CODEBOOK Robin Hood 2017-2018 21m-Follow up Survey

Updated May 18, 2023

[VAR: q7newyork]	PUNCH 1 2 97 98 99	Are you still a resident of New York City? RESPONSE Yes No No answer Don't know Refused to answer
[VAR: q7a1]	PUNCH 1 2 3 97 98 99	Do you currently live with a spouse or domestic partner (a live-in romantic partner)? RESPONSE Spouse Domestic partner Neither No answer Don't know Refused
[VAR: q7a2]	PUNCH 1 2 97 98 99	Do you have at least one biological or adopted child under the age of 18 who lives with you? RESPONSE Yes No No response Don't know Refused to answer
NOTE: J and F Module questions only asked of individuals who did not complete this survey late (q7late)		
[VAR: q7j1_1]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to YOU in the past 3 monthsyou moved? RESPONSE Yes No No answer Don't know Refused
[VAR: q7j1_2]	<u>PUNCH</u>	Which of the following, if any, have happened to YOU in the past 3 monthsyou had a child? RESPONSE

	1 2 97 98 99	Yes No No answer Don't know Refused
[VAR: q7j1_3]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to YOU in the past 3 monthssomeone moved into HH? RESPONSE Yes No No answer Don't know Refused to answer
[VAR: q7j1_4]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to YOU in the past 3 monthssomeone moved out HH? RESPONSE Yes No No answer Don't know Refused to answer
[VAR: q7j1_5]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to YOU in the past 3 monthsyou started a relationship? RESPONSE Yes No No answer Don't know Refused to answer
[VAR: q7j1_6]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to YOU in the past 3 monthsyou ended a relationship? RESPONSE Yes No No answer Don't know Refused to answer
[VAR: q7j1_7]		Which of the following, if any, have happened to YOU in the past 3 months

	PUNCH 1 2 97 98 99	you had a change in childcare? RESPONSE Yes No No answer Don't know Refused to answer
[VAR: q7j1_8]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to you or anyone in the HH in the past 3 monthstime taken off work? RESPONSE Yes No No answer Don't Know Refused to answer
[VAR: q7j2_1]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to you or anyone in the HH in the past 3 monthssomeone in HH started a new job? RESPONSE Yes No No answer Don't know Refused
[VAR: q7j2_2]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to you or anyone in the HH in the past 3 monthssomeone in HH lost a job? RESPONSE Yes No No answer Don't know Refused to answer
[VAR: q7j2_3]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to you or anyone in the HH in the past 3 monthssomeone in the HH started receiving benefits? RESPONSE Yes No No answer Don't know Refused to answer

[VAR: q7j2_4]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to you or anyone in the HH in the past 3 monthssomeone in HH benefits cut off? RESPONSE Yes No No answer Don't know Refused to answer
[VAR: q7j2_5]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to you or anyone in the HH in the past 3 monthssomeone in HH had a major expense? RESPONSE Yes No No answer Don't know Refused to answer
[VAR: q7j2_6]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to you or anyone in the HH in the past 3 monthssomeone in HH had an increase in income? RESPONSE Yes No No answer Don't know Refused to answer
[VAR: q7j2_7]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to you or anyone in the HH in the past 3 monthssomeone in HH had a decrease in income? RESPONSE Yes No No answer Don't know Refused to answer
[VAR: q7j2_8]	<u>PUNCH</u> 1 2 97	Which of the following, if any, have happened to you or anyone in the HH in the past 3 monthssomeone in HH had accident, injury, or illness? RESPONSE Yes No No answer

	98 99	Don't know Refused
[VAR: q7j2_9]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to you or anyone in the HH in the past 3 monthssomeone in HH was the victim of a crime? RESPONSE Yes No No answer Don't know Refused
[VAR: q7j2_11]	PUNCH 1 2 97 98 99	Which of the following, if any, have happened to you or anyone in the HH in the past 3 monthssomeone in HH lost or broke belongings? RESPONSE Yes No No answer Don't know Refused
[VAR: q7f2]	PUNCH 1 2 3 97 98 99	In the past 3 months how often did you worry that your food would run out before you had money to by more? RESPONSE Often Sometimes Never No answer Don't know Refused to answer
[VAR: q7f6]	PUNCH 1 2 97 98 99	In the past 3 months did you stay at a shelter, in an abandoned building, an automobile, or any other place not meant for regular housing, even for one night? RESPONSE Yes No No answer Don't know Refused to answer
[VAR: q7f8]		In the past three months was your phone, gas, or electricity turned off?

