

Identifying Individuals At-Risk of Eviction from Public Housing using Linked Population-Based Administrative Data

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Outline

- Background, Context, & Rationale
- Objective & Hypotheses
- Methods
- Results
- Summary
- Policy Importance
- Future Directions

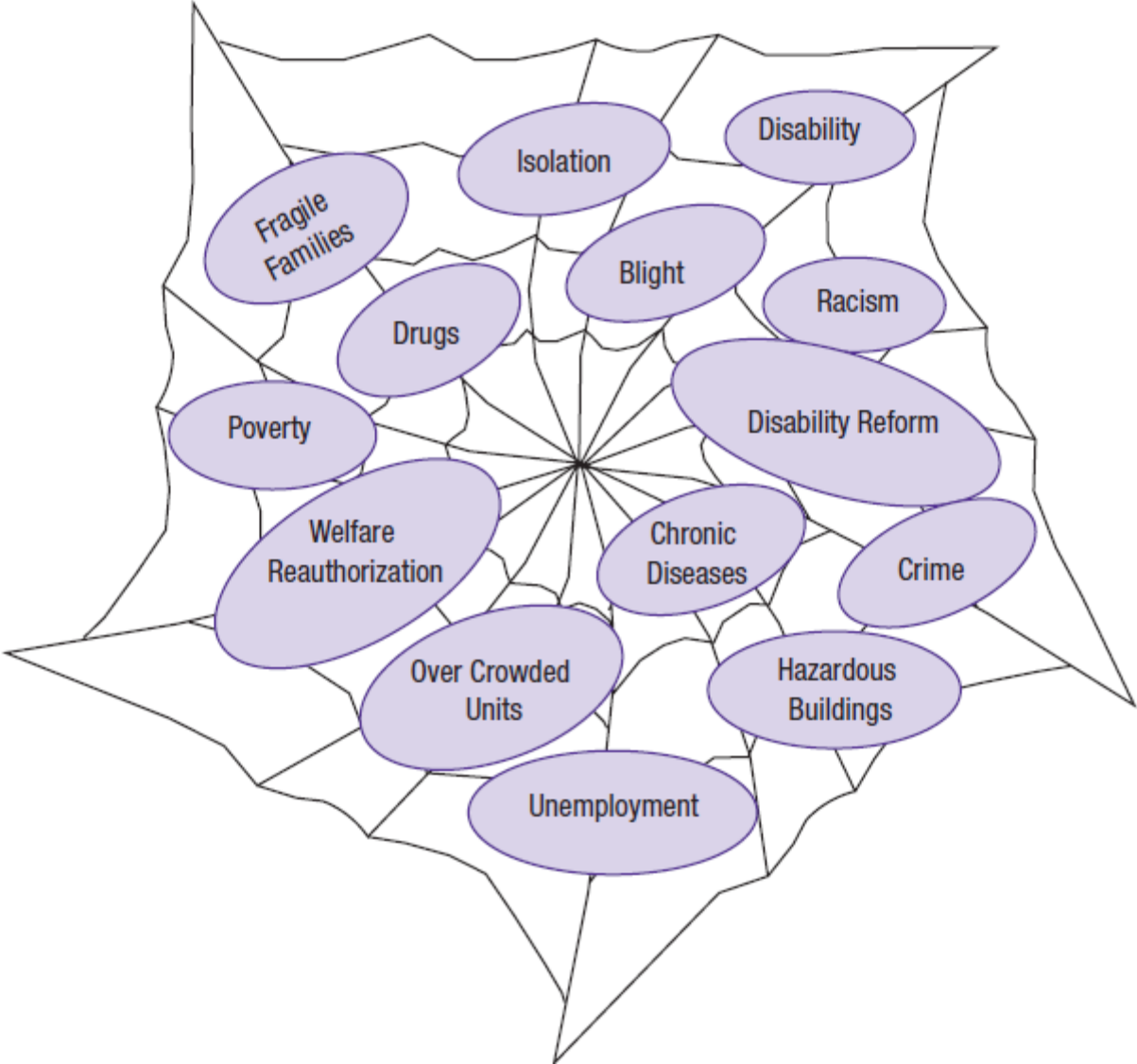


What is Public Housing?

- Form of low income housing
- Owned and managed by a government housing authority or corporation
- Income-based rent (usually 30%)



Figure 1: Web of Issues Impacting Public Housing Residents



(US Department of Health and Human Services, 2005)

Public Housing & Health

- Compared to the general population, public housing residents
 - Tend to be in poorer health
 - Lower self-rated health
 - Higher prevalence of chronic diseases (e.g., diabetes, hypertension, asthma), injuries, & mental disorders
 - More likely to engage in risky health behaviors (e.g., smoking, alcohol & drug use, sexual) & have low levels of physical activity



Manitoba



- Population: 1.28 million
- Winnipeg
 - Capital city
 - Population: 663,615

Housing Measures	2007	2016
Vacancy Rate	1.5%	2.8%
Average Rent for a 2 Bedroom Apartment	\$740	\$1033

