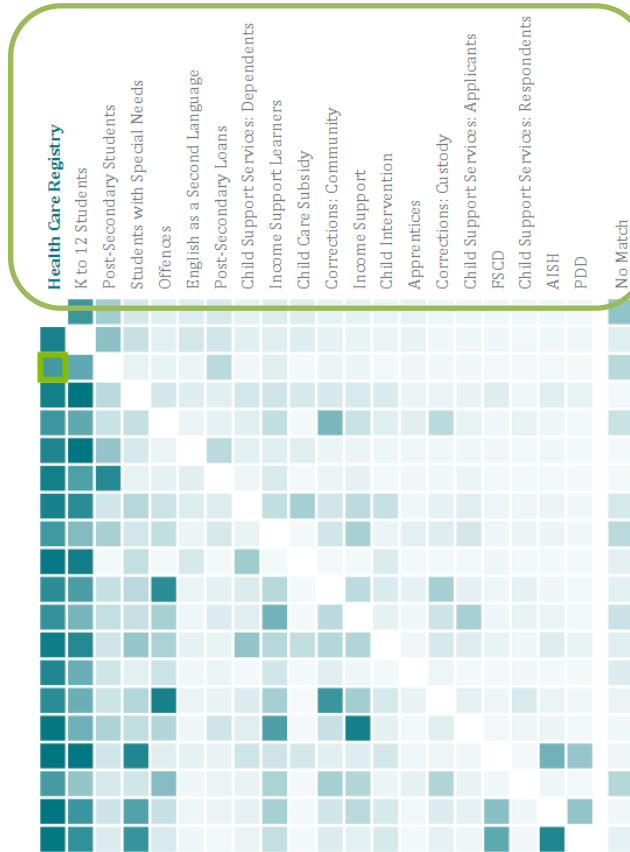
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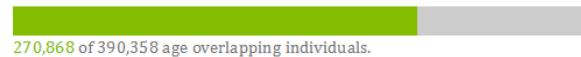
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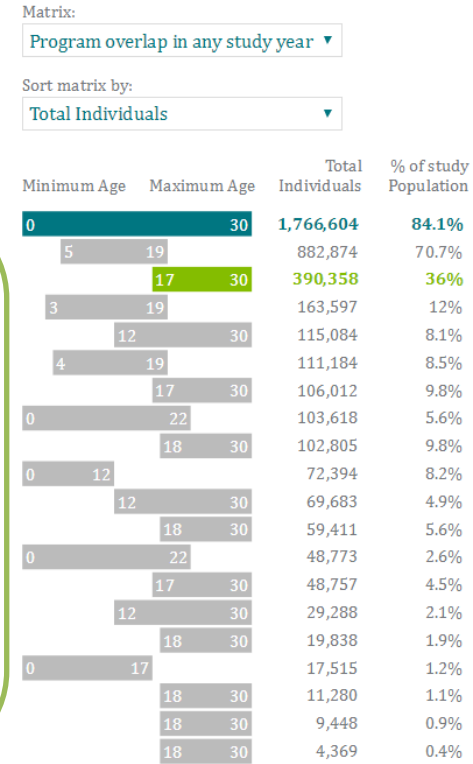
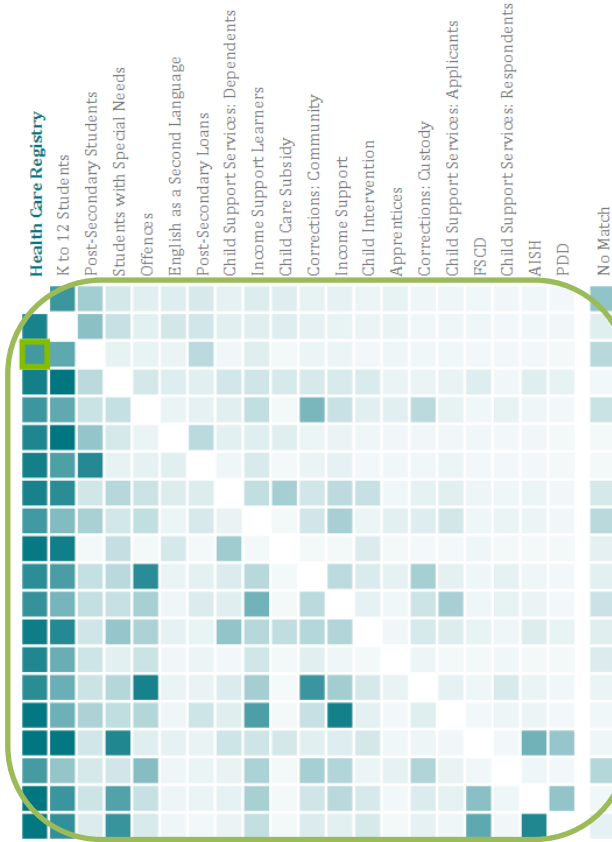
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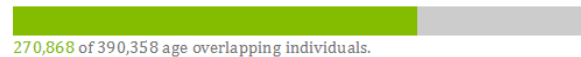
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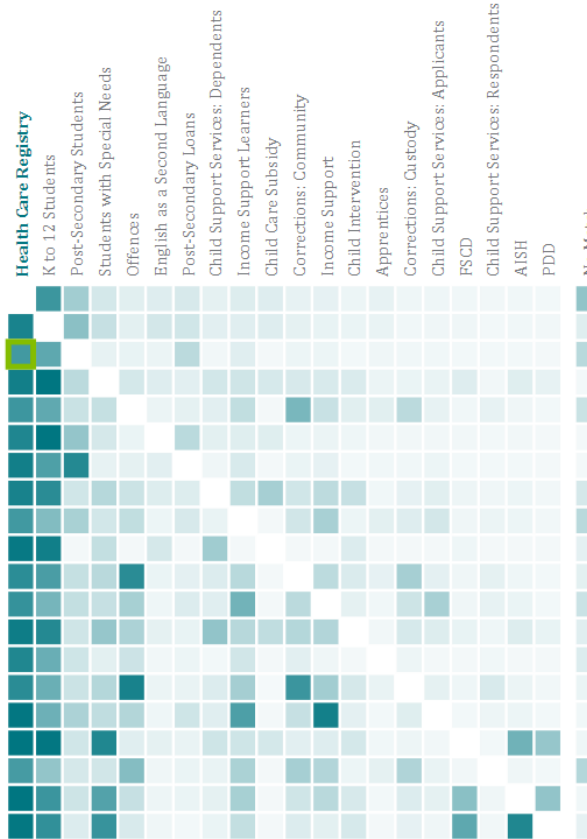
→ Age ranges