	PUNCH 1 2 97 98 99	RESPONSE Yes No No answer Don't know Refused to answer
[VAR: q7f9]	PUNCH 1 2 97 98 99	In the past 3 months, could you not go to the hospital because of the cost? RESPONSE Yes No No answer Don't know Refused to answer
[VAR: q7f10]	PUNCH 1 2 3 97 98 99	In the past 3 months, how often did you not have enough money at the end of the month or before you got your next paycheck. RESPONSE Often Sometimes Never No answer Don't know Refused to answer
[VAR: q7b1]	PUNCH 1 2 3 4 5 97 98 99	Would you say your health in general is RESPONSE Excellent Very Good Good Fair Poor No answer Don't know Refused
[VAR: q7b2]	PUNCH 1 2 3 4 5 97 98 99	In general, would you say your quality of life is RESPONSE Excellent Very Good Good Fair Poor No answer Don't know Refused

[VAR: q7b3]	PUNCH 1 2 3 4 5 97 98 99	In general, how would you rate your physical health? RESPONSE Excellent Very Good Good Fair Poor No answer Don't know Refused
[VAR: q7b4]	PUNCH 1 2 3 4 5 97 98 99	In general, how would you rate your mental health, including your mood and your ability to think? RESPONSE Excellent Very Good Good Fair Poor No answer Don't know Refused
[VAR: q7b5]	PUNCH 1 2 3 4 5 97 98 99	In general, how would you rate your satisfaction with your social activities and relationships? RESPONSE Excellent Very Good Good Fair Poor No answer Don't know Refused
[VAR: q7b6]	PUNCH 1 2 3 4 5 97	In general, please rate how well you carry out your usual social activities and roles. (This includes activities at home, at work and in your community, and responsibilities as a parent, child, spouse, employee, friend, etc.). RESPONSE Excellent Very Good Good Fair Poor No answer

	98 99	Don't know Refused
[VAR: q7b7]	PUNCH 1 2 3 4 5 97 98 99	To what extent are you able to carry out your everyday physical activities such as walking, climbing stairs, carrying groceries, or moving a chair? RESPONSE Completely Mostly Moderately A little Not at all No answer Don't know Refused
[VAR: q7b8]	PUNCH 1 2 3 4 5 97 98 99	How often have you been bothered by emotional problems such as feeling anxious, depressed, or irritable? RESPONSE Never Rarely Sometimes Often Always No answer Don't know Refused
[VAR: q7b9]	PUNCH 1 2 3 4 5 97 98 99	How would you rate your fatigue on average? RESPONSE None Mild Moderate Severe Very Severe No answer Don't know Refused
[VAR: q7b10]	PUNCH 0 1 2	How would you rate your pain on average? You can use a scale from 0 to 10 where 0 equals no pain and 10 equals the worst imaginable pain. RESPONSE 0 1 2 3