https://www.cmhc-schl.gc.ca/odpub/esub/64355/64355_2016_B01.pdf

https://www.cmhc-schl.gc.ca/odpub/esub/64491/64491_2016_A01.pdf?fr=1508198723977



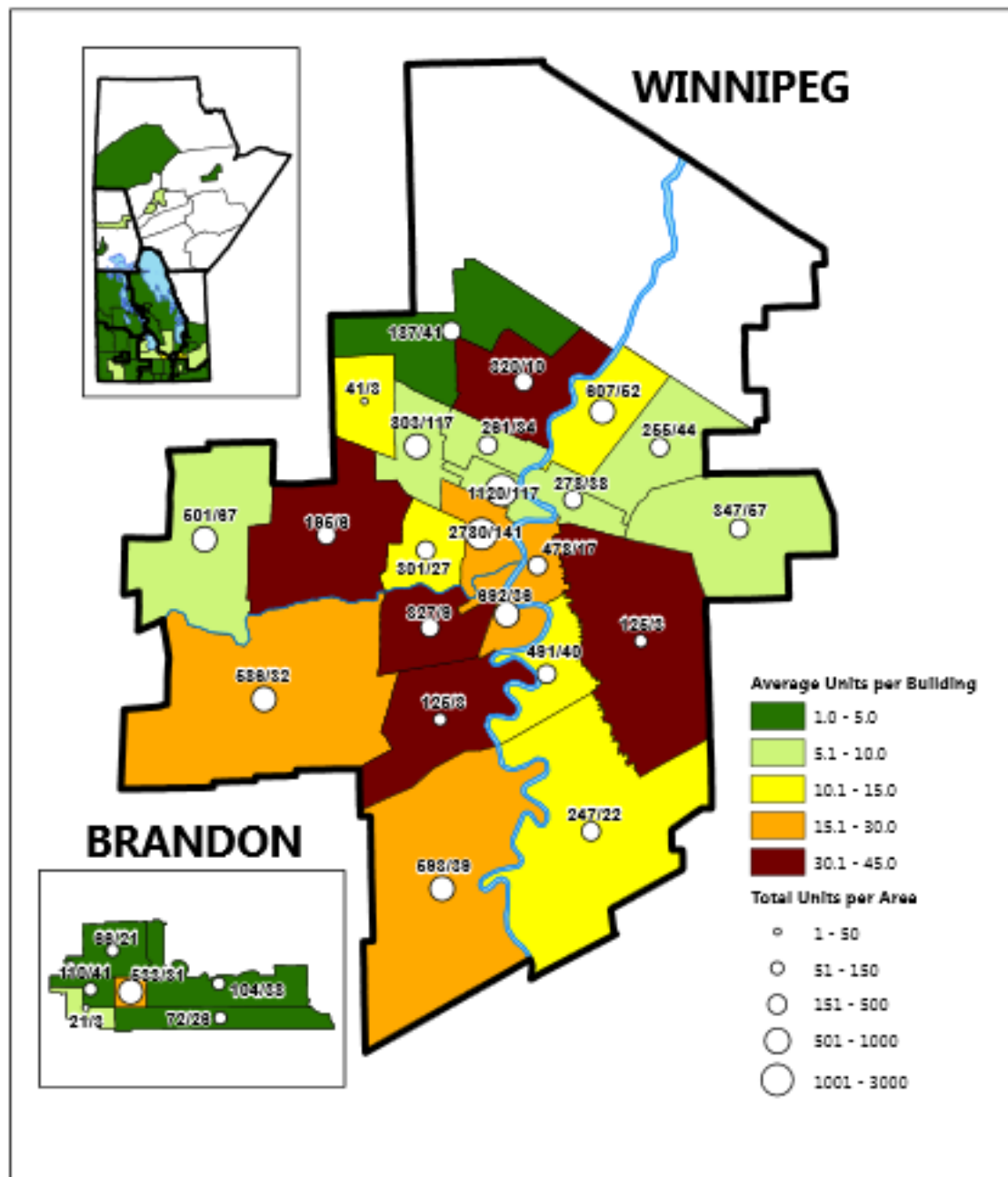
Manitoba Housing



- Department of Families
- Provides subsidies to ~34,900 households under various programs
 - Owns 17,600 units
 - **Manages ~13,100 units**
 - ~4,500 units are operated by non-profit/cooperative sponsor groups or property management agencies
 - Provides subsidies to 17,300 households who reside in market housing

