## SENSITIVITY ANALYSES: Comparison of the 2 groups (chronic v. no chronic condition) across waves

## Aim:

This document shows the sensitivity analysis in order to demonstrate that the independent sample across survey rounds are similar enough in terms of demographics so that they can be compared. Because we analyzed independent sub-samples of a representative survey across 6 time points, we compared these samples on the main demographic characteristic within each group: chronic and no chronic health condition. Individuals with chronic health condition did not vary on any variables. Individuals with no chronic health conditions showed minor discrepancies in age, sex, and educational distributions between separate waves. The complete table output is available on the study repository. See below for the exact breakdowns and details.

TABLE 1: Young adults with chronic health conditions across survey rounds/waves

No significant differences were observed.

##	Stratified by wave								
##		2		3		4			
##	n	277		293		299			
##	age_yrs (mean (SD))	29.99	(5.83)	30.16	(5.64)	29.72	(6.08)		
##	sex (%)								
##	Female	177	(63.9)	177	(60.8)	178	(59.7)		
##	Male	100	(36.1)	114	(39.2)	120	(40.3)		
##	Other	0	(0.0)	0	(0.0)	0	(0.0)		
##	edu (%)								
##	College	135	(49.5)	133	(45.9)	144	(48.3)		
##	Graduate	63	(23.1)	64	(22.1)	58	(19.5)		
##	Never been	0	(0.0)	2	(0.7)	0	(0.0)		
##	Primary	7	(2.6)	7	(2.4)	2	(0.7)		
##	Secondary	68	(24.9)	84	(29.0)	94	(31.5)		
##	<pre>province_full (%)</pre>								
##	Alberta	29	(10.5)	47	(16.0)	38	(12.7)		
##	British Columbia	37	(13.4)	40	(13.7)	40	(13.4)		
##	Manitoba	7	(2.5)	9	(3.1)	12	(4.0)		
##	New Brunswick	5	(1.8)	10	(3.4)	7	(2.3)		
##	Newfoundland	3	(1.1)	5	(1.7)	5	(1.7)		
##	Nova Scotia	8	(2.9)	4	(1.4)	8	(2.7)		
##	Ontario	116	(41.9)	103	(35.2)	106	(35.5)		
##	Prince Edward Island	d 1	(0.4)	0	(0.0)	0	(0.0)		
##	Quebec	62	(22.4)	64	(21.8)	77	(25.8)		
##	Saskatchewan	9	(3.2)	11	(3.8)	6	(2.0)		
##	chronic_descriptive (%	)							
##	Autoimmune	36	(13.0)	31	(10.6)	38	(12.7)		

```
9 (3.2)
                                                 6 (2.0)
                                                               10 (3.3)
##
        Cancer
##
        Diabetes
                                 14 (5.1)
                                                16 (5.5)
                                                               22 (7.4)
                                                63 (21.5)
##
        Heart disease
                                 51 (18.4)
                                                               54 (18.1)
##
                                                43 (14.7)
        Hypertension
                                 40 (14.4)
                                                               43 (14.4)
##
        Lung disease
                                 96 (34.7)
                                               106 (36.2)
                                                              103 (34.4)
##
        Obesity
                                 28 (10.1)
                                                17 (5.8)
                                                               23 (7.7)
##
        Other
                                   3 (1.1)
                                                11 (3.8)
                                                                6(2.0)
##
                                               119 (40.6)
     chronic multi = 1 (%)
                                108 (39.0)
                                                              119 (39.8)
##
     any m health = 1 (%)
                                 136 (49.1)
                                               142 (48.5)
                                                              156 (52.2)
##
     hoinc (%)
##
        Bottom 3rd
                                 75 (29.6)
                                                91 (36.0)
                                                               87 (34.0)
##
        Middle 3rd
                                140 (55.3)
                                               138 (54.5)
                                                              148 (57.8)
                                                24 (9.5)
##
        Top 3rd
                                 38 (15.0)
                                                               21 (8.2)
##
                             Stratified by wave
##
                                                            7
                                                                                  test
                                                                           p
##
                                237
                                               209
                                                              229
##
     age_yrs (mean (SD))
                              30.69 (5.78)
                                             29.56 (6.11)
                                                            30.48 (5.67)
                                                                            0.254
##
     sex (%)
                                                                            0.221
##
        Female
                                151 (63.7)
                                               129 (62.6)
                                                              142 (62.0)
##
        Male
                                 86 (36.3)
                                                77 (37.4)
                                                               85 (37.1)
##
        Other
                                   0 (0.0)
                                                 0 (0.0)
                                                                2 (0.9)
##
     edu (%)
                                                                            0.129
##
        College
                                122 (51.9)