	4	4
	5	5
	6	6
	7	7
	8	8
	9	9
	10	10
	97	No answer
	98	Don't know
	99	Refused
		In the west 12 mouths have you stored everyight in a
[VAR: q7b11]		In the past 12 months have you stayed overnight in a
		hospital because of your own health?
	<u>PUNCH</u>	RESPONSE
	1	Yes
	2	No
	97	No answer
	98	Don't know
	99	Refused
[VAR: q7b12_1]		Has a doctor or other health professional ever told
		you that you have or had
		Asthma?
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
	97	No answer
	98	Don't know
	99	Refused
[VAR: q7b12_2]		Has a doctor or other health professional ever told
[VAIX. 47612_2]		
		you that you have or had
		Diabetes?
	<u>PUNCH</u>	RESPONSE
	1	Yes
	2	No
	0.7	A.1
	97	No answer
	97 98	No answer Don't know
	98	Don't know Refused
[VAR: q7b12_3]	98	Don't know
[VAR: q7b12_3]	98	Don't know Refused Has a doctor or other health professional ever told you that you have or had
[VAR: q7b12_3]	98	Don't know Refused Has a doctor or other health professional ever told
[VAR: q7b12_3]	98	Don't know Refused Has a doctor or other health professional ever told you that you have or had
[VAR: q7b12_3]	98 99	Don't know Refused Has a doctor or other health professional ever told you that you have or hadHypertension?
[VAR: q7b12_3]	98 99 <u>PUNCH</u>	Don't know Refused Has a doctor or other health professional ever told you that you have or hadHypertension? RESPONSE
[VAR: q7b12_3]	98 99 PUNCH 1 2	Don't know Refused Has a doctor or other health professional ever told you that you have or hadHypertension? RESPONSE Yes No
[VAR: q7b12_3]	98 99 PUNCH 1	Don't know Refused Has a doctor or other health professional ever told you that you have or hadHypertension? RESPONSE Yes

	99	Refused
[VAR: q7b12_4]	PUNCH 1 2 97 98 99	Has a doctor or other health professional ever told you that you have or hadHeart disease? RESPONSE Yes No No answer Don't know Refused
[VAR: q7b12_5]	PUNCH 1 2 97 98 99	Has a doctor or other health professional ever told you that you have or hadCancer? RESPONSE Yes No No answer Don't know Refused
[VAR: q7b12_6]	PUNCH 1 2 97 98 99	Has a doctor or other health professional ever told you that you have or had Arthritis? RESPONSE Yes No No answer Don't know Refused
[VAR: q7b12_7]	PUNCH 1 2 97 98 99	Has a doctor or other health professional ever told you that you have or had Migranes? RESPONSE Yes No No answer Don't know Refused
[VAR: q7b12_8]	<u>PUNCH</u> 1 2	Has a doctor or other health professional ever told you that you have or had Sleep disorder? RESPONSE Yes No

	97 98 99	No answer Don't know Refused
[VAR: q7b12_9]	PUNCH 1 2 97 98 99	Has a doctor or other health professional ever told you that you have or hadOther chronic condition RESPONSE Yes No No answer Don't know Refused
[VAR: q7b23]	PUNCH 1 2 97 98 99	During the past 30 days, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise? RESPONSE Yes No No answer Don't know Refused
[VAR: q7b24]	PUNCH 1 2 3 4 5 6 97 98 99	By yourself, and without using any special equipment, how difficult is it for you to walk a quarter of a mile – about 3 city blocks? Would you say RESPONSE Not at all difficult Only a little difficult Somewhat difficult Very difficult Can't do this activity Don't do this activity No answer Don't know Refused
[VAR: q7c2]	PUNCH 0 1 97 98 99	Sex of focal child? RESPONSE Female Male No answer Don't know Refused

[VAR: q7c4]	PUNCH 1 2 3 4 5 97 98 99	How would you say focal child's health is? RESPONSE Excellent Very good Good Fair Poor No answer Don't know Refused
[VAR: q7c6]	PUNCH 1 2 97 98 99	During the past 12 months has focal child stayed overnight in the hospital for any reason? RESPONSE Yes No No answer Don't know Refused
[VAR: q7c7_1]	PUNCH 1 2 97 98 99	Has a doctor or health professional told you that focal child has Asthma? RESPONSE Yes No No answer Don't know Refused
[VAR: q7c7_2]	PUNCH 1 2 97 98 99	Has a doctor or health professional told you that focal child has Food Allergy? RESPONSE Yes No No answer Don't know Refused
[VAR: q7c7_3]	PUNCH 1 2 97	Has a doctor or health professional told you that focal child has Other Allergy? RESPONSE Yes No Answer