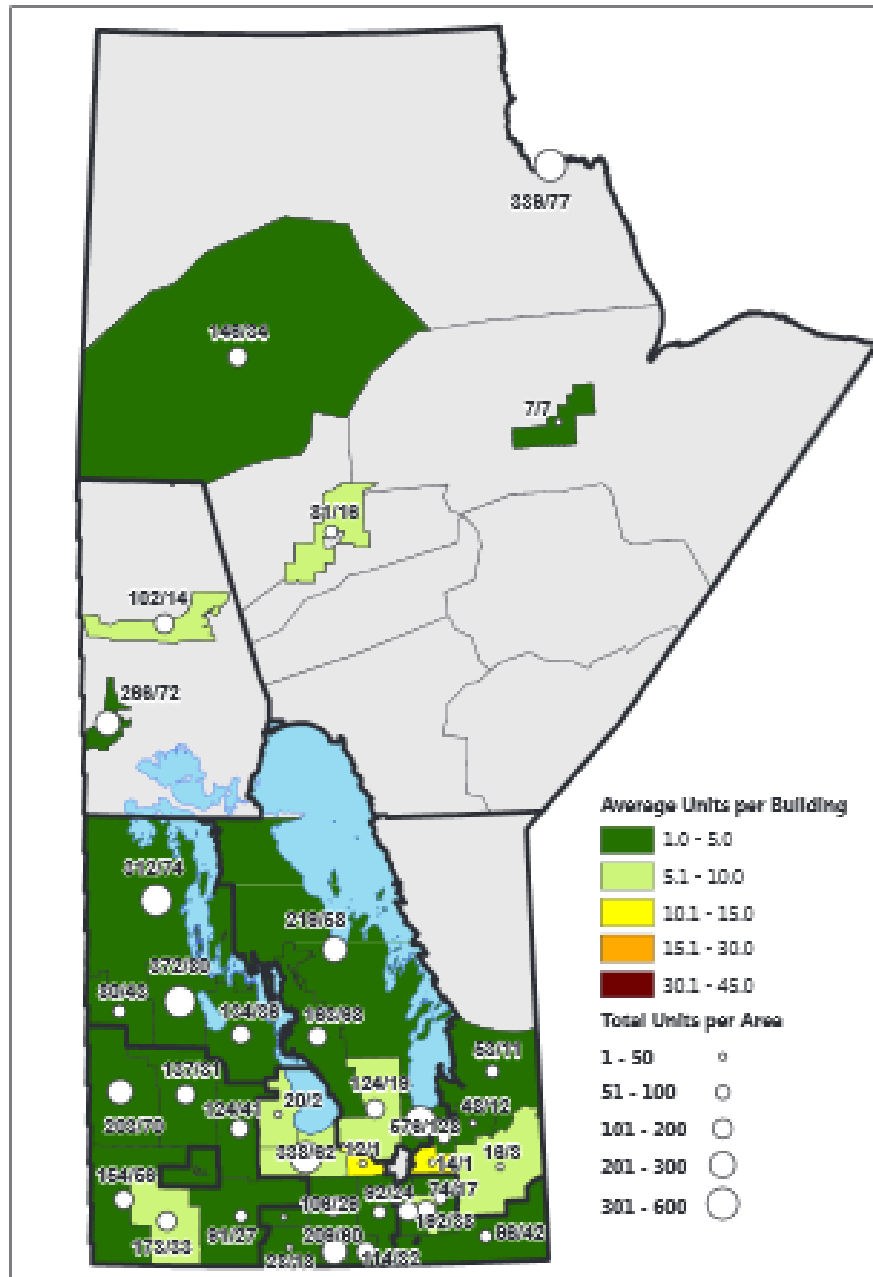


Figure 3.2: Map of the Number of Social Housing Units per Building in Winnipeg, 2009



* Housing managed by Manitoba Housing and Community Development
 Note: The first values that appear near the spheres represent the number of units in the area, while the second value represents the number of buildings

Figure 3.1: Map of the Number of Social Housing Units per Building in Manitoba, 2009



* Housing managed by Manitoba Housing and Community Development
 Note: The first values that appear near the circles represent the number of units in this area, while the second value represents the number of buildings.

(Finlayson et al, 2013)

Summary of the Literature

- Public housing may be a
 - “stepping stone to economic independence”
 - “legitimate long-term” housing option (Whelan, 2009)
- Reported duration of tenure in public housing varies from 2 to 18 years
- Duration varies across subpopulations



Research Motivation

- Socio-demographic characteristics of residents, including their age and income, are known to influence duration of tenure/moving
- Health characteristics of residents might also influence duration of tenancy/moving and the reason for moving out, but there has been no previous research on this topic