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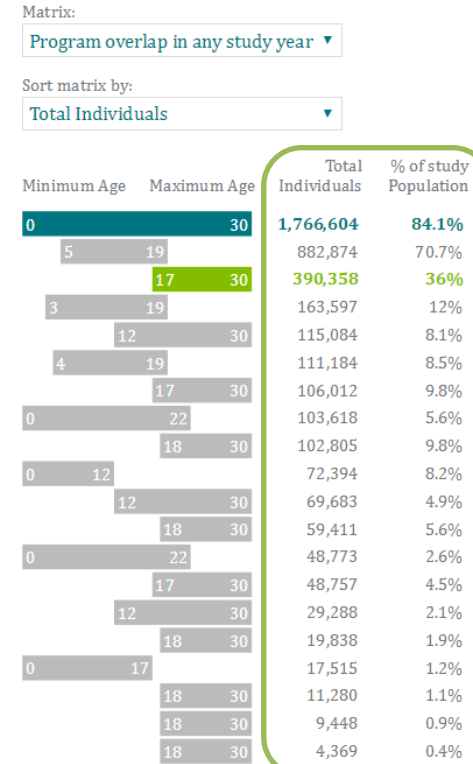
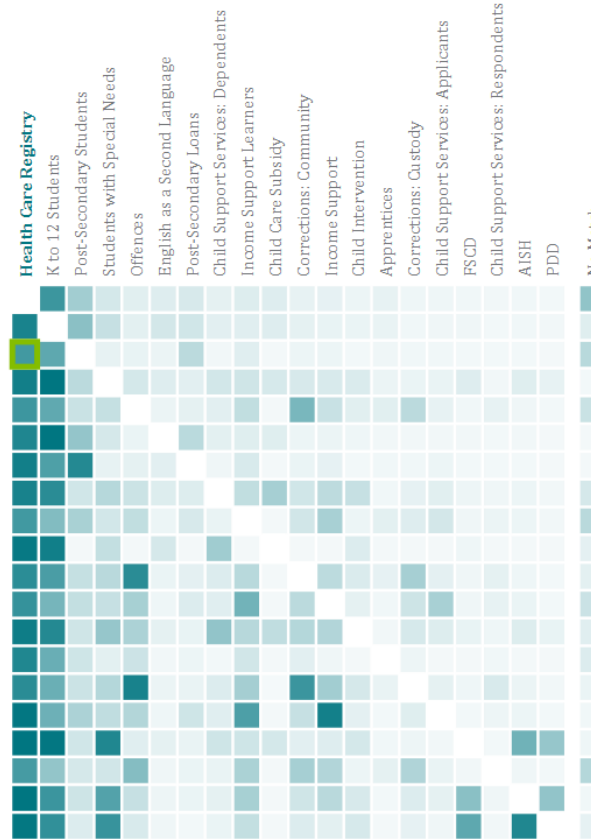
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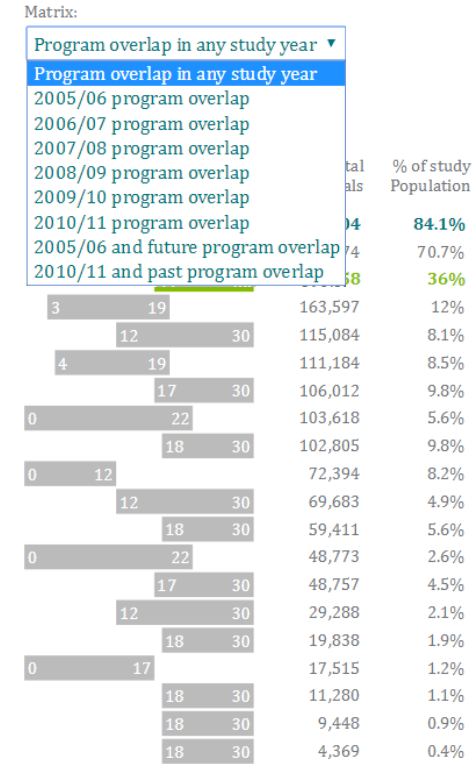
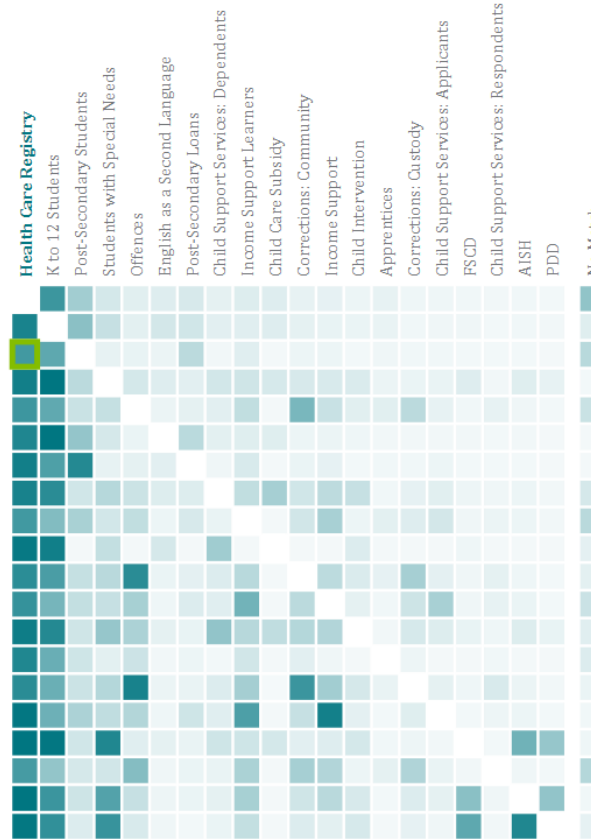
