# SPECTRUM

Workshop 3
October 19, 2020

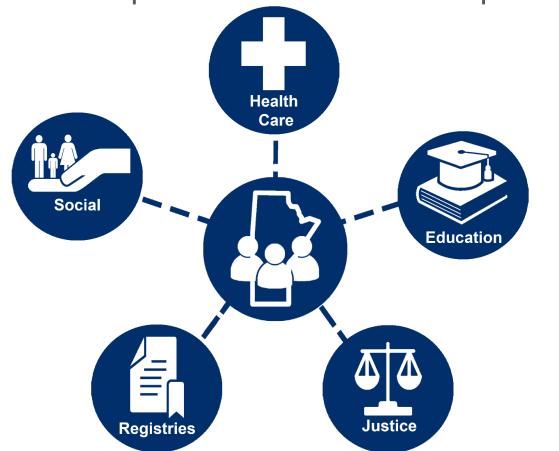


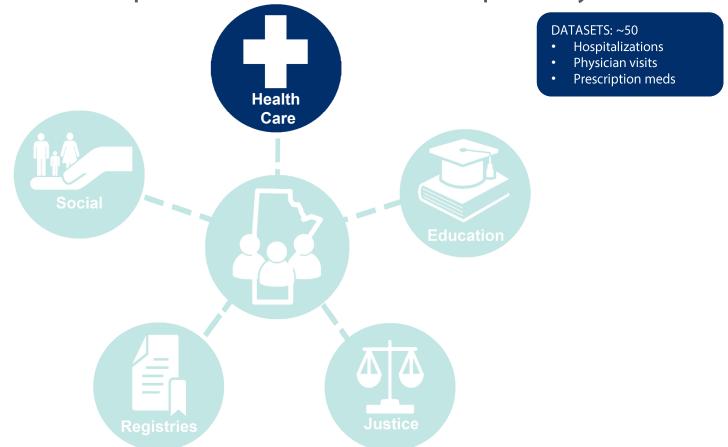
#### Agenda

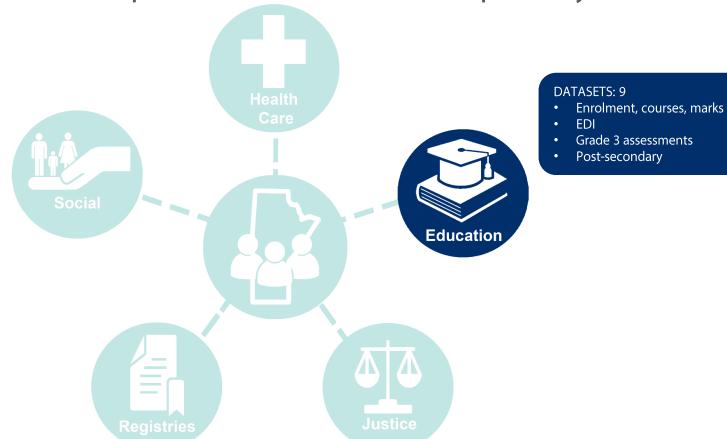
- 1:00-1:40 Introduction to MCHP Repository
- 1:40-1:50 Discussion
- 1:50-2 Break
- 2:00-2:10 Working Groups Update
- 2:10-2:30 Breakout Discussions
- 2:30-2:50 Demo Project 1 Update
- 2:50-3 Closing comments / Next Steps / Workshop Evaluation