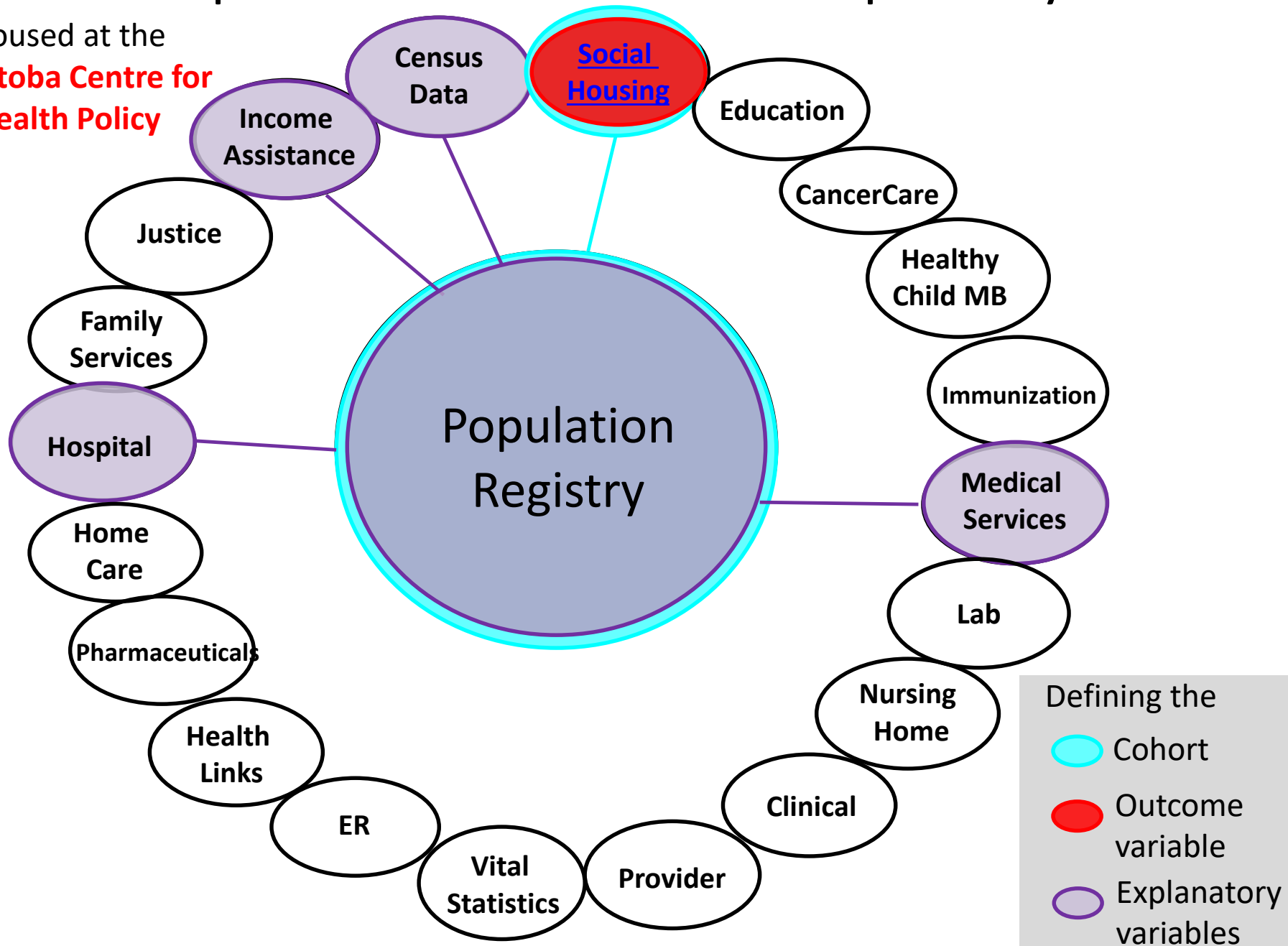
Research Objectives & Hypotheses

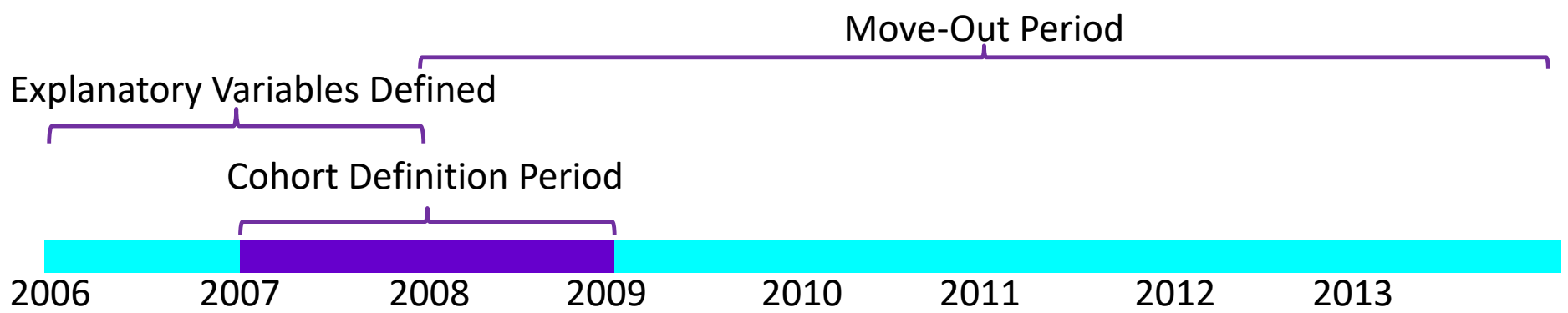
Objective	Hypotheses
<p>To identify predictors of moving out of public housing</p> <p>Test for differences by move-out reason (i.e., voluntary versus forced)</p>	<ul style="list-style-type: none">• Individuals who are older, less healthy, and receive income assistance would be least likely to move• Individuals who are residentially mobile would be more likely to move• Being evicted would be associated with prior residential mobility and poor mental health



Population Research Data Repository

Housed at the
**Manitoba Centre for
Health Policy**





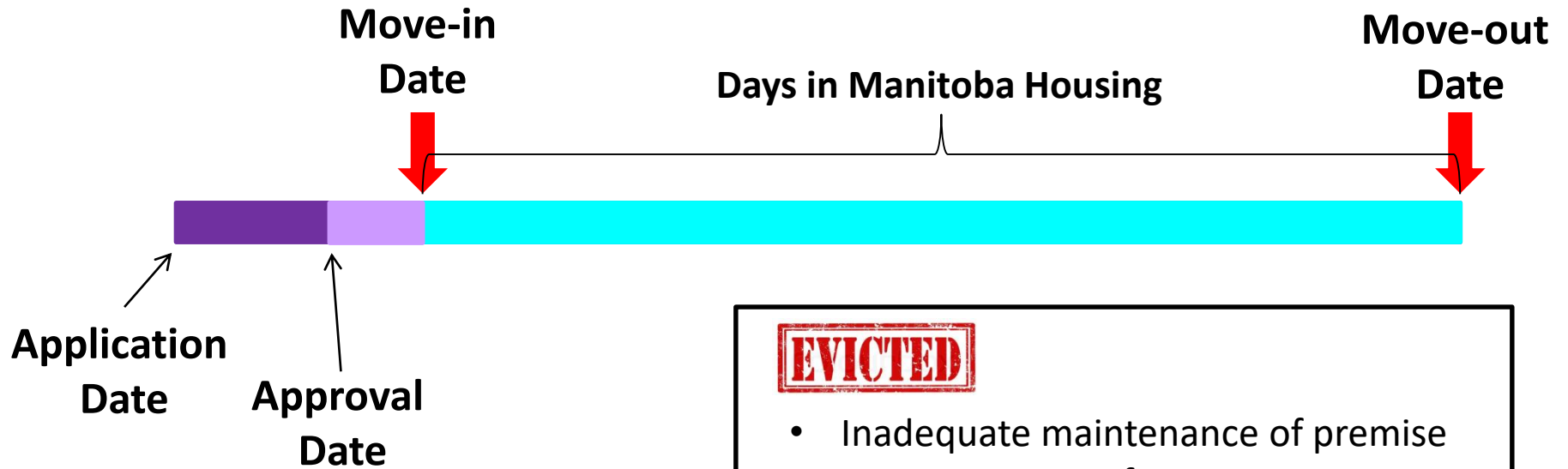
Inclusion Criteria:

- Primary applicants to MB Housing who moved in during 2007 or 2008
- Resided at least one month
- Registered with the MB Health Insurance Plan in the year prior to moving in
- 18+ years of age

Exclusion Criteria

- Reside in MB Housing within 2 years prior to the 2007/2008 move-in date
- A public housing resident in the northern MB town of Churchill

Manitoba Housing Records



EVICTED

- Inadequate maintenance of premise
- Notice to vacate for rent arrears or damages
- Notice to vacate due to nuisance/disturbance/management decision
- Sheriff eviction
- Safer communities eviction

Move-out Reason Variable



EVICTED



Explanatory Variables

Categories	Variables	Data Sources
Demographic	Sex & Age Group	Population Registry
Geographic	Region of Residence	Population Registry
Economic	Income Quintile & Receipt of Income Assistance	Statistics Canada Census Social Assistance Management Information Network
Residential Mobility	Change of Postal Code	Population Registry
Health Status	Chronic Physical Illness, Injury, Mental Disorder, & Substance Use Disorder	Physician Billing Claims & Hospital Discharge Abstracts
Healthcare Use	Hospitalizations, Continuity of Care, Physician Visits	Physician Billing Claims & Hospital Discharge Abstracts



Analysis

- Descriptives to characterize the cohort
- Multivariable Cox Proportional Hazards regression model
- Residents were censored at death or end of the study period
- Modeled voluntarily moving out and eviction (versus did not move out)
- Report adjusted hazard ratios (aHRs) and 95% confidence intervals (95% CIs)