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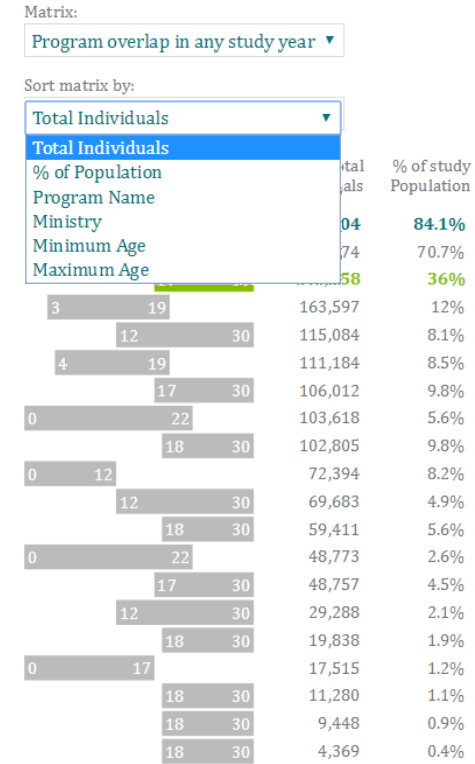
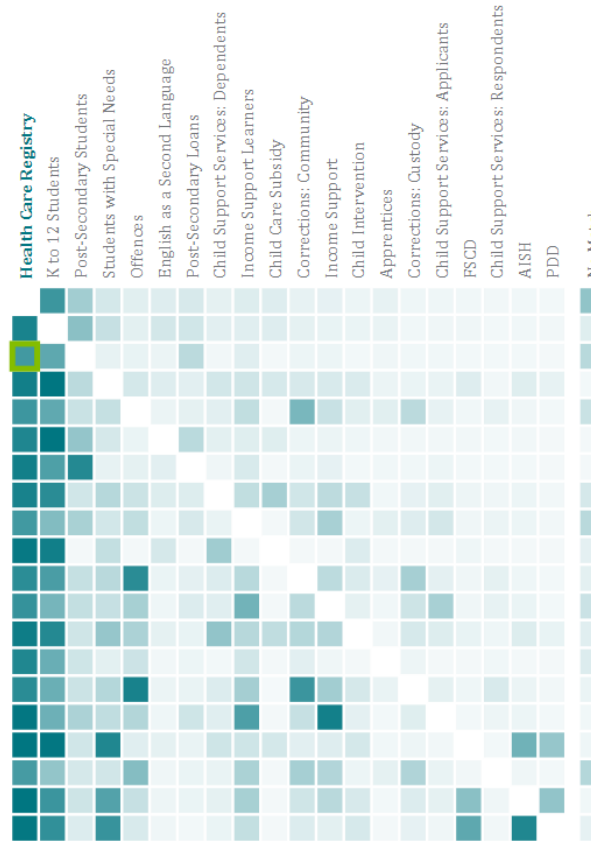
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<https://visualization.policywise.com/P2matrix/>