	98 99	Don't know Refused
[VAR: q7c7_5]	PUNCH 1 2 97 98 99	Has a doctor or health professional told you that focal child has Developmental problems? RESPONSE Yes No No answer Don't know Refused
[VAR: q7c7_6]	PUNCH 1 2 97 98 99	Has a doctor or health professional told you that focal child has Other chronic condition? RESPONSE Yes No No answer Don't know Refused
[VAR: q7c16]	PUNCH 1 2 97 98 99	Do you provide regular care to a family member who either lives with you or lives nearby, and who has a disability or chronic illness? RESPONSE Yes No No answer Don't know Refused
[VAR: q7c17_1]	PUNCH 1 2 3 4 5 97 98 99	Even if it can be rewarding, helping a family member who is ill or disabled can sometimes be difficult. On a scale from 1 to 5, where 1 is not very difficult and 5 is very difficult. How difficult is it financially for you? RESPONSE Not very difficult Only a little difficult Somewhat difficult Significantly difficult Very difficult No answer Don't know Refused

[VAR: q7c17_2]	PUNCH 1 2 3 4 5 97 98 99	Even if it can be rewarding, helping a family member who is ill or disabled can sometimes be difficult. On a scale from 1 to 5, where 1 is not very difficult and 5 is very difficult. How difficult is it for you emotionally? RESPONSE Not very difficult Only a little difficult Somewhat difficult Significantly difficult Very difficult No answer Don't know Refused
[VAR: q7c17_3]	PUNCH 1 2 3 4 5 97 98 99	Even if it can be rewarding, helping a family member who is ill or disabled can sometimes be difficult. On a scale from 1 to 5, where 1 is not very difficult and 5 is very difficult. How difficult is it for you physically? RESPONSE Not very difficult Only a little difficult Somewhat difficult Significantly difficult Very difficult No answer Don't know Refused
[VAR: q7c18]	PUNCH 1 2 97 98 99	In the last year, have you gone to a support group for people who provide care for others? RESPONSE Yes No No answer Don't know Refused
[VAR: q7c19]	PUNCH 1 2 97 98 99	In the past year, have you received help from a home health aide, respite care service, or any other service that helps people take care of their family members? RESPONSE Yes No No answer Don't know Refused

[VAR: q7d1]	PUNCH 1 2 97 98 99	Have you moved in the past 12 months? RESPONSE Yes No No answer Don't know Refused
[VAR: q7d2a]	PUNCH 1 2 3 97 98 99	Before your most recent move, did you rent or own your house or apartment, or have some other housing status? RESPONSE Rent Own Other No answer Don't know Refused
[VAR: q7d3_1]	PUNCH 1 2 97 98 99	People move for many reasons. Did any of the following contribute to your most recent move? The landlord raised the rent RESPONSE Yes No No answer Don't know Refused
[VAR: q7d3_2]	PUNCH 1 2 97 98 99	People move for many reasons. Did any of the following contribute to your most recent move? You wanted to be closer to work/easier commute RESPONSE Yes No No answer Don't know Refused
[VAR: q7d3_3]	PUNCH 1 2 97 98	People move for many reasons. Did any of the following contribute to your most recent move? You found a more affordable house or apartment RESPONSE Yes No No answer Don't know

	99	Refused
[VAR: q7d3_4]	PUNCH 1 2 97 98 99	People move for many reasons. Did any of the following contribute to your most recent move? The neighborhood was dangerous RESPONSE Yes No No answer Don't know Refused
[VAR: q7d3_5]	PUNCH 1 2 97 98 99	People move for many reasons. Did any of the following contribute to your most recent move? The landlord wouldn't fix anything and your place was getting run down RESPONSE Yes No No answer Don't know Refused
[VAR: q7d3_6]	PUNCH 1 2 97 98 99	People move for many reasons. Did any of the following contribute to your most recent move? The landlord was harassing you RESPONSE Yes No No answer Don't know Refused
[VAR: q7d3_7]	PUNCH 1 2 97 98 99	People move for many reasons. Did any of the following contribute to your most recent move? The house or apartment went into foreclosure RESPONSE Yes No No answer Don't know Refused
[VAR: q7d3_8]	PUNCH 1	People move for many reasons. Did any of the following contribute to your most recent move? The City condemned the building RESPONSE Yes