Flow Chart for Construction of the Study Cohort

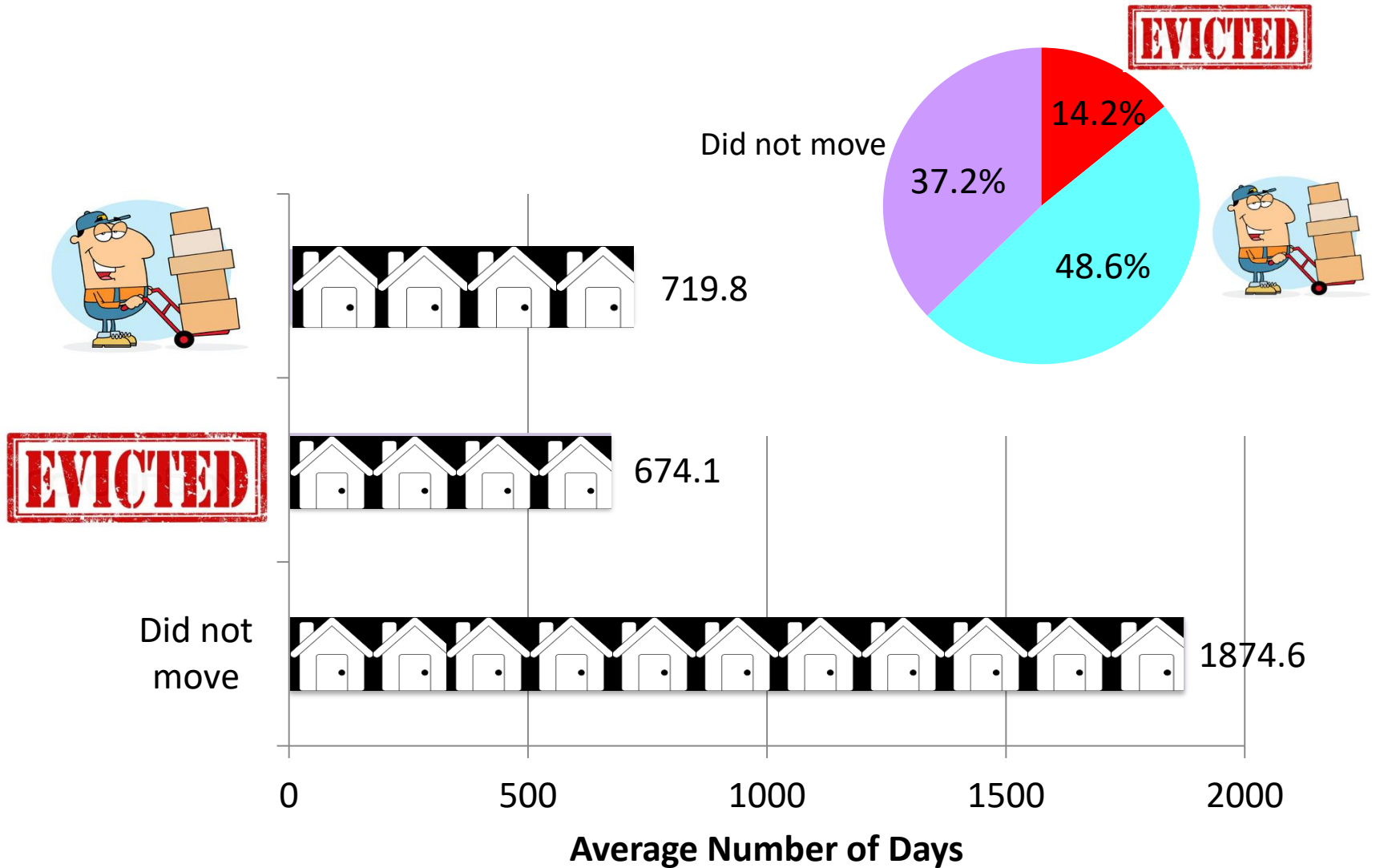
4789 applicants moved in between January 1, 2007 & December 31, 2008 and resided ≥ 30 days