Population Profiles– Overview

[How to use dashboard](#)

[Download a comprehensive report for this dashboard](#)

[Download PDF version of this dashboard for the selected study year](#)

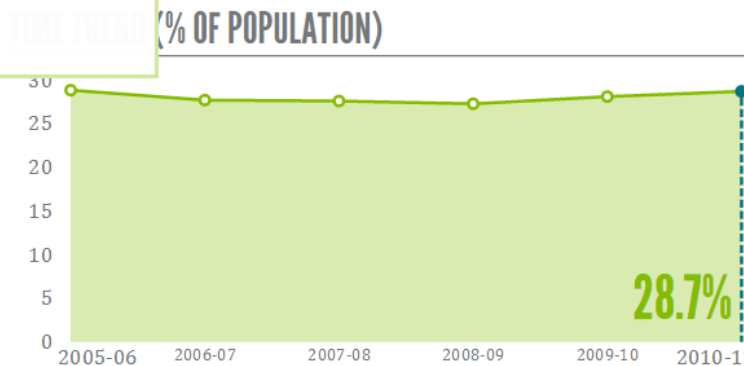
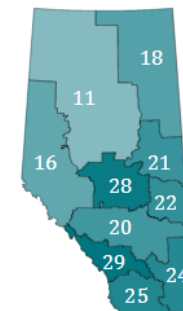
click to select program ▼

- Family Support for Children with Disabilities
- Criminal Offences
- Income Support Recipients
- Post-Secondary

Child and Youth Data Laboratory
 Longitudinal Project
 2005/06 - 2010/11

Alberta's publicly-funded post-secondary institutions.

