

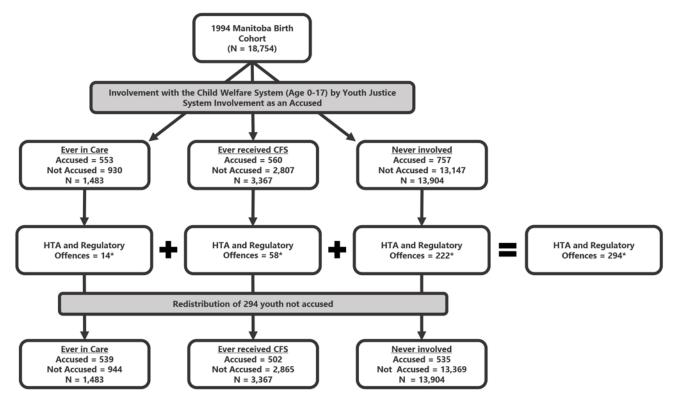
Marni Brownell, PhD Nathan Nickel, PhD Lorna Turnbull, PhD Wendy Au, BSc Okechukwu Ekuma, MSc Leonard MacWilliam, MSc, MNRM Scott McCulloch, MA Jeff Valdivia, MNRM, CAPM Janelle Boram Lee, BA (Hons) Elizabeth Wall-Wieler, PhD Jennifer Enns, PhD



# Appendix 1: Chapter 3

#### Appendix Figure 1.1: Child Welfare System Involvement and Youth Justice System Involvement as an Accused

Removing as "accused" those whose only offenses are Highway Traffic Act and/or Regulatory Offenses



\*Indicates a prosecution record that is a Highway Traffic Act (HTA), for example, speeding ticket, or a regulatory offence, such as trespassing on school property. Note: Disaggregation of results by Indigenous identity is done to call to attention the impact of social forces such as colonialism, systemic racism, and structural violence on involvement in the child welfare system and youth justice system.

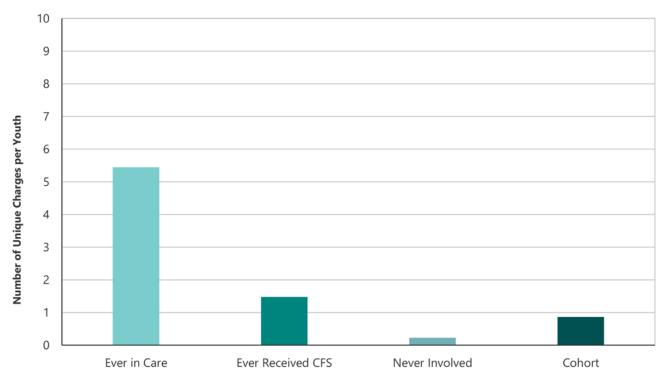
**Appendix Table 1.1: Methods for counting charges in PRISM Records** 

## Within an unique PRISM record the total count of charges is the sum of:

	Definition	Example				
Method		PRISM Charge	Charge Category	Charge Count	Subtotal	Total Count
Method 1	All Charges	Fail Comply Probation	Administrative	3	3	8
		Failure To Comply with Conditions of Undertaking	Administrative	1	1	
		Careless Use of Firearm	Violent	2	2	
		Break & Enter & Steal Firearm	Violent	2	2	
Method 2	Unique PRISM Charge	Fail Comply Probation	Administrative	3	1	
		Failure To Comply with Conditions of Undertaking	Administrative	1	1	4
		Careless Use of Firearm	Violent	2	1	4
		Break & Enter & Steal Firearm	Violent	2	1	

Note: The Prosecution Information and Scheduling Management (PRISM) data system is maintained by the Manitoba Justice Prosecution Service to track types of incidents, involvement, and initial charges.

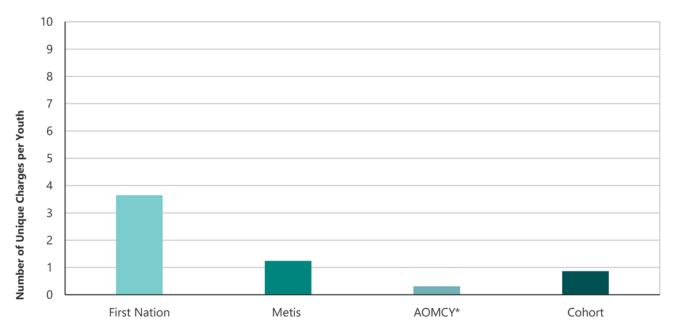
## Appendix Figure 1.2: Average Number of Unique Charges† per Youth, by Child Welfare System Involvement 1994 Cohort; Age 12-17



†The number of unique charges a person accused of a crime is charged with refers to the number of different categories of charge(s) associated with a single incident. Because a person could have multiple charges in each category, the number of unique charges is equal to or less than the total number of charges associated with that incident. Also see Appendix Table 1.1.

### Appendix Figure 1.3: Average Number of Unique Charges† per Youth, by Indigenous Identity

1994 Cohort; Age 12-17

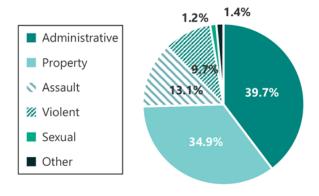


<sup>\*</sup> All Other Manitoba Children and Youth

<sup>†</sup>The number of unique charges a person accused of a crime is charged with refers to the number of different categories of charge(s) associated with a single incident. Because a person could have multiple charges in each category, the number of unique charges is equal to or less than the total number of charges associated with that incident. Also see Appendix Table 1.1.

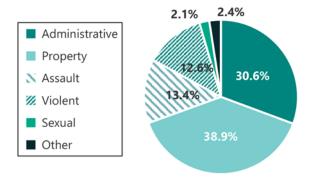
## Appendix Figure 1.4: Proportion of Total Unique Charges by Charge Category, for Youth Ever In Care

1994 Cohort, Age 12-17



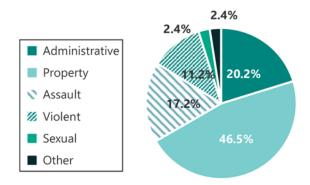
†The number of unique charges a person accused of a crime is charged with refers to the number of different categories of charge(s) associated with a single incident. Because a person could have multiple charges in each category, the number of unique charges is equal to or less than the total number of charges associated with that incident. Also see Appendix Table 1.1.