1658 (34.6%)
applicants excluded

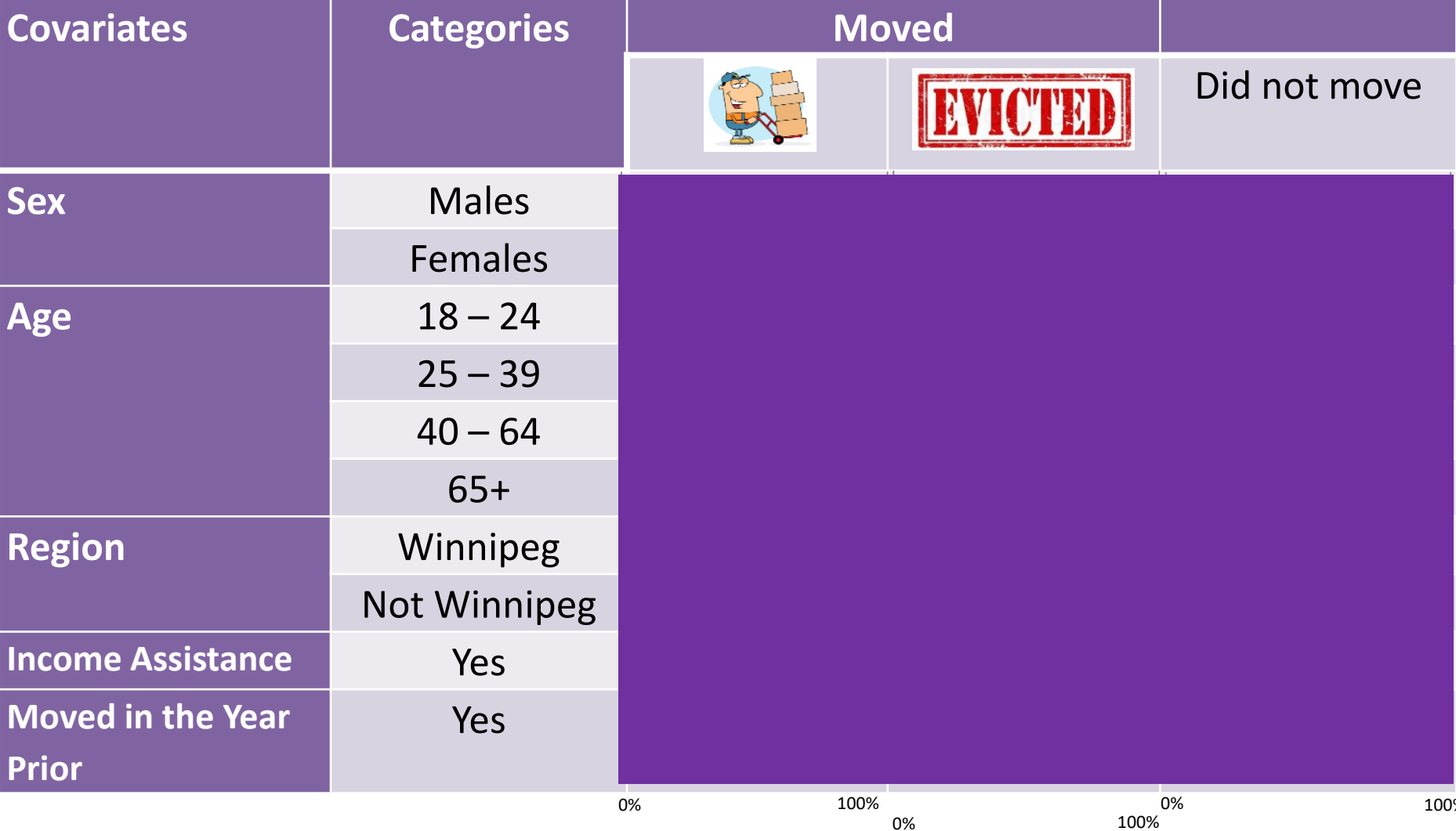
3131 (65.4%) applicants



Average Number of Days in Public Housing

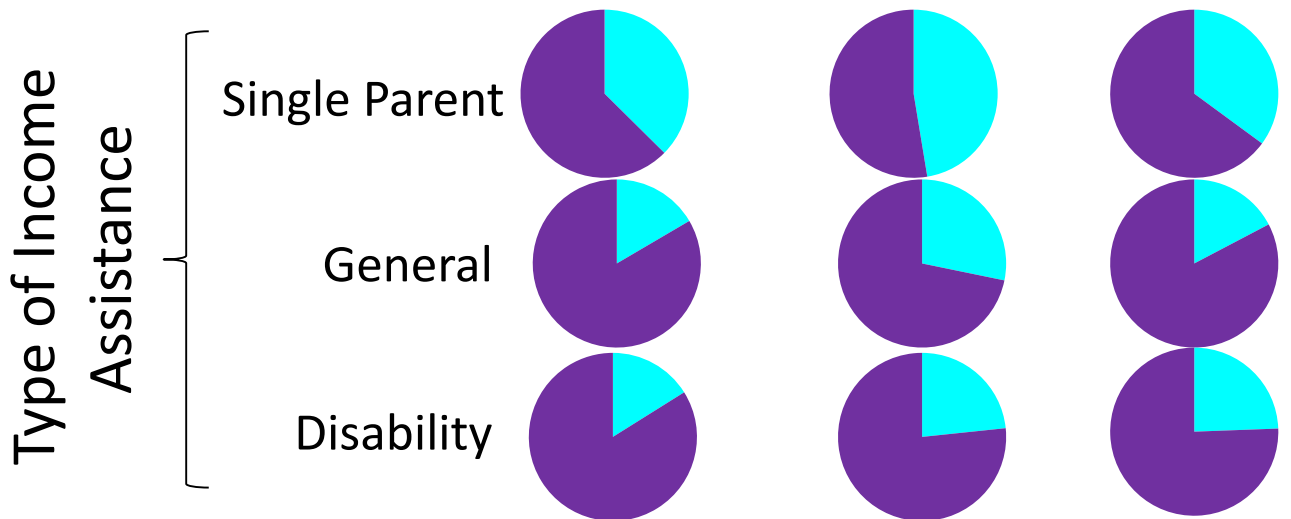
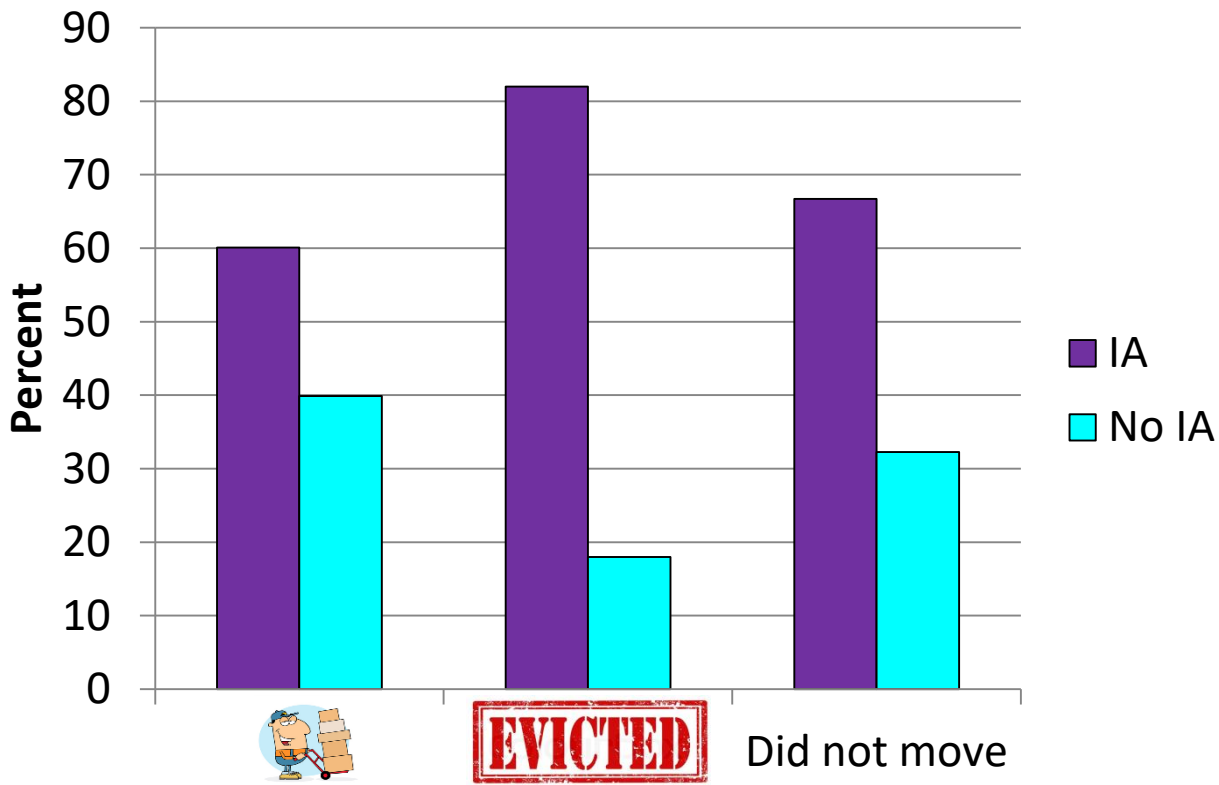