% OF POPULATION BY REGION

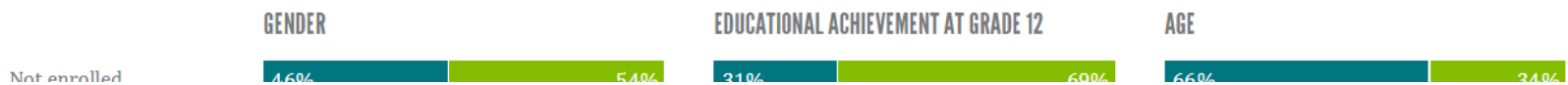


130,585



ENROLMENT STATUS ⓘ

◀ 2010-11



<https://visualization.policywise.com/P2dashboard>

Population Profiles– Overview

➔ Population and map
Second indicator

First indicator
SES & Overlaps

click to select program ▼

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POST-SECONDARY STUDENTS

Students (aged 18 to 25) enrolled in Alberta's publicly-funded post-secondary institutions.

Child and Youth Data Laboratory

Longitudinal Project

2005/06 - 2010/11

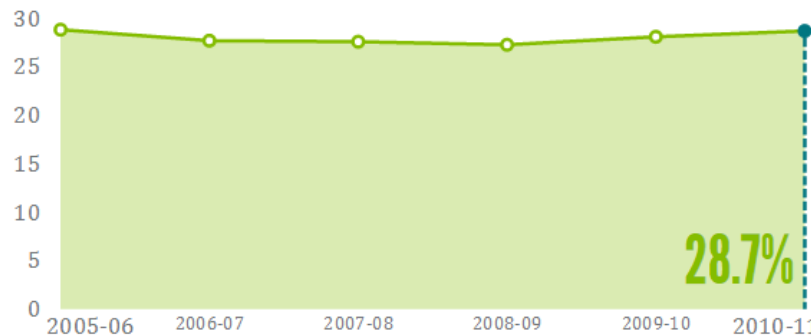
◀ 2010-11

Post-secondary students.

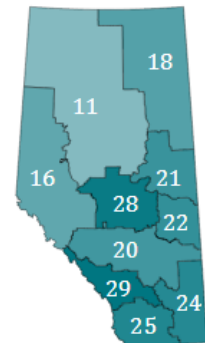
130,585



TIME TREND (% OF POPULATION)



% OF POPULATION BY REGION



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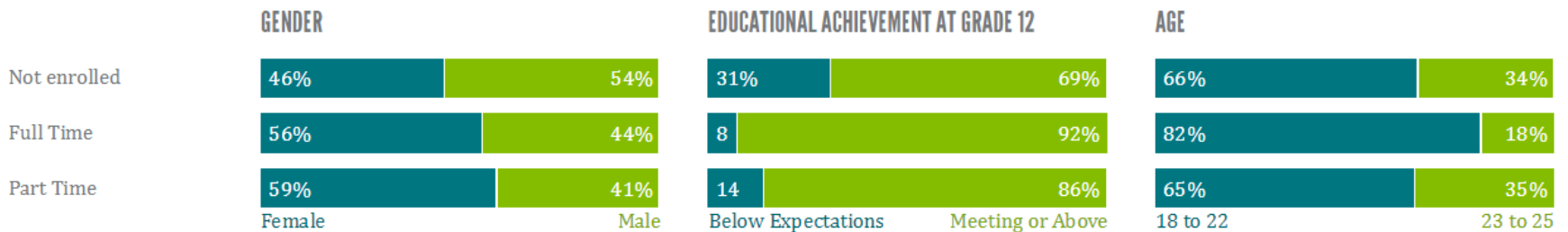
Population Profiles– Overview