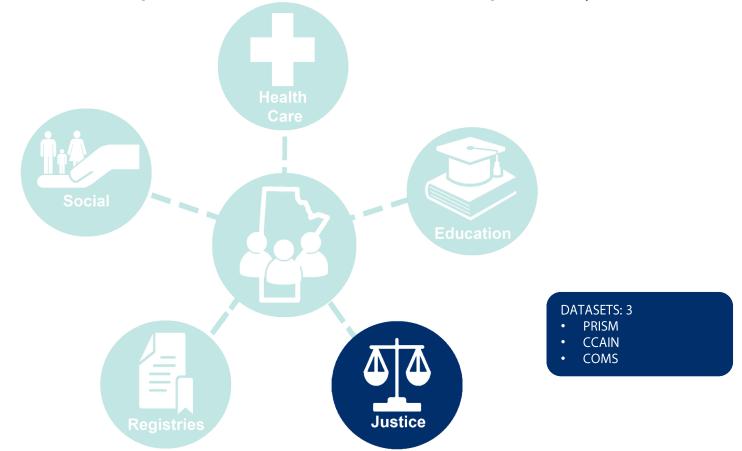


# Manitoba Population Data Repository 101











**DATASETS: 6** 

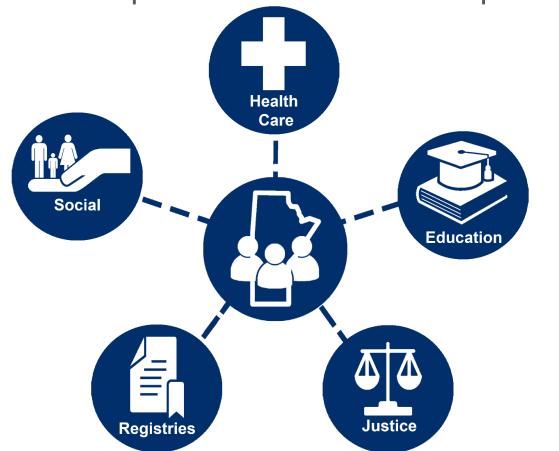
MH Registry (pop) **Immigration** 

Metis Population Registry

#### DATASETS: 21

- CFS
- Income Assistance
- Families First Screen
- Healthy Baby





#### Data REQUIRES Context

- Even though data held at MCHP include the whole Manitoba Population (i.e.: all people with a Manitoba Health Card are accounted for), the data are **not neutral**.
  - When using the data, need to take into account systemic barriers to services and systems of oppression (colonialism, racism, ableism, gender discrimination, etc.).

### Healthy Baby Prenatal Benefit

#### Manitoba Healthy Baby Prenatal Benefit

- aimed at promoting pre- and perinatal health
- Benefits start in 2<sup>nd</sup> trimester of pregnancy; monthly cheque for \$81.41
- Eligibility medical note confirming pregnancy and expected date of delivery
  - Completed application
  - Net family income < \$32,000</li>
  - Resident of Manitoba

Otherwise, "no strings attached"





# Does the HBPB improve outcomes?

- Low birth weight
- Small for gestational age
- Large for gestational age
- Preterm birth
- 5-minute Apgar
- Length-of-stay for birth hospitalization
- Breastfeeding initiation
- Readmission within 30 days
- Hospital admission first 2 years
- Immunization 1 and 2 years
- Early Development Instrument (EDI)

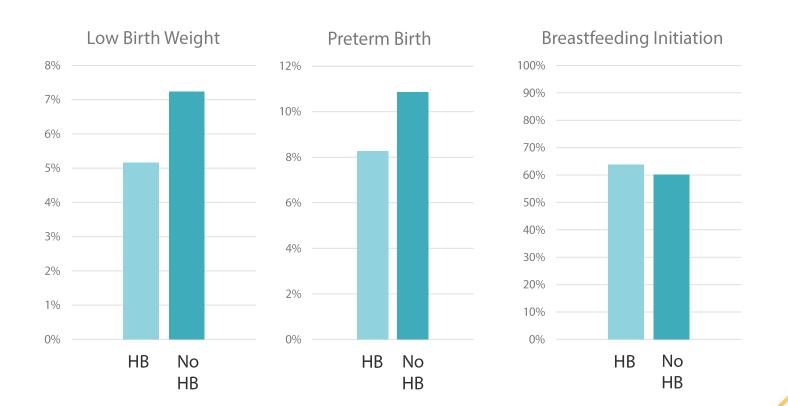
#### Methods

- All women receiving Income Assistance during pregnancy (2003-2010)
  - Received HB = 10,738
  - Did not receive HB = 3,853
- Propensity scores calculated
  - Based on probability of receiving HB
- Inverse probability of treatment weights
  - Applied to balance HB and no-HB groups