Characteristics of the Cohort by Move-Out Group



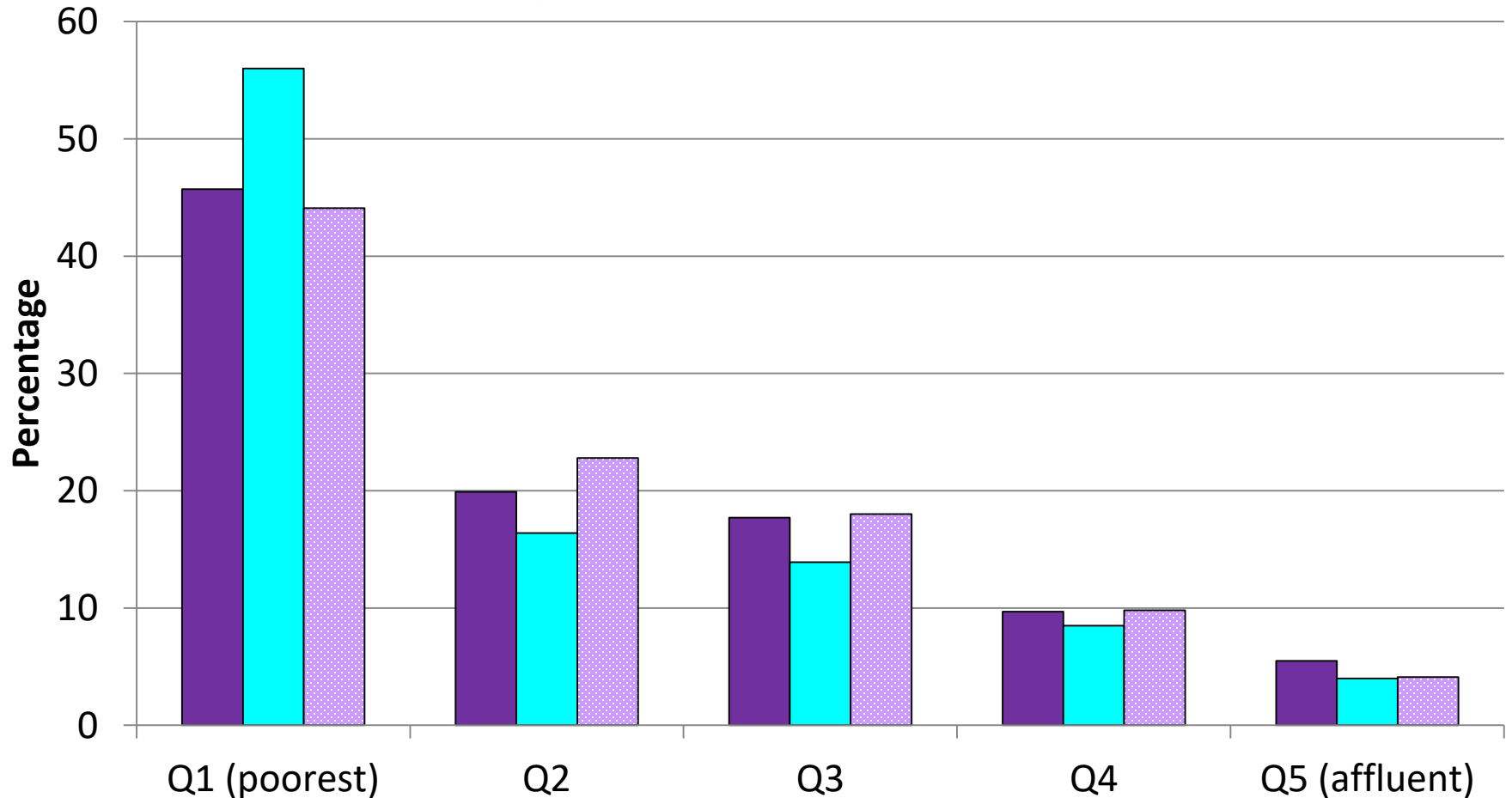
*Values are percentages

Receipt of Income Assistance (IA) by Mover Group





Categories are not mutually exclusive

Income Quintile by Mover Group



*Values may not total to a 100% due to unassigned postal codes or an area having a small non-institutionalised population.