Population and map
Second indicator

→ First indicator
SES & Overlaps

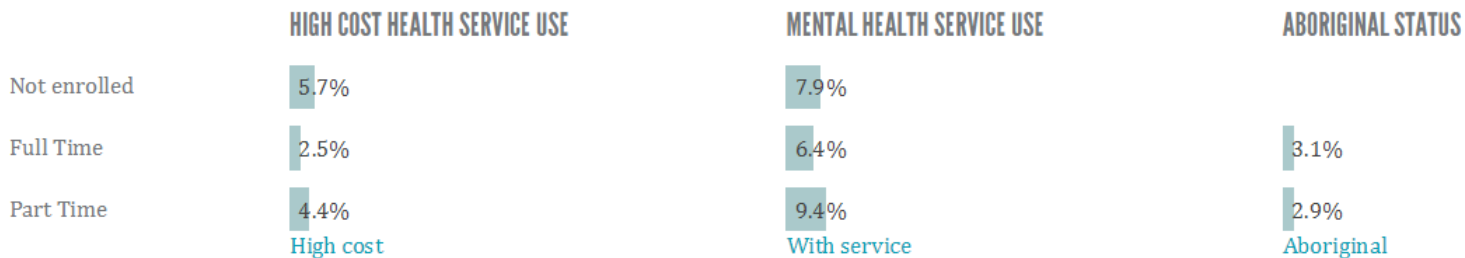
ENROLMENT STATUS i

◀ 2010-11



ENROLMENT STATUS

◀ 2010-11



<https://visualization.policywise.com/P2dashboard>

Population Profiles– Overview

Population and map

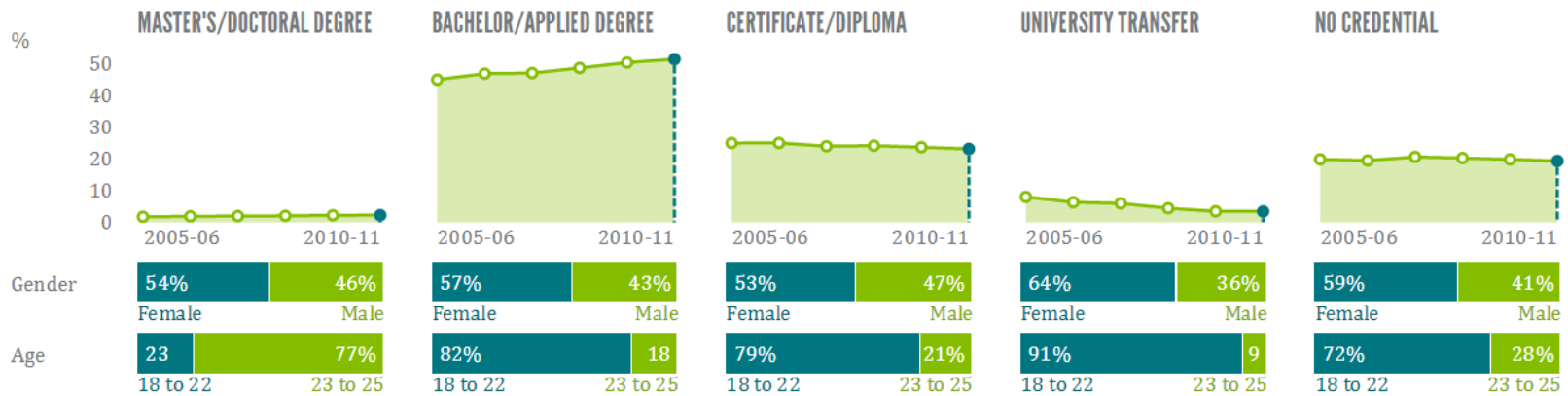
➔ Second indicator

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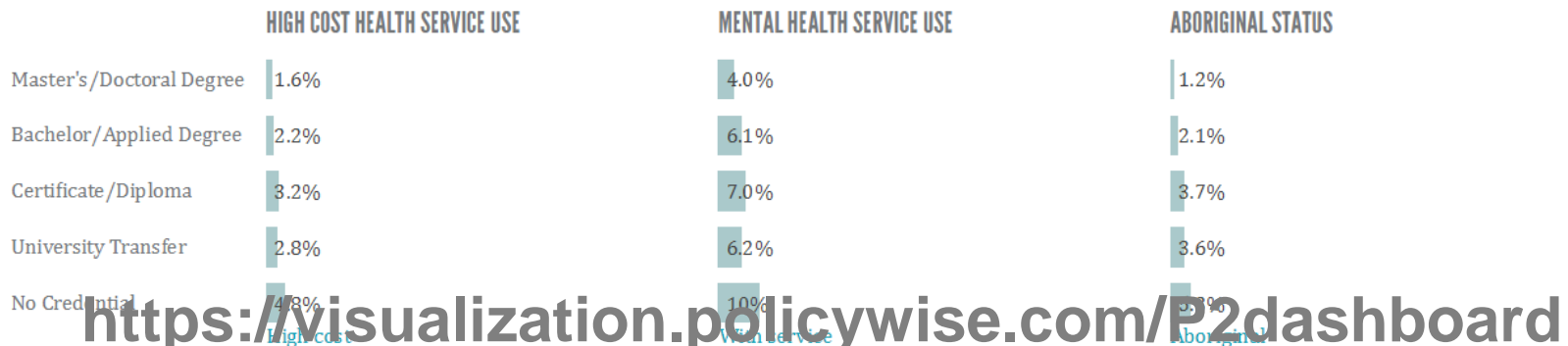
CREREDENTIAL TYPE ⓘ