                                                96 (45.9)
                                                              119 (52.7)
##
        Graduate
                                 44 (18.7)
                                                35 (16.7)
                                                               40 (17.7)
##
        Never been
                                                                0(0.0)
                                  2 (0.9)
                                                 0 (0.0)
                                                 2 (1.0)
##
        Primary
                                  7 (3.0)
                                                                3 (1.3)
##
        Secondary
                                 60 (25.5)
                                                76 (36.4)
                                                               64 (28.3)
##
                                                                            0.810
     province_full (%)
##
        Alberta
                                 24 (10.1)
                                                26 (12.4)
                                                               32 (14.0)
##
        British Columbia
                                 30 (12.7)
                                                33 (15.8)
                                                               37 (16.2)
##
        Manitoba
                                  11 (4.6)
                                                 6(2.9)
                                                                7 (3.1)
##
        New Brunswick
                                   4 (1.7)
                                                 3(1.4)
                                                                5 (2.2)
##
        Newfoundland
                                   6(2.5)
                                                 1 (0.5)
                                                                0 (0.0)
##
        Nova Scotia
                                   6 (2.5)
                                                11 (5.3)
                                                                8 (3.5)
##
        Ontario
                                 92 (38.8)
                                                79 (37.8)
                                                               79 (34.5)
##
        Prince Edward Island
                                  1 (0.4)
                                                 1 (0.5)
                                                                0(0.0)
##
        Quebec
                                  56 (23.6)
                                                44 (21.1)
                                                               54 (23.6)
##
        Saskatchewan
                                  7 (3.0)
                                                 5 (2.4)
                                                                7 (3.1)
##
     chronic descriptive (%)
                                                                            0.113
##
        Autoimmune
                                 38 (16.0)
                                                35 (16.7)
                                                               29 (12.7)
##
        Cancer
                                  2(0.8)
                                                 3(1.4)
                                                                4 (1.7)
##
        Diabetes
                                 12 (5.1)
                                                 9 (4.3)
                                                               18 (7.9)
##
                                                29 (13.9)
                                                               27 (11.8)
        Heart disease
                                 31 (13.1)
##
        Hypertension
                                 39 (16.5)
                                                25 (12.0)
                                                               41 (17.9)
##
                                 86 (36.3)
                                                78 (37.3)
                                                               79 (34.5)
        Lung disease
##
                                                22 (10.5)
                                                               21 (9.2)
        Obesity
                                 26 (11.0)
##
        Other
                                  3 (1.3)
                                                 8 (3.8)
                                                               10 (4.4)
##
                                                75 (35.9)
                                                                            0.368
     chronic_multi = 1 (%)
                                 89 (37.6)
                                                               73 (31.9)
##
     any_m_health = 1 (%)
                                137 (57.8)
                                               115 (55.0)
                                                              110 (48.0)
                                                                            0.174
##
     hoinc (%)
                                                                            0.121
##
        Bottom 3rd
                                 62 (32.3)
                                                60 (33.7)
                                                               49 (24.1)
                                110 (57.3)
##
        Middle 3rd
                                               102 (57.3)
                                                              131 (64.5)
##
        Top 3rd
                                 20 (10.4)
                                                16 (9.0)
                                                               23 (11.3)
```