## Appendix Figure 1.5: Proportion of Total Unique Charges† by Charge Category, for Youth Who Ever Received Services from CFS 1994 Cohort, Age 12-17



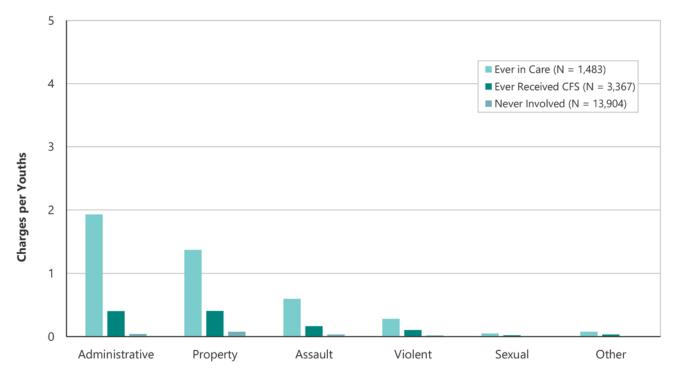
†The number of unique charges a person accused of a crime is charged with refers to the number of different categories of charge(s) associated with a single incident. Because a person could have multiple charges in each category, the number of unique charges is equal to or less than the total number of charges associated with that incident. Also see Appendix Table 1.1.

# Appendix Figure 1.6: Proportion of Total Unique Charges† by Charge Category, for Youth Never Involved with Child Welfare System 1994 Cohort, Age 12-17



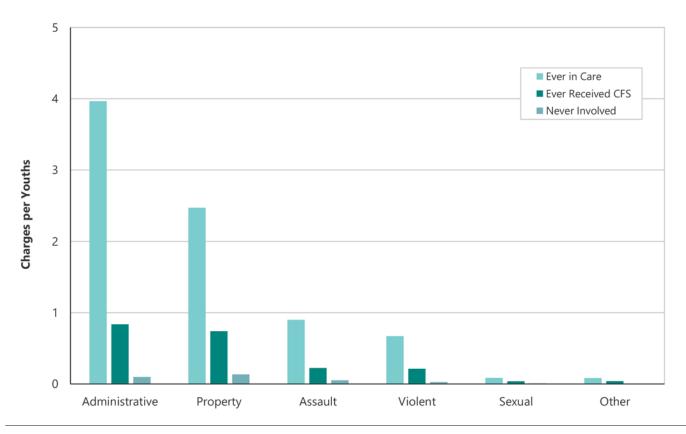
\*The number of unique charges a person accused of a crime is charged with refers to the number of different categories of charge(s) associated with a single incident. Because a person could have multiple charges in each category, the number of unique charges is equal to or less than the total number of charges associated with that incident. Also see Appendix Table 11

Appendix Figure 1.7: Rate of Unique Charges† Among all Youth by Charge Category and Child Welfare System Involvement 1994 Cohort; Age 12-17



<sup>†</sup>The number of unique charges a person accused of a crime is charged with refers to the number of different categories of charge(s) associated with a single incident. Because a person could have multiple charges in each category, the number of unique charges is equal to or less than the total number of charges associated with that incident. Also see Appendix Table 1.1.

**Appendix Figure 1.8: Rate of Charges Among all Youth, by Charge Category and Child Welfare System Involvement** 1994 Cohort; Age 12-17



# **Appendix 2: Technical Appendix**

### **Appendix Table 2.1: Technical Definitions**

Indicator	Definition
	An individual is considered to have the diagnosis of interest if they meet any of the following In the Medical Services data, diagnoses are recorded using three-digit ICD-9-CM diagnosis codes, and therefore the 5-digit, specific codes used in the hospital data are not available from the Medical Services data. The following 3-digit ICD-9-CM codes were used to select cases of Developmental Disability from the Medical Services data:  - Mild Mental Retardation (MR) (ICD-9-CM 317)
	<ul> <li>Other MR (ICD-19-CM 318)</li> <li>Unspecified MR (ICD-19-CM 319)</li> <li>Autism and other psychoses with origin specific to childhood (ICD-19-CM 299)</li> <li>In the hospital discharge data, the following ICD-10-CA codes were used to select cases of Developmental Disorders (NOTE: In Manitoba, for data beginning on April 1, 2004, up to 25 diagnoses can be coded in an abstract using ICD-10-CA):</li> </ul>
Developmental Disability	<ul> <li>Mild MR (ICD-10 F70.0, F70.1, F70.8, F70.9)</li> <li>Moderate MR (ICD-10 F71.0, F71.1, F71.8, F71.9)</li> <li>Severe MR (ICD-10 F72.0, F72.1, F72.8, F72.9)</li> <li>Profound MR (ICD-10 F73.0, F73.1, F73.8, F73.9)</li> <li>Other MR (ICD-10 F78.0, F78.1, F78.8, F78.9)</li> <li>Unspecified MR (ICD-10 F79.0, F79.1, F79.8, F79.9)</li> <li>Pervasive developmental disorders (ICD-10 F84.0, F84.1, F84.3, F84.4, F84.5, F84.8, F84.9)</li> <li>Congenital malformation syndromes due to known exogenous causes, not elsewhere classified (ICD-10 Q86.1, Q86.2, Q86.8)</li> <li>Other specified congenital malformation syndromes affecting multiple systems (ICD-10 Q87.0, Q87.1, Q87.2, Q87.3, Q87.5, Q87.8)</li> </ul>
Disability	- Other specified congenital malformations (ICD-10 Q89.8) - Down's syndrome (ICD-9-CM 758.0; ICD-10 Q90.0, Q90.1, Q90.2, Q90.9) - Edward's syndrome and Patau's syndrome (ICD-9-CM 758.1 and 758.2; ICD-10 Q91.0, Q91.1, 91.2, Q91.3, 91.4, Q91.5, 91.6, Q91.7) - Monosomies and deletions from the autosomes, not elsewhere classified (ICD-9-CM 758.3; ICD-10 Q93.0, Q93.1, Q93.2, Q93.3, Q93.4, Q93.5, Q93.6, Q93.7, Q93.8, Q93.9) - Fragile X chromosome (ICD-10 Q99.2) - Other specified anomalies (ICD-9-CM 759.8) - Unspecified Congenital anomaly (ICD-9-CM 759.9)
	In the Manitoba Education & Training (MET) Special Needs data file, children receiving special (categorical) funding for special needs were identified using the variable CATEGORYN.  Children with developmental disabilities are selected by a value of "Multiple Handicaps" ("MH") or "Autism Spectrum Disorder" (ASD) in this variable. The data also contains a variable STATUSN, that identifies whether the funding is approved, denied, non-supportable or terminated, and works in conjunction with CATEGORYN. Only those with an "approved status" are included in the selection process.
	FASD Clinic Data From the FASD clinic data, individuals were included if they had the following diagnoses in the variable DIA_Diagnosis: "ARBD", "ARND", "ARND/ARBD", "FAS", FAS/ARBD", "Partia FAS".

