

SUPPLEMENTAL MATERIAL

Data S1.

SUPPLEMENTAL METHODS

Modified Charlson Score Generation: A modified Charlson Comorbidity Index (CCI) score was calculated based on results from medical history questionnaire. Because the comorbidities included in the self-report questionnaire used did not correspond exactly to Charlson's original definitions, some conditions were excluded (Congestive heart failure, peripheral vascular disease, hemiplegia, connective tissue disease and diabetes with end organ damage). For conditions where severity variables were not available (peptic ulcer disease, moderate to severe liver disease), low and high estimates of the Charlson index for each patient was computed by weighing each answer for conditions with the lowest and highest possible Charlson weight. A previous study using this method showed no difference in mortality outcomes between the high and low estimates so the high estimates were used here.¹ The score was further modified to remove points given for previous strokes to allow for further analysis to generate a modified CCI used for analysis to adjust for co-morbidity.

Table S1. Neuroimaging protocol.

	ACQ Matrix	FOV	REC Matrix	REC Voxel (mm)	slices	slice thickness (mm)	gap (mm)	TR (ms)	TE (ms)	SENSE	Coil	Flip Angle	TI (ms)
3D T1 Sagittal	256 x 250	256 x 256	256 x 256	1.0 x 1.0	190	1	0	7.6	3.5	YES	SENSE- Head-8	8	1051
SWI Axial	444 x 216	200 x 151.351	512 x 512	0.39 x 0.39	96	2	0	30	25	YES	SENSE- Head-8	17	
FLAIR Axial	256 x 203	240 X 191.25	512 x 512	0.47 x 0.47	50	3	0	11000	125	NO	SENSE- Head-8	90	2800

Table S2. Infarct Location.

Stroke Location	Total	R	L	Bilateral
Corona radiata/centrum semiovale	3	2	1	0
Internal capsule	0	0	0	0
Caudate	7	3	4	0
Lentiform	1	0	1	0
Thalamus	1	0	1	0
Midbrain	0	0	0	0
Pons	1	0	1	0
Medulla	0	0	0	0
Cerebellum	6	2	3	2
ACA territory embolic	1	1	0	0
MCA territory embolic	1	0	1	0
PCA territory embolic	1	0	1	0
ACA/MCA watershed	1	0	0	1
MCA/PCA watershed	0	0	0	0
Other or multiple (specify)*	2	1	0	0
Total	25	9	13	3

*1: R external capsule and pons; 2: Multiple lacunes in external capsule watershed

region

Table S3. Logistic Regression Model.

	Beta	Standard Error	p value	OR	95% CI for Beta	
					Lower	Upper
Age	.075	.026	.004	1.078	1.024	1.135
Total Homelessness Duration	-.074	.062	.234	.928	.822	1.049

Table S4. Demographics in Vancouver studies of vulnerably-housed and homeless participants.

Measure	HOTEL (2008-2011) imaging participants at baseline N=228	Lewis et al. (2007-2008) N=628²	Shannon et al. (2003-2004) N=1813³	Palepu et al. (2009) N=396⁴
Sampling	Community-based (all consenting tenants) at SROs	Stratified random sample of SROs	Facility-based at SROs	Randomly selected participants from 10 SROs (n=199) and homeless participants from shelters and meal programs (n=197)
Age (years)	46.4 (mean) SD 9.4	46 (mean)	42 (median)	42.0 (mean) SD 10.2
Sex (Male)	176/228 (77%)	496/628 (79%)	1375/1800 (76%)	244/393 (62%)
White	133/227 (59%)	426/628 (68%)		222/383 (58%)
Indigenous	69/227 (30%)	105/628 (17%)	498/1813 (28%)*	105/383 (27%)
Mixed/Other	25/227 (11%)	97/628 (15%)		56/383 (15%)
Average monthly income, CAD	\$800 (median)	\$1109 (mean)		\$1074 (median)

Previous history of homelessness	165/225 (73%)	327/628 (52%)	512/1812 (28%)†	
0-8 years	45/228 (20%)	69/628 (11%)		
8-11 years	126/228 (55%)	276/628 (44%)		178/391 (46%)
12 years	32/228 (14%)	138/628 (22%)		99/391 (25%)
>12 years	25/228 (11%)	138/628 (22%)		114/391 (29%)
Active Smoker	213/227 (94%)	481/628 (77%)		
Injection drug use in past 1-6 months	125/228 (55%)		718/1813 (40%)	
Current alcohol dependence or problematic use	42/228 (18%)	126/628 (20%)		60/396 (15%)
Positive HIV status	39/228 (17%)		462/1813 (26%)	
Previous HCV infection	150/228 (66%)		868/1813 (48%)	