## TABLE 2: Young adults with no chronic health conditions across survey rounds/waves $\,$

There exist minor differences between some waves in variables age, sex, education level, and perceived income status.

## Warning in ModuleReturnVarsExist(vars, data): These variables only have NA/NaN:
## chronic\_descriptive Dropped

 $\mbox{\tt \#\#}$  Warning in ModuleReturnVarsExist(factorVars, data): These variables only have  $\mbox{\tt \#\#}$  NA/NaN: chronic\_descriptive Dropped

##	Stratified by wave										
##		2		3		4					
##	n	857		670		761					
##	age_yrs (mean (SD))	28.94	(5.89)	29.25	(5.89)	28.36 (6.15)					
##	sex (%)										
##	Female	498	(58.3)	411	(61.7)	471 ( 62.1)					
##	Male	356	(41.7)	255	(38.3)	287 ( 37.9)					
##	Other	0	( 0.0)	0	( 0.0)	0 ( 0.0)					
##	edu (%)										
##	College	473	(55.6)	366	(55.1)	378 ( 50.1)					
##	Graduate	139	(16.3)	111	(16.7)	116 ( 15.4)					
##	Never been	0	( 0.0)	0	( 0.0)	1 ( 0.1)					
##	Primary		( 0.2)		( 0.3)	8 ( 1.1)					
##	Secondary	237	(27.8)	185	(27.9)	251 ( 33.3)					
##	<pre>province_full (%)</pre>										
##	Alberta	90	(10.5)	68	(10.1)	110 ( 14.5)					
##	British Columbia	126	(14.7)	102	(15.2)	108 ( 14.2)					
##	Manitoba	30	(3.5)	20	( 3.0)	22 ( 2.9)					
##	New Brunswick	15	( 1.8)	20	( 3.0)	16 ( 2.1)					
##	Newfoundland	10		7	( 1.0)	5 ( 0.7)					
##	Nova Scotia	23	(2.7)	13	( 1.9)	16 ( 2.1)					
##	Ontario	324	(37.8)	254	(37.9)	286 ( 37.6)					
##	Prince Edward Island	0	( 0.0)	3	(0.4)	2 ( 0.3)					
##	Quebec	213	(24.9)	158	(23.6)	177 ( 23.3)					
##	Saskatchewan	26	( 3.0)	25	(3.7)	19 ( 2.5)					
##	<pre>chronic_multi = 0 (%)</pre>	857	(100.0)		(100.0)	761 (100.0)					
##	$any_m_health = 1 (%)$	166	(19.4)	136	(20.3)	155 ( 20.4)					
##	hoinc (%)										
##	Bottom 3rd		(24.9)		(26.7)						
##	Middle 3rd		(58.8)		(60.4)	393 (62.7)					
##	Top 3rd	124	(16.3)	72	(13.0)	66 ( 10.5)					
##	## Stratified by wave										
##		5		6		7	p				
##	n	814		766		758					
##	age_yrs (mean (SD))	29.95	(5.89)	29.06	(6.03)	29.20 (5.90)	<0.001				
##	sex (%)						0.019				
##	Female	496	(61.0)		(59.0)	433 ( 57.1)					
##	Male		(39.0)		(41.0)	322 ( 42.5)					
##	Other	0	( 0.0)	0	( 0.0)	3 ( 0.4)					
##	edu (%)						0.011				
##	College	412	(50.9)	393	(51.6)	377 ( 49.9)					

```
154 ( 19.0)
                                               158 ( 20.7)
                                                               160 (21.2)
##
        Graduate
##
        Never been
                                  0 ( 0.0)
                                                 0 ( 0.0)
                                                                 0 ( 0.0)
##
        Primary
                                  7 ( 0.9)
                                                 5 ( 0.7)
                                                                 9 (1.2)
##
        Secondary
                                236 ( 29.2)
                                               206 (27.0)
                                                               209 ( 27.7)
##
     province_full (%)
                                                                             0.838
                                 95 ( 11.7)
##
        Alberta
                                                91 (11.9)
                                                                90 (11.9)
##
        British Columbia
                                112 (13.8)
                                               122 (15.9)
                                                               111 ( 14.6)
                                 29 ( 3.6)
                                                31 ( 4.0)
                                                                27 ( 3.6)
##
        Manitoba
                                 18 ( 2.2)
                                                 8 ( 1.0)
##
        New Brunswick
                                                                 9 ( 1.2)
##
        Newfoundland
                                 10 ( 1.2)
                                                10 ( 1.3)
                                                                10 ( 1.3)
##
        Nova Scotia
                                 22 ( 2.7)
                                                21 ( 2.7)
                                                                14 ( 1.8)
##
                                311 ( 38.2)
                                               277 ( 36.2)
                                                               294 (38.8)
        Ontario
##
        Prince Edward Island
                                  2 ( 0.2)
                                                 3(0.4)
                                                                 2 ( 0.3)
##
                                190 (23.3)
        Quebec
                                               176 (23.0)
                                                               185 ( 24.4)
##
        Saskatchewan
                                 25 ( 3.1)
                                                27 ( 3.5)
                                                                16 ( 2.1)
##
     chronic_multi = 0 (%)
                                814 (100.0)
                                               766 (100.0)
                                                               758 (100.0)
                                                                                 NA
##
     any_m_health = 1 (%)
                                175 ( 21.5)
                                               167 (21.8)
                                                               183 ( 24.1)
                                                                             0.261
                                                                             0.075
##
     hoinc (%)
                                                               157 ( 25.0)
##
        Bottom 3rd
                                158 ( 22.9)
                                               144 ( 22.4)
        Middle 3rd
                                438 (63.5)
                                               417 (65.0)
                                                               394 (62.8)
##
##
        Top 3rd
                                 94 (13.6)
                                                81 (12.6)
                                                                76 (12.1)
##
                             Stratified by wave
##
                              test
##
     age_yrs (mean (SD))
##
##
     sex (%)
##
        Female
##
        Male
##
        Other
##
     edu (%)
##
        College
##
        Graduate
##
        Never been
##
        Primary
##
        Secondary
##
     province_full (%)
##
        Alberta
##
        British Columbia
##
        Manitoba
##
        New Brunswick
##
        Newfoundland
##
        Nova Scotia
##
        Ontario
##
        Prince Edward Island
##
        Quebec
##
        Saskatchewan
##
     chronic_multi = 0 (%)
##
     any_m_health = 1 (%)
##
     hoinc (%)
##
        Bottom 3rd
##
        Middle 3rd
##
        Top 3rd
```