www.mchp.ca 6

### **Appendix Table 2.1 Cont'd: Technical Definitions**

Indicator	Definition	
Attention-Deficit Hyperactivity Disorder	An individual is considered to have the diagnosis of interest if they meet any of the following 1. 1+ hospitalizations with diagnosis of hyperkinetic syndrome (ICD-9-CM code 314 or ICD-10 code F90) in one fiscal year, OR,  2. 1+ physician claims with diagnosis of hyperkinetic syndrome (ICD-9-CM code 314) in one fiscal year, OR,  3. 2+ Rx for ADHD drugs in one fiscal year without a diagnosis in the same fiscal year of:  - conduct disorder (312/F63, F91, F92)  - disturbance of emotions (313/F93, F94)  - cataplexy/narcalepsy (347/G47.4), OR,  4. 1 Rx for ADHD drugs in one fiscal year with diagnosis of hyperkinetic syndrome (ICD-9-CM code 314 or ICD-10 code F90) in the previous 3 years.	
Condict Disorder	An individual is considered to have the diagnosis of interest if they meet any of the following criteria:  1. 1+ hospitalizations with diagnosis of conduct disorders (ICD-9-CM code 312 or ICD-10 code F91 (All F91 codes except F91.3 - oppositional disorder)), OR, 2. 1+ physician visits with a diagnosis of conduct disorders (ICD-9-CM code 312)	
Mood and Anxiety Disorders	An individual is considered to have the diagnosis of interest if they meet any of the following criteria:  1. 1+ hospitalizations with a diagnosis for depressive disorder, affective psychoses, neurotic depression or adjustment reaction (ICD-9-CM codes 296.1-296.8, 300.4, 309 or 311; ICD-10-CA codes F31, F32, F33, F34.1, F38.0, F38.1, F41.2, F43.1, F43.2, F43.8, F53.0, F93.0) or with a diagnosis for an anxiety state, phobic disorders or obsessive-compulsive disorders (ICD-9-CM codes 300.0, 300.2, 300.3, 300.7; ICD-10-CA codes F40, F41.0, F41.1, F41.3, F41.8, F41.9, F42, F45.2) OR;  2. 1+ hospitalizations with a diagnosis for anxiety disorders (ICD-9-CM code 300; ICD-10-CA codes F32, F34.1, F40, F41, F42, F44, F45.0, F45.1, F45.2, F48, F68.0, or F99) AND one or more prescriptions for an antidepressant or mood stabilizer, including medications with the ATC codes N05AN01, N05BA, N06A. Note: See the medication list below for a complete set of medications used in Brownell et al. (2012). OR;  3. 1+ physician visits with a diagnosis for depressive disorder or affective psychoses (ICD-9-CM codes 296, 311) OR;  4. 1+ physician visits with a diagnosis for anxiety disorders (ICD-9-CM code 300) AND one or more prescriptions for an antidepressant or mood stabilizer, including medications with the ATC codes N05AN01, N05BA, N06A. Note: See the medication list below for a complete set of medications used in Brownell et al. (2012). OR,  5. 3+ physician visits with a diagnosis for anxiety disorders or adjustment reaction (ICD-9-CM codes 300, 309).	

### **Appendix Table 2.1 Cont'd: Technical Definitions**

Indicator	<b>Definition</b>
Psychotic Disorders	An individual is considered to have the diagnosis of interest if they meet any of the following criteria:  1. 1+ hospitalizations with a diagnosis of psychotic disorders:  - Schizophrenia and schizophrenic disorders (ICD-9-CM 295; ICD-10 F20)  - Delusional Disorders (ICD-9-CM 297; ICD-10 F22, F24)  - Acute and Trasient Psychotic Disorders (ICD-10 F23)  - Schizoaffective Disorders (ICD-10 F25)  - Other or unspecified nonorganic Psychoses (ICD-9-CM 298; ICD-10 F28, F29)  - Psychotic disorders due to opioids, cannabinoids, etc. (ICD-10 F11.5, F12.5, F13.5, F14.5, F15.5, F16.5, F17.5, F18.5, F19.5). OR,  2. 1+ physician visits with a diagnosis of psychotic disorders:  - Schizophrenic disorders (ICD-9-CM 295)  - Delusional Disorders (ICD-9-CM 297)  - Other nonorganic Psychoses (ICD-9-CM 298)
Substance Use Disorder	An individual is considered to have the diagnosis of interest if they meet any of the following criteria:  1. 1+ hospitalization with a diagnosis for alcohol or drug psychoses, alcohol or drug dependence, or nondependent abuse of drugs:  - Alcoholic Psychoses (ICD-9-CM 291; ICD-10 F10) - Druq Psychoses (ICD-9-CM 292; ICD-10 F11-F19) - Alcohol Dependence (ICD-9-CM 303, ICD-10 F10.2) - Drug Dependence (ICD-9-CM 304; ICD-10 F11.2, F12.2, F13.2, F14.2, F15.2, F16.2, F17.2, F18.2, F19.2)  - Nondependent Abuse of Druqs (ICD-9-CM 305; ICD-10 F55) - Alcohol rehabilitation (ICD-10 Z50.2) - Druq rehabilitation (ICD-10 Z50.3). OR,  2. 1+ physician visits with a diagnosis for alcohol or drug psychoses, alcohol or drug dependence, or nondependent abuse of drugs:  - Alcoholic Psychoses (ICD-9-CM 291) - Druq Psychoses (ICD-9-CM 292) - Alcohol Dependence (ICD-9-CM 303) - Druq Dependence (ICD-9-CM 304) - Nondependent Abuse of Drugs (ICD-9-CM 305)

# Appendix 3: Chapter 4

## Predictors of Being Charged with a Crime – Interaction Analyses

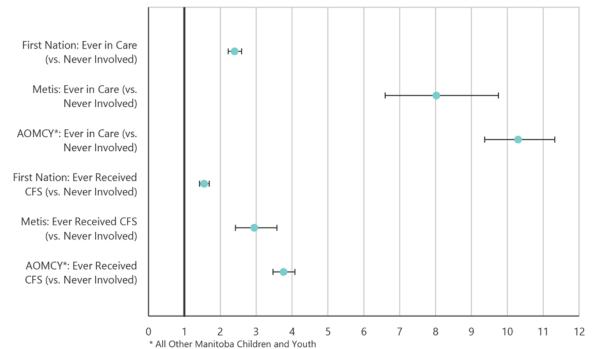
To further explore some of the patterns we observed in Chapter 4, we tested whether the relationship between child welfare system involvement and being charged with a crime differed by Indigenous identity (Appendix Figure 3.1). Among First Nation children, ever being in care doubled the risk of being charged with a crime compared with children who had never been involved with CFS; among Metis children, ever being in care increased the risk of being

charged with a crime 8-fold; and among all other Manitoba children and youth, ever being in care increased the risk of being charged with a crime 10-fold.

We saw a similar (although less pronounced) pattern when we compared children who had ever received services from CFS with children who had never been involved with CFS. Among First Nation children, those who received services from CFS were at 55% higher risk of being charged with a crime compared to those who were never involved with CFS; among Metis children, the risk among children who received services from CFS was three times higher than among those who were never involved; and among all other Manitoba children and youth, the risk was 3.8 times higher among children who received services from CFS.