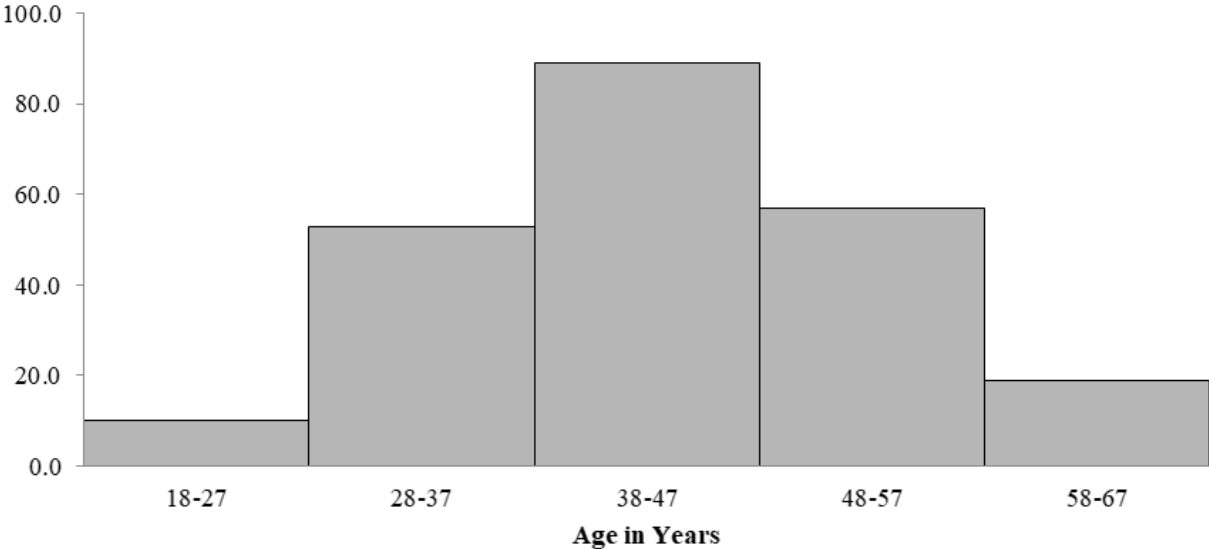
*Indigenous versus non-Indigenous reported only

Table S5. Demographics in Cross-Canada studies of vulnerably-housed and homeless participants.

Measure	HOTEL imaging participants at baseline (2008-2011)	Health and Housing in Transition Study (2009) ^{4,5}			
		Vancouver, Toronto, Ottawa N=1192	Vancouver N=396	Toronto N=399	Ottawa N=396
	N=228				
Sampling	Community-based (all consenting tenants) at SROs	Randomly selected participants from 10 SROs or rooming houses (due to difficulties with access, modified to include meal programs, community health centres, drop-in centres); for homeless, randomly selected shelters and meal programs			
Age (years)	46.4 (mean) SD 9.4	(values presented as groups rather than mean)	42.0 (mean) SD 10.2	43.5 (mean) SD 9.9	41.1 (mean) SD 11.4
Sex (Male)	176/228 (77%)	781/1188 (66%)	244/393 (62%)	258/399 (65%)	278/395 (70%)
White	133/227	722/1156	222/383	203/379	297/393

	(59%)	(62%)	(58%)	(54%)	(76%)
Indigenous	69/227 (30%)	205/1156 (18%)	105/383 (27%)	52/379 (14%)	47/393 (12%)
Mixed/Other	25/227 (11%)	229/1156 (20%)	56/383 (15%)	124/379 (33%)	49/393 (12%)
Monthly Income, median CAD	\$800	\$900	\$1074	\$770	\$825
Educational Attainment <12 years	171/228 (75%)	529/1183 (45%)	178/391 (46%)	170/397 (43%)	181/394 (46%)
Educational Attainment =12 years	32/228 (14%)	277/1183 (23.4%)	99/391 (25%)	90/397 (23%)	87/394 (22%)
Educational Attainment >12 years	25/228 (11%)	377/1183 (32%)	114/391 (29%)	137/397 (34%)	126/394 (32%)

Figure S1. Age Distribution of Participants.



SUPPLEMENTAL REFERENCES:

1. Chaudhry S, Jin L, Meltzer D. Use of a self-report-generated charlson comorbidity index for predicting mortality. *Med Care*. 2005;43:607-615.
2. Lewis M, Boyes K, McClanaghan D, Copas J. Downtown eastside demographic study of sro and social housing tenants. April 2008. Available Online at: http://www.vancouveragreement.ca/wp-content/uploads/080600_DTES-Demographic-Study-Final.pdf
3. Shannon K, Ishida T, Lai C, Tyndall MW. The impact of unregulated single room occupancy hotels on the health status of illicit drug users in vancouver. *International Journal of Drug Policy*. 2006;17:107-114.
4. Palepu A, Gadermann A, Hubley AM, Farrell S, Gogosis E, Aubry T, Hwang SW. Substance use and access to health care and addiction treatment among homeless and vulnerably housed persons in three canadian cities. *PLoS One*. 2013;8:e75133.
5. Hwang SW, Aubry T, Palepu A, Farrell S, Nisenbaum R, Hubley AM, Klodawsky F, Gogosis E, Hay E, Pidlubny S, Dowbor T, Chambers C. The health and housing in transition study: A longitudinal study of the health of homeless and vulnerably housed adults in three canadian cities. *Int J Public Health*. 2011;56:609-623.