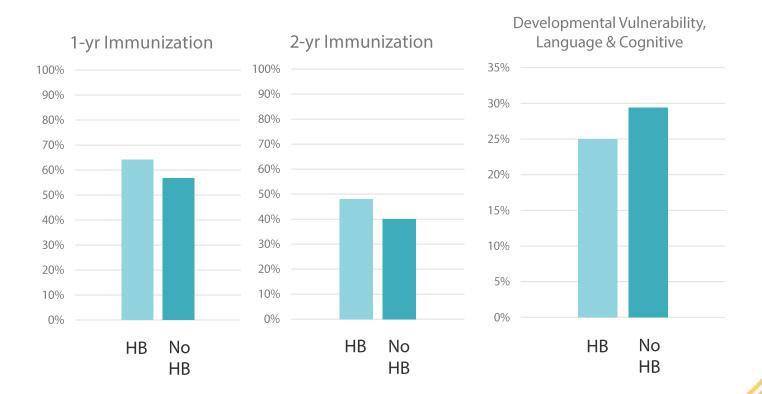




#### **Perinatal Outcomes**



#### **Longer-term Outcomes**

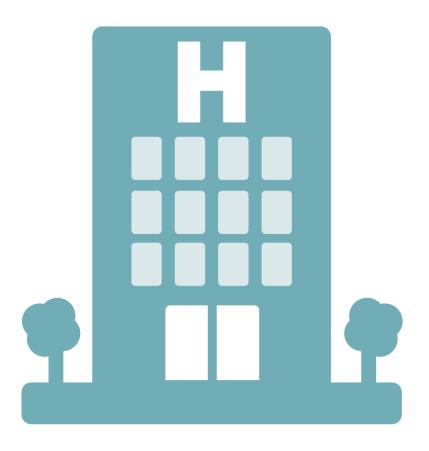


# Length of stay for birth hospitalization decreased

- The average mother who received HBPB spent roughly 6 hours less in hospital after birth or a quarter of a day
- That number may seem small BUT over 5000 births that adds up!