## Appendix Figure 3.1: Relationship between Child Welfare System Involvement and Risk of Being Charged with a Crime, by Indigenous Identity

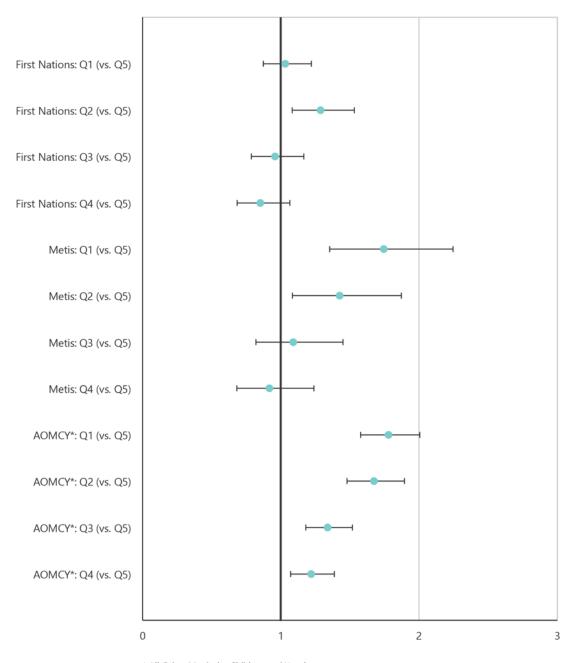
Hazard Ratio Estimates and 95% Confidence Intervals



We then tested whether being from a high-income neighbourhood was a protective factor against being charged with a crime for all children, regardless of Indigenous identity (Appendix Figure 3.2). Among all other Manitoba children and youth, being charged with a crime was related to neighbourhood income quintile: children living in lower income neighborhoods had a higher risk of being charged with a crime, while children in higher income

neighbourhoods had a lower risk of being charged with a crime. We saw the same pattern among Metis children. However, among First Nation children, children living in higher income neighbourhoods had the same risk of being charged with a crime as children from lower income neighbourhoods. In other words, the socioeconomic status of First Nation children's neighbourhood was not a significant predictor of being charged with a crime.

Appendix Figure 3.2: Relationship between Risk of Being Charged with a Crime and Income Quintile, by Indigenous Identity Hazard Ratio Estimates and 95% Confidence Intervals



<sup>\*</sup> All Other Manitoba Children and Youth Note: Disaggregation of results by Indigenous identity is done to call to attention the impact of social forces such as colonialism, systemic racism, and structural violence on involvement in the child welfare system and youth justice system.

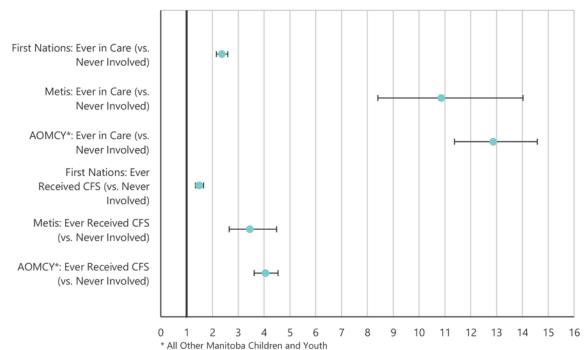
Appendix Figure 3.3 shows the relationship between CFS involvement and being charged with a violent offense by Indigenous identity. Among Metis children and among all other Manitoba children and youth, ever being in care of CFS was a much stronger predictor of being charged with a violent offense than among First Nation children. Among Metis children, ever being in care was associated with a nearly 11-fold increase in the risk of being charged with a violent offense compared with Metis children who had had no contact with CFS. Among all other Manitoba children and youth, ever being in care was associated with a nearly 13-fold increase in the risk of being charged with a violent

offense compared with all other Manitoba children and youth who had no contact with CFS. However, among First Nation children, being in care was associated with 2.4 times the risk of being charged with a violent offense compared with First Nation children who had not had any contact with CFS

Ever receiving services from CFS was likewise associated with higher risk of being charged with a violent offense, and followed a similar pattern according to Indigenous identity. However, it was not as strong a predictor as ever being in care.

## Appendix Figure 3.3: Relationship between Child Welfare System Involvement and Risk of Being Charged with a Violent Offense, by Indigenous Identity

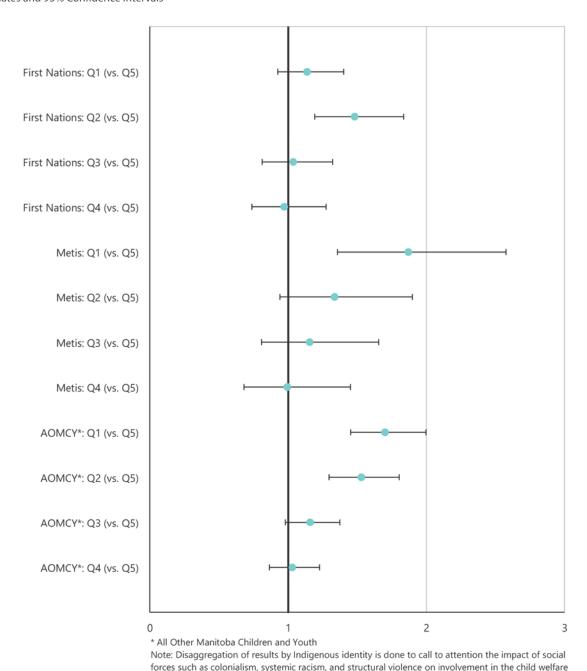
Hazard Ratio Estimates and 95% Confidence Intervals



We tested whether being from a high-income neighbourhood protected against being charged with a violent crime, and whether this varied by Indigenous identity (Appendix Figure 3.4). Among First Nation children, the income quintile of the neighborhood did little to protect against the risk of being charged with a violent offense. There was a statistically significant difference in risk of a charge only when comparing First Nation children living in the highest income neighbourhoods with First Nations children living in Q2 (second lowest). The rest of the relationships among First Nation children were non-significant, suggesting that higher area-level income did

little to moderate First Nation children's risk for being charged for a violent offense. Among Metis children, the only significant relationship was between Metis children living in the lowest income neighborhoods and Metis children living in the highest income neighborhoods (Q1 vs Q5). Among all other Manitoba children and youth, children from the lowest two income quintile neighborhoods (Q1 and Q2) had a higher risk of being charged with a violent offense compared with those living in the highest income neighborhoods, but none of the other income quintiles were significantly related to risk of being charged with a violent offense.