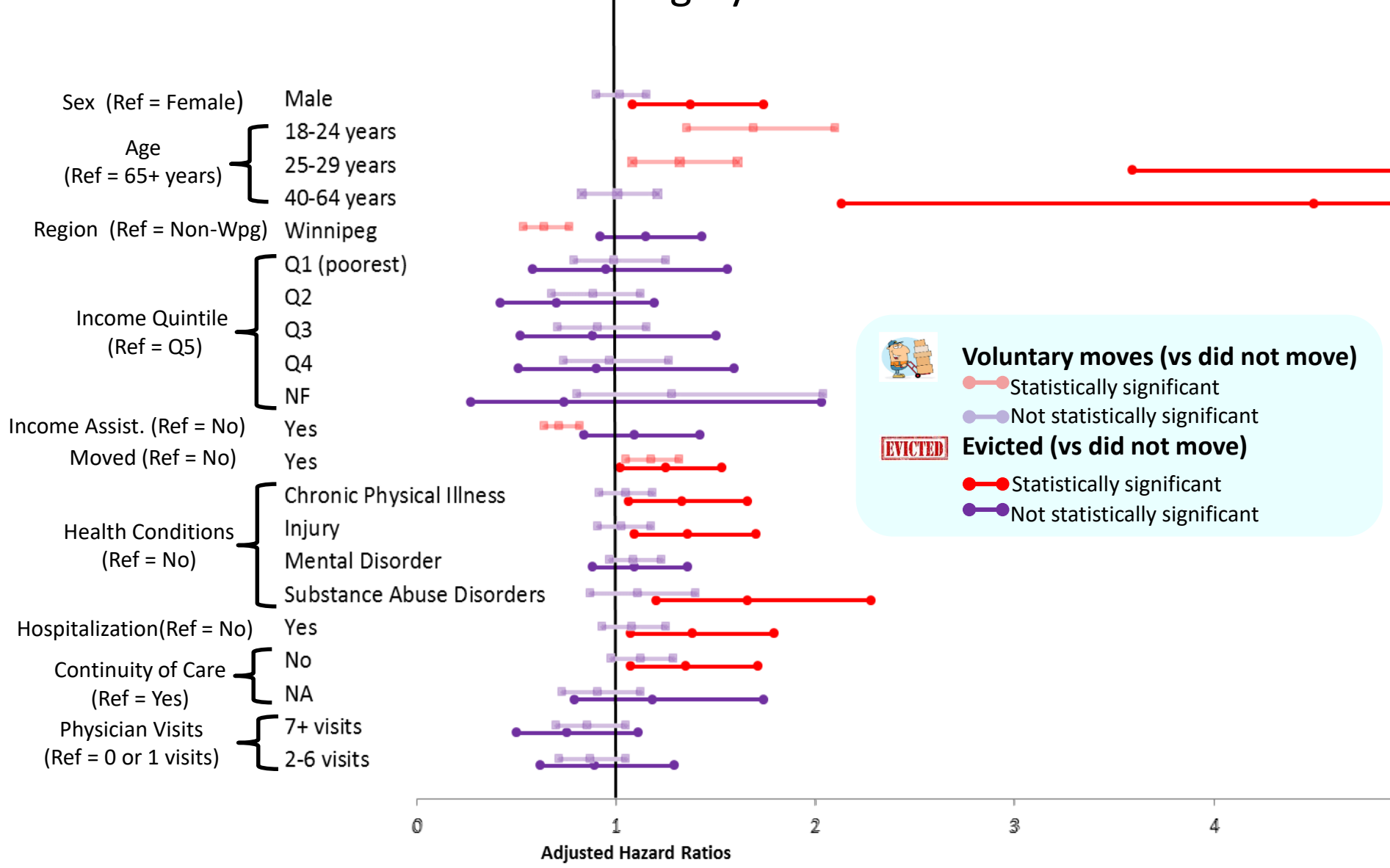
Characteristics of the Cohort by Move-Out Group

Covariates	Categories	Moved		Did not move
				
Health Status	Chronic Physical Disorder			
	Injury			
	Mental Disorder			
	Substance Use Disorder			
Hospitalized	Yes			
Emergency	0			
Department Visits (Winnipeg residents)	1			
	2+			

*Values are percentages

Mean # of General Practitioners Visited (SD)	7.0 (6.6)	7.9 (8.3)	6.8 (6.2)
Mean # of Specialists Visited (SD)	2.3 (4.8)	2.6 (4.3)	2.6 (5.1)

Adjusted Hazards Ratios (HRs) and 95% Confidence Intervals for Moving Out of Public Housing by Move-Out Reason



Summary of Key Findings from the Multivariable Cox Proportional Hazards Models

Variable	Voluntary Moves	Evicted Moves
Sex (males)	-	↑
Age	↑	↑
Region (Winnipeg)	↓	-
Income Quintile	-	-
Income Assistance	↓	-
Residential Mobility	↑	↑
Chronic Physical Illness	-	↑
Injury	-	↑
Mental Disorder	-	-
Substance Use Disorders	-	↑
Hospitalizations	-	↑
Continuity of Care (No)	-	↑
Physician Visits	-	-

↑ = Increased risk
 ↓ = Decreased risk
 - = Not significantly associated

Compared to not moving

Summary of Findings

- For movers, average duration of tenancy was slightly less than 2 years
- Substantial proportion of public housing residents have very long tenancies
- Movers differ from non-movers on multiple characteristics
- Some socioeconomic characteristics were associated with moving out of public housing voluntarily
- Health status and healthcare use were not associated with voluntarily moving out of public housing, but were associated with being evicted



Policy Implications

- Understanding tenancy behavior is important for planning future needs for public housing
- Forced moves have negative consequences
- Preventing eviction has health, social, and economic benefits for tenants, landlords, and taxpayers



Policy Implications

- Early detection of at-risk individuals is important; healthcare system may have a role to play
- Support housing stability by creating capacity to direct services to tenants at greatest risk of eviction
- Strategically locate health and social services
- Support health and wellness programs in public housing



Future Research

- Include characteristics of the household members or household-level or building/project-level characteristics
- Investigate outcomes of residents when they move out of public housing (voluntarily and forced)
- Qualitative study to investigate the impact of moving out/being evicted



Disclaimer

The authors acknowledge the Manitoba Centre for Health Policy for use of data contained in the Population Health Research Data Repository under project #2015-002 (HIPC#2014/2015.29). The results and conclusions are those of the authors and no official endorsement by the Manitoba Centre for Health Policy, Manitoba Health, Seniors, & Active Living, or other data providers is intended or should be inferred. Data used in this study are from the Population Research Data Repository housed at the Manitoba Centre for Health Policy, University of Manitoba and were derived from data provided by Manitoba Health, the Winnipeg Regional Health Authority, and the Department of Families.



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Thank You

- Hinds, A. M., Bechtel, B., Distasio, J., Roos, L. L., & Lix, L. M. (2017). Duration of public housing tenancy: A population-based investigation. **Accepted to the *Canadian Journal of Community Mental Health*.**
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