.25 x 5000 = 1,250 hospital days saved

for reference, Manitoba had 17,317 births in 2017-2018

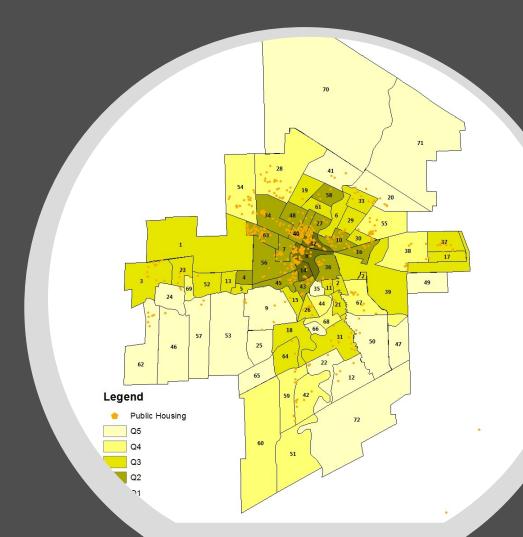


### Social Housing

PATHS to Equity

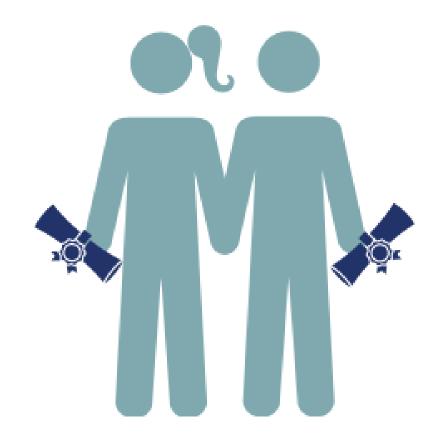


Social Housing Located Throughout Winnipeg

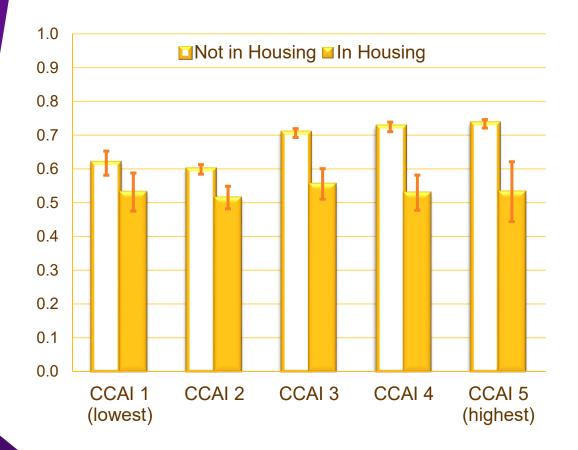


## Where social housing is located matters!

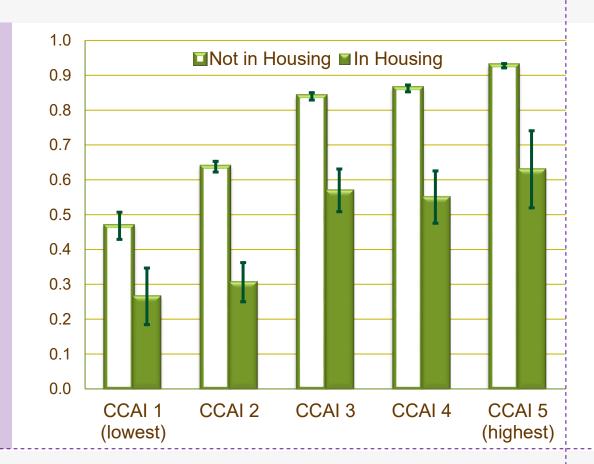
 Neighbourhood has no effect prior to entering school, but as children get older and have been in school for a period of time, those living in social housing in high income areas have better outcomes than their counterparts in low income



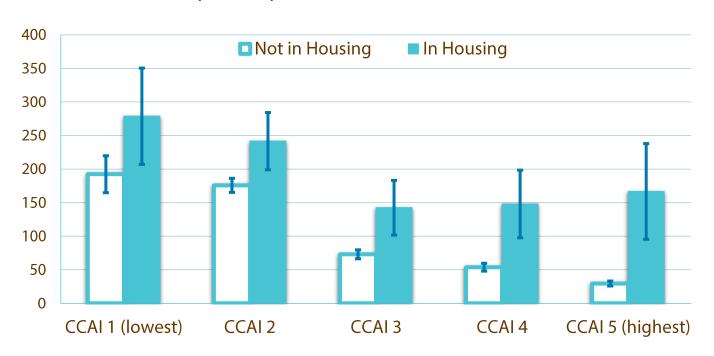
Complete Immunization at Two Years Old by Community Centre Area Income (CCAI), 2006/07 -2008/09



High School Completion by Community Centre Area Income (CCAI), 2006/07 -2008/09



### Teen Pregnancy by Community Centre Area Income (CCAI), 2006/07 - 2008/09



#### Families First Home Visiting

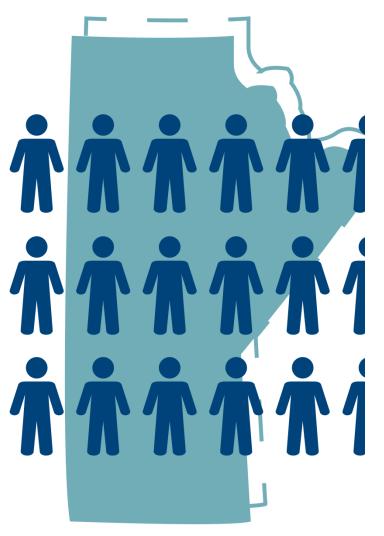
#### Families First Home Visiting

- enhancing parents' capacity to provide a nurturing and supportive environment for their children
- Currently serving approx 1500 families
- Weekly home visits provided by trained non-professional home visitors.
- Home Visiting support is offered for 3 years (although average time = 18 months)
- Home Visitors have limited caseloads
- Use skill building curriculum focused on parenting, child development and family functioning