Appendix Figure 3.4: Relationship between Risk of Being Charged with a Violent Offense and Income Quintile, by Indigenous Identity Hazard Ratio Estimates and 95% Confidence Intervals



system and youth justice system.

www.mchp.ca 12

### Characteristics Associated with the Overlap

Characteristics Associated With Having Received Services from CFS with No Criminal Charge before Age 18 vs. No Involvement with CFS or the Youth Justice System (Group 1 vs Group 7)

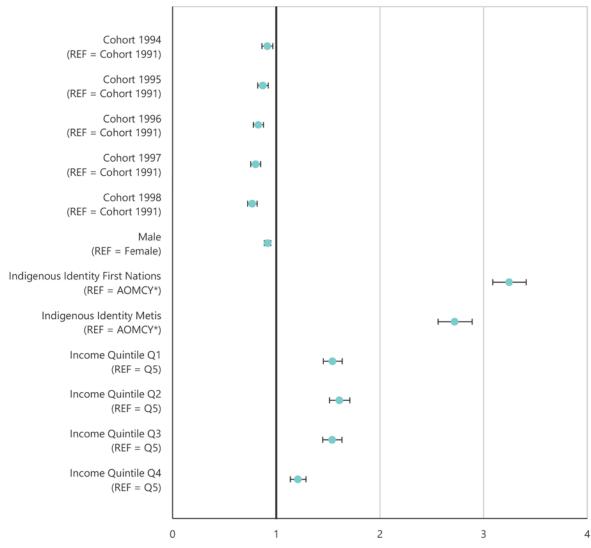
Appendix Figure 3.5 shows the relationship between children's characteristics and the odds of being in Group 1. **Group 1 comprises youth who received services from CFS but did not have a criminal charge before age 18.** The reference group (Group 7) includes only youth who did not receive services from CFS, did not go into care, and were not charged with a crime before age 18.

Compared to the reference birth cohort (1991), children born in later years (1994-1998) had lower odds of receiving services from CFS. Over time, the odds of a child receiving services from CFS declined. Males had lower odds of receiving services compared with females. First Nation children had more than 3 times higher odds of receiving services, and Metis children had 2.7 times higher odds, of receiving services from CFS than all other Manitoba children and youth. Children born to women living in lower income neighborhoods (Q1-Q4) had greater odds of receiving services from CFS than children born to women living in Q5 neighbourhoods (Q5).

Indigenous identity was the strongest predictor of children being in Group 1 (receiving services from CFS) among all the predictors we examined.

#### Appendix Figure 3.5: Characteristics Associated with Receiving CFS Services and not Being Charged with a Crime

Odds Ratio Estimates and 95% Confidence Intervals for Receiving CFS Services and not Being Charged with a Crime

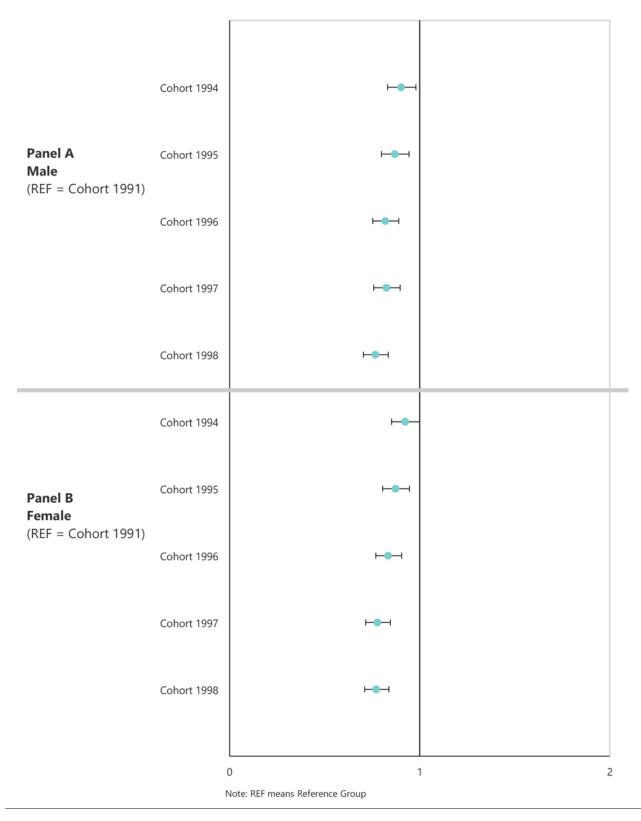


<sup>\*</sup> All Other Manitoba Children and Youth Note: REF means Reference Group

Appendix Figure 3.6 shows changes over time in the odds of being in Group 1, that is, of receiving services from CFS, by sex. The results for males are presented in the upper panel (Panel A), and the results for females are in the lower

panel (Panel B). Each birth cohort of males and females born after 1991 had lower odds of receiving services from CFS compared with the respective male and female 1991 birth cohorts.

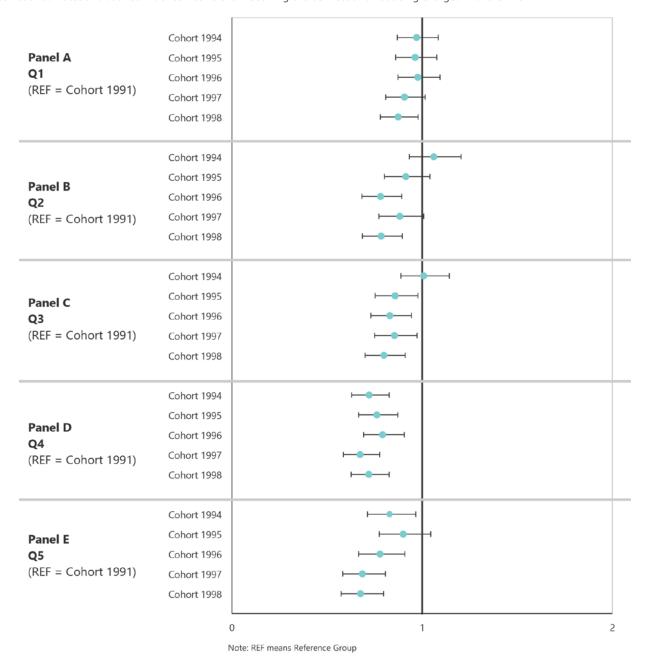
Appendix Figure 3.6: Characteristics Associated with Receiving CFS Services and not Being Charged with a Crime, by Sex Odds Ratio Estimates and 95% Confidence Intervals for Receiving CFS Services and not Being Charged with a Crime



Appendix Figure 3.7 shows changes over time in the odds of being in Group 1, that is, of receiving services from CFS, by income quintile. The results for each income quintile (Q1 to Q5) are presented in Panels A-E. Over time, the odds

of receiving services from CFS declined among children in Q4, and to a lesser extent, Q5. There were few changes over time for children in the other income quintiles.