◀ 2010-11



CREREDENTIAL TYPE

◀ 2010-11



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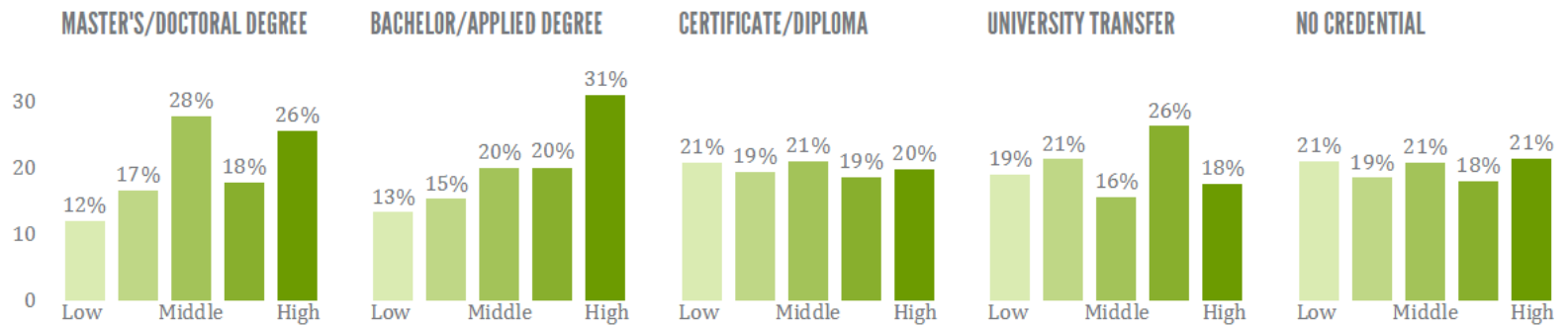
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→ SES & Overlaps

SOCIO-ECONOMIC STATUS (NEIGHBORHOOD-LEVEL MEASURE)

◀ 2010-11



PROGRAM OVERLAP

◀ 2010-11

	% IN HEALTH CARE REGISTRY	% WITH CRIMINAL OFFENCES	% INCOME SUPPORT RECIPIENTS	% WITH POST-SECONDARY LOANS
Master's/Doctoral Degree	64%	<10	<10	7.0%
Bachelor/Applied Degree	75%	0.4%	0.1%	24%
Certificate/Diploma	69%	1.2%	0.8%	22%
University Transfer	73%	0.8%	0.2%	24%
No Credential	53%	1.7%	1.3%	29%

<https://visualization.policywise.com/P2dashboard>

The Power of Matrix and Dashboard

Other service use

- What other services do ESL students use?

Over-represented programs

- In what programs are Child Care Subsidy clients over-represented?

Resilience

- What is the linkage rate between Child Intervention clients and Post-Secondary students?

Transitions

- What types of services do students with special needs receive as they transition to adulthood?

The Power of Matrix and Dashboard

Time trend

- What types of services did Income Support clients receive in the past?

Regional distribution

- What is the regional distribution of clients with criminal offences in Alberta?

Key indicators

- What is the mental health service use rate among post-secondary students?

Group discussion:

More policy-related questions

1. What child-related services are used by FSCD clients and how do their service use patterns compare to the general population?
2. What adult-related services are used by FSCD clients and how do their service use patterns compare to the general population?
3. How many AISH clients previously accessed FSCD?
4. How many PDD clients previously accessed FSCD?
5. What types of services are students with special needs accessing?
6. What is the rate of post-secondary participation among ESL students over time?
7. What is the rate of justice system involvement among apprentices?
8. What is the socio-economic status of Albertans with criminal offences?
9. What types of criminal offences are more frequent in Alberta?
10. What is the relation between criminal offences and mental health service use?