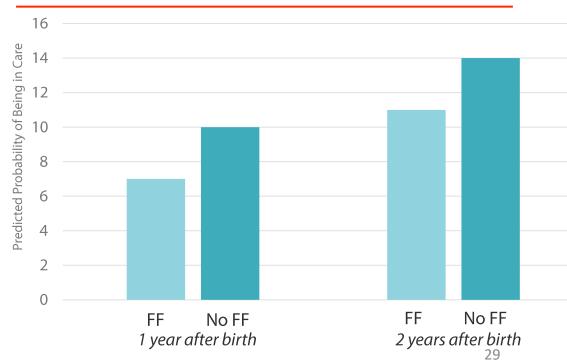
#### **Methods**

- Children with high risk scores born in years 2003-2009
  - In program = 4,575
  - Not in program = 5,186
- Propensity score calculated
  - Probability that in program based on FF Screening
- Inverse probability of treatment weights
  - Applied to balance program and comparison groups

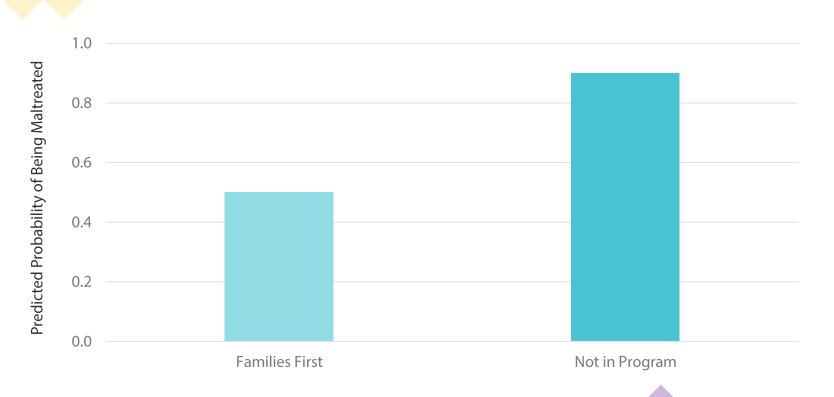




#### Children in CFS Care



#### Injury for Child Maltreatment







Boys & Girls Clubs















#### Cohort

Manitoba Population Health Registry Kids with valid PHIN born 1987-2010

N = 15,720,741

Boys and Girls Clubs of Winnipeg Membership 2005-2016

N = 16,784

link via PHIN



After removing duplicates and individuals without health coverage during membership

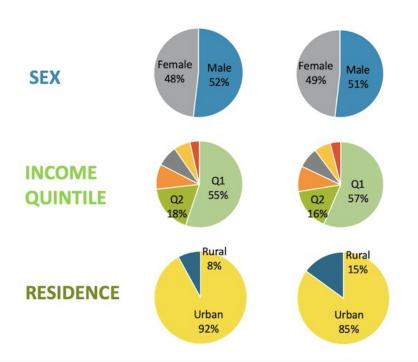
N = 9,049 program kids



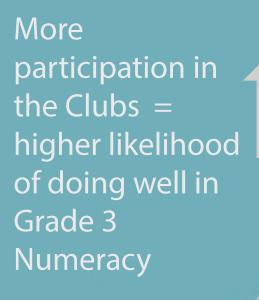
Matched on 5digit postal code and age (±3 months)

Exposed Group N = 8,785 program kids Control Group
N = 69,076
non-program
kids

#### Descriptive Characteristics Program Participants vs Non-Program Participants







More participation in the Clubs = higher likelihood of doing well in Grade 7 Student Engagement



# Social Outcomes Justice System Involvement

- Youth (12-17 y) who participated in the Clubs at higher risk of justice system involvement
  - Higher likelihood of CFS involvement
  - Higher likelihood that mom had mental health disorder
- After accounting for the disadvantages they faced:
  - more visits = less likely to become involved with the justice system
  - for every 10 visits, their risk of becoming involved with the justice system dropped by 1%

# SPECTRUM

 $SSHRC \equiv CRSH$ 

#### Questions? Comments...