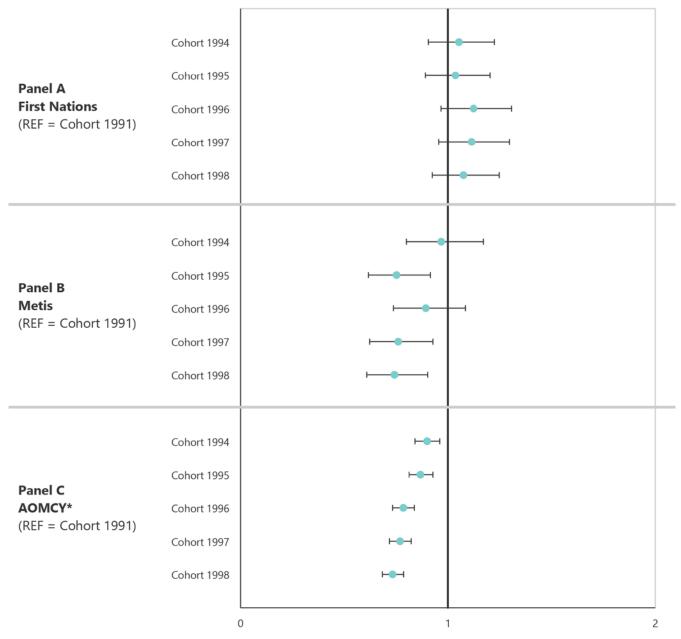
Appendix Figure 3.7: Characteristics Associated with Receiving CFS Services and not Being Charged with a Crime, by Income Quintile Odds Ratio Estimates and 95% Confidence Intervals for Receiving CFS Services and not Being Charged with a Crime



Appendix Figure 3.8 shows changes over time in the odds of being in Group 1, that is, of receiving services from CFS, by Indigenous identity. The results for each identity group (First Nation, Metis and all other Manitoba children and youth) are presented in Panels A-C. For Metis children and

all other Manitoba children and youth, the odds of being in Group 1 declined over time compared with the 1991 reference birth cohort, but the odds did not change among First Nation children.

Appendix Figure 3.8: Characteristics Associated with Receiving CFS Services and not Being Charged with a Crime, by Indigenous Identity Odds Ratio Estimates and 95% Confidence Intervals for Receiving CFS Services and not Being Charged with a Crime



<sup>\*</sup> All Other Manitoba Children and Youth NOTE: REF means Reference Group

### Characteristics Associated with Having Been In Care with No Criminal Charge before Age 18 vs. No Involvement in CFS or the Youth Justice System (Group 2 vs Group 7)

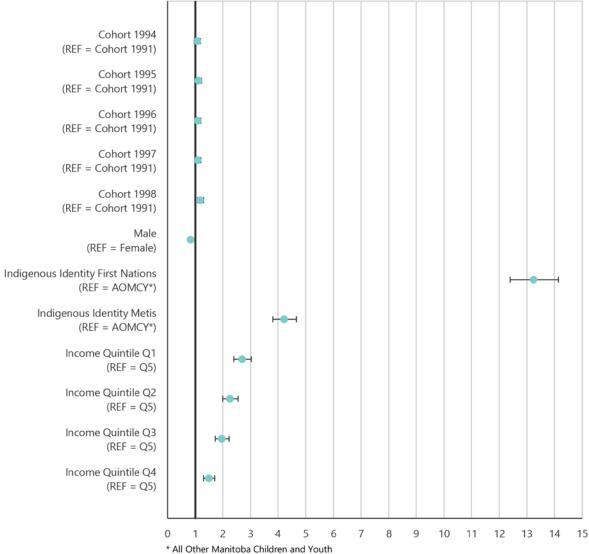
Appendix Figure 3.9 shows the relationship between children's characteristics and the odds of being in Group 2. Group 2 comprises youth who were in care of CFS but did not have a criminal charge before age 18. The reference group (Group 7) includes only youth who did not receive services from CFS, did not go into care, and were not charged with a crime before age 18.

We found next to no differences in the odds of being in Group 2 when we compared the 1991 reference birth

cohort with later birth cohorts (1994-1998). Males had lower odds than females had of being in Group 2. First Nation identity was a strong predictor of being in Group 2; First Nation children had more than 13 times the odds of being in care compared with all other Manitoba children and youth, while Metis children had about 4 times the odds. Children born to mothers living in lower income neighbourhoods had higher odds of being in care (with no criminal charge) compared with children born to mothers living in Q5 neighborhoods.

Indigenous identity was the strongest predictor of children being in Group 2 (having been in care of CFS) among all the predictors we examined.

Appendix Figure 3.9: Characteristics Associated with Ever Being in the Care of CFS and Not Subsequently Being Charged with a Crime Odds Ratio Estimates and 95% Confidence Intervals for Ever in Care of CFS and Not Being Charged with a Crime

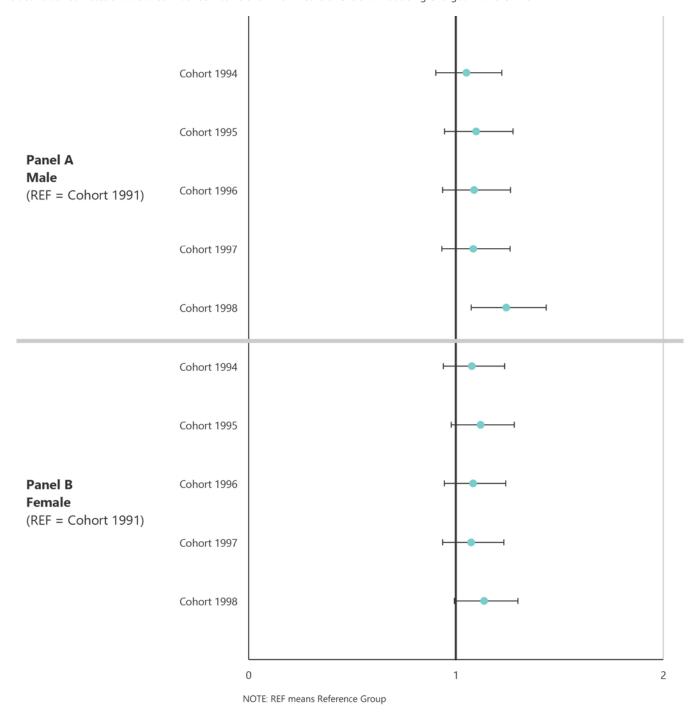


Note: REF means Reference Group

Appendix Figure 3.10 shows changes over time in the odds of being in Group 2, that is, of having been in care of CFS, by sex. The results for males are presented in the upper panel (Panel A), and the results for females are in the lower panel (Panel B). Among males, those born in 1998 had higher

odds of being in Group 2; none of the other birth cohorts had significantly different odds compared with the 1991 birth cohort. Among females, there were no statistically significant differences in odds of being in Group 2 for any of the birth cohorts.

Appendix Figure 3.10: Characteristics Associated with Ever Being in the Care of CFS and Not Subsequently Being Charged with a Crime, by Sex Odds Ratio Estimates and 95% Confidence Intervals for Ever in Care of CFS and Not Being Charged with a Crime

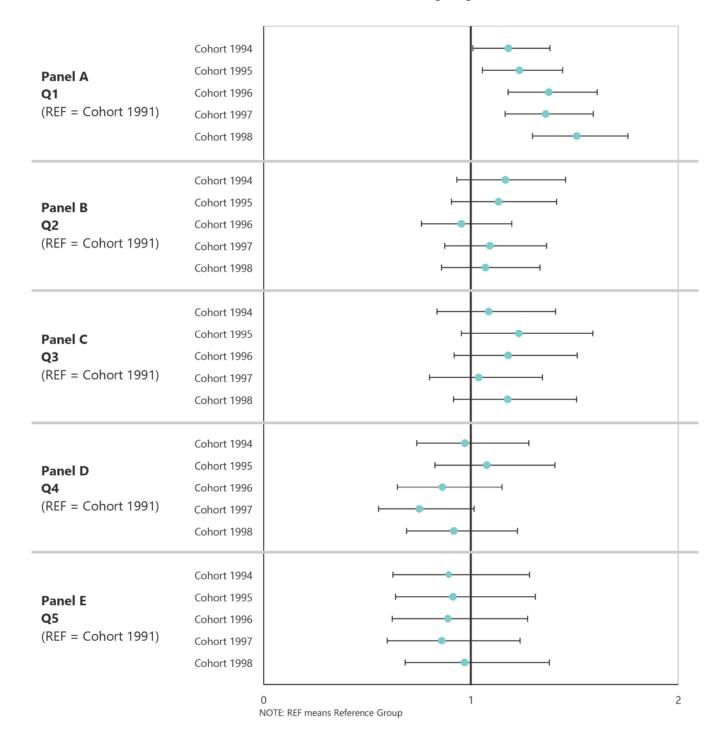


Appendix Figure 3.11 shows changes over time in the odds of being in Group 2, that is, of having been in care of CFS, by income quintile. The results for each income quintile (Q1 to Q5) are presented in Panels A-E. Among children living in

the lowest income neighbourhoods (Q1), the odds of going into care increased over time compared with the 1991 birth cohort. In the other income quintiles, there were no changes in the odds of going into care compared with the 1991 birth cohort.

Appendix Figure 3.11: Characteristics Associated with Ever Being in the Care of CFS and Not Subsequently Being Charged with a Crime, by Income Quintile

Odds Ratio Estimates and 95% Confidence Intervals for Ever in Care of CFS and Not Being Charged with a Crime



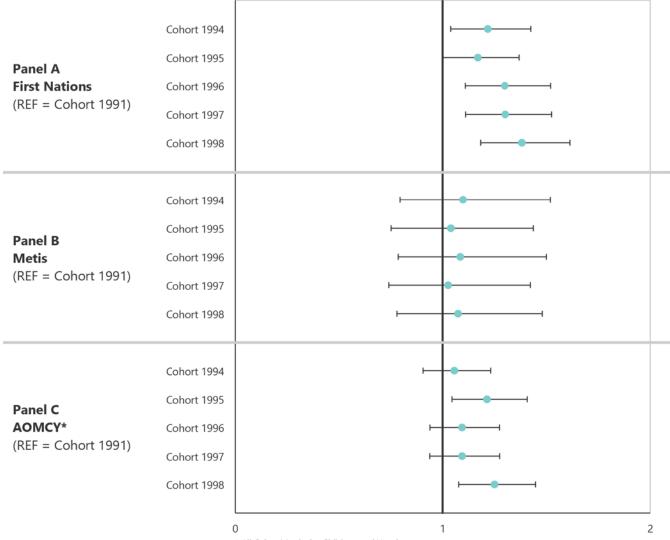
Appendix Figure 3.12, panels A to C, show how the odds of going into care (without being charged with a crime) have changed over time, when compared with the 1991 birth cohort, for First Nations, Metis, and all other Manitoba children and youth.

Appendix Figure 3.12 shows changes over time in the odds of being in Group 2, that is, of having been in care of CFS, by Indigenous identity. The results for each identity group (First

Nation, Metis and all other Manitoba children and youth) are presented in Panels A-C. The odds of being in Group 2 did not change for Metis children. For all other Manitoba children and youth, the odds were higher in the 1995 and the 1998 birth cohorts than in the 1991 cohort but there was no apparent trend. Among First Nation children, the odds of being taken into care increased steadily over time from 1996 onwards.

## Appendix Figure 3.12: Characteristics Associated with Ever Being in the Care of CFS and Not Subsequently Being Charged with a Crime, by Indigenous Identity

Odds Ratio Estimates and 95% Confidence Intervals for Ever in Care of CFS and Not Being Charged with a Crime



<sup>\*</sup> All Other Manitoba Children and Youth

Note: REF means Reference Group

### **Characteristics Associated with Having Been Charged with a Crime with No CFS Contact Before** Age 18 vs. No Involvement with CFS or the Youth **Justice System (Group 3 vs Group 7)**

Appendix Figure 3.13 shows the relationship between children's characteristics and the odds of being in Group 3. Group 3 comprises youth who were charged with a crime before age 18 and did not receive services from CFS, nor were they ever in care (i.e. they had no CFS contact). The reference group (Group 7) includes only youth who did not receive services from CFS, did not go into care,

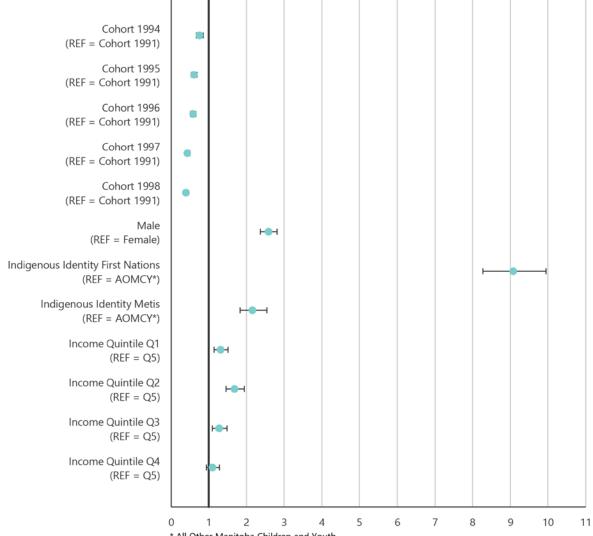
and were not charged with a crime before age 18.

Compared with the 1991 birth cohort, children in each subsequent birth cohort had lower odds of being in Group 3. Males had higher odds than females of being in Group 3. Children born to mothers living in lower income neighbourhoods (Q1, Q2, and Q3) had higher odds of being in Group 3 compared with children living in the highest income neighbourhood (Q5).

First Nation children and Metis children both had higher odds of being charged with a crime compared with all other Manitoba children and youth.

Appendix Figure 3.13: Characteristics Associated with Being Charged with a Crime but Having No Contact with CFS





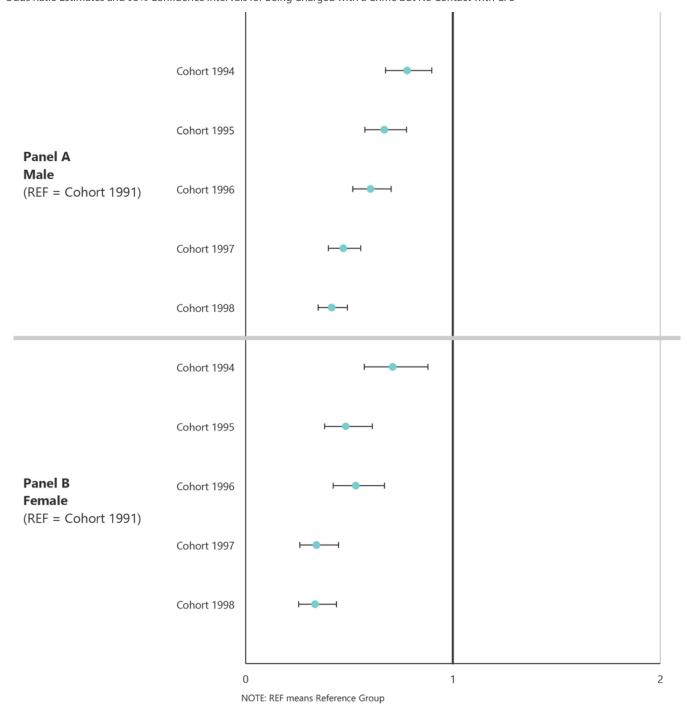
\* All Other Manitoba Children and Youth

Note: REF means Reference Group

Appendix Figure 3.14 shows changes over time in the odds of being in Group 3, that is, of being charged with a crime but not having any CFS contact, by sex. The results for males are presented in the upper panel (Panel A), and the results

for females are in the lower panel (Panel B). For both males and females, the odds of being in Group 3 declined over time compared with the 1991 cohort.

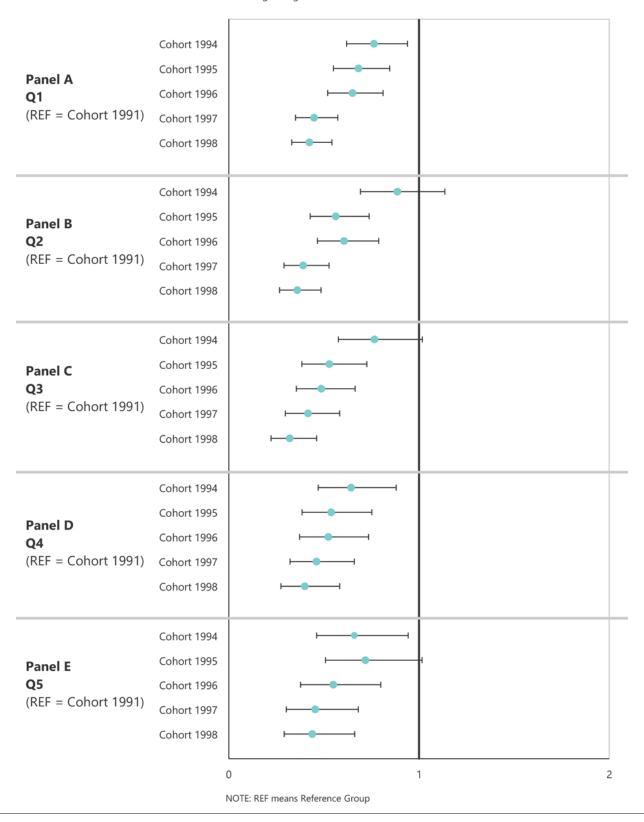
Appendix Figure 3.14: Characteristics Associated with Being Charged with a Crime but Having No Contact with CFS, Stratified by Sex Odds Ratio Estimates and 95% Confidence Intervals for Being Charged with a Crime but No Contact with CFS



Appendix Figure 3.15 shows changes over time in the odds of being in Group 3, that is, of being charged with a crime without having any CFS contact, by income quintile. The results for each income quintile (Q1 to Q5) are presented in

Panels A-E. Within each income quintile, the odds of being in Group 3 declined over time compared with the 1991 reference birth cohort.

Appendix Figure 3.15: Characteristics Associated with Being Charged with a Crime but Having No Contact with CFS, by Income Quintile Odds Ratio Estimates and 95% Confidence Intervals for Being Charged with a Crime but No Contact with CFS

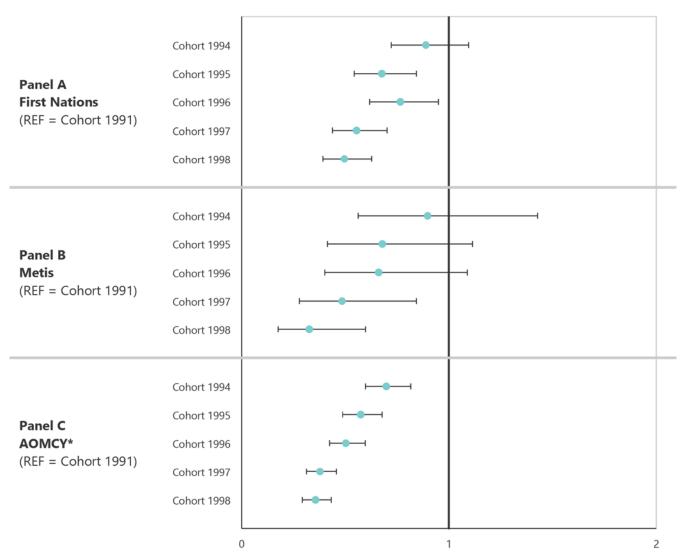


Appendix Figure 3.16, panels A to C, show how the odds of being charged as a youth have changed over time for First Nations, Metis, and all other Manitoba children and youth, respectively. Each odds ratio is comparing the odds of having a contact with the justice system in 1991 (as the reference) with each subsequent year.

Appendix Figure 3.16 shows changes over time in the odds of being in Group 3, that is, of being charged with a crime without any CFS contact, by Indigenous identity. The results

for each identity group (First Nation, Metis and all other Manitoba children and youth) are presented in Panels A-C. Among all other Manitoba children and youth, each birth cohort later than 1991 had lower odds of being charged with a crime compared with the 1991 cohort. Among First Nation children, there was a similar trend except that the difference in the odds of being in Group 3 between the 1994 and 1991 birth cohorts was not statistically significant. Among Metis children, there were significant differences over time for the 1997 and 1998 birth cohorts only.

Appendix Figure 3.16: Characteristics Associated with Being Charged with a Crime but Having No Contact with CFS, by Indigenous Identity Odds Ratio Estimates and 95% Confidence Intervals for Being Charged with a Crime but No Contact with CFS



<sup>\*</sup> All Other Manitoba Children and Youth Note: REF means Reference Group



## **Manitoba Centre for Health Policy**

Data | Insight | Informing Solutions

University of Manitoba Max Rady College of Medicine Rady Faculty of Health Sciences

408-727 McDermot Avenue Winnipeg, Manitoba, Canada R3F 3P5

**Tel:** (204) 789-3819 **Fax:** (204) 789-3910

**Email:** reports@cpe.umanitoba.ca

www.mchp.ca