	2 97 98 99	No No answer Don't know Refused
[VAR: q7d3_9]	PUNCH 1 2 97 98 99	People move for many reasons. Did any of the following contribute to your most recent move? You or the person you were staying with missed a rent payment and you thought you might be evicted RESPONSE Yes No No answer Don't know Refused
[VAR: q7d3_10]	PUNCH 1 2 97 98 99	People move for many reasons. Did any of the following contribute to your most recent move? The landlord told you or the person you were staying with to leave RESPONSE Yes No No answer Don't know Refused
[VAR: q7d3_11]	PUNCH 1 2 97 98 99	People move for many reasons. Did any of the following contribute to your most recent move? You received an eviction notice RESPONSE Yes No No answer Don't know Refused
[VAR: q7d3_12]	PUNCH 1 2 97 98 99	People move for many reasons. Did any of the following contribute to your most recent move? Other RESPONSE Yes No No answer Don't know Refused
[VAR: q7d4]		Did you call 311 or the Eviction Hotline?

	PUNCH 1 2	RESPONSE Yes No
	97	No answer
	98	Don't know
	99	Refused
[VAR: q7d5]		Did your children have to change schools because of this move?
	<u>PUNCH</u>	RESPONSE
	1	Yes
	2	No
	97	No answer
	98	Don't know
	99	Refused
[VAR: q7d6]		What is your current housing situation?
	<u>PUNCH</u>	RESPONSE
	1	Rent your own apartment or house
	2	Own your own apartment or house
	3	Live with family or friends who rent and you
	4	contribute part of the rent Live with family or friends who rent but you do not
	4	pay rent
	5	Rent a room, but not from family or friends
	6	Live in an apartment or house owned by another
		family member
	7	Live in temporary housing or a group shelter
	8	Live on the street or in a park, abandoned building,
		automobile or similar place
	9	Have some other housing arrangement
	97	No answer
	98	Don't know
	99	Refused
[VAR: q7d7]		Does your home or apartment have open cracks or
		holes in the interior walls, ceiling, or floors? Do NOT
		include very small hairline cracks.
	<u>PUNCH</u>	RESPONSE
	1	Yes
	2	No
	97	No answer
	98	Don't know
	99	Refused
[VAR: q7d8_1]		In the past 90 days, have you seen any of the
- · - ·		following in your residence?
		Cockroaches

	PUNCH 1 2 97 98 99	RESPONSE Yes No No answer Don't know Refused
[VAR: q7d8_2]	PUNCH 1 2 97 98 99	In the past 90 days, have you seen any of the following in your residence? Mice or signs of mice RESPONSE Yes No No answer Don't know Refused
[VAR: q7d8_3]	PUNCH 1 2 97 98 99	In the past 90 days, have you seen any of the following in your residence? Rats RESPONSE Yes No No answer Don't know Refused
[VAR: q7d8_4]	PUNCH 1 2 97 98 99	In the past 90 days, have you seen any of the following in your residence? Bedbugs RESPONSE Yes No No answer Don't know Refused
[VAR: q7d9]	PUNCH 1 2 97 98 99	During this past winter, did you at any time have to use additional sources of heat because your residence did not have enough heat? Additional sources could include the kitchen stove, a fireplace or a portable or space heater. RESPONSE Yes No No answer Don't know Refused

[VAR: q7d10]	PUNCH 1 2 3 4 97 98 99	How safe from crime are the public spaces in your current residence, for example, the lobby, elevators, and stairwells? RESPONSE Very safe Somewhat safe Not safe Not applicable No answer Don't know Refused
[VAR: q7g3]	PUNCH 1 2 3 4 5 6 7 8 9 97 98 99	What is your current employment status? RESPONSE Working full-time Working part-time On leave from a job or temporarily laid off Looking for work Unable to work Keeping house Going to school Retired Other No answer Don't know Refused
[VAR: q7g6]	PUNCH 1 2 3 97 98 99	During the past 12 months, about how many days did you miss work at a job or business because you or someone you care for was ill or injured? RESPONSE None Entered number Self-employed / not applicable No answer Don't know Refused
[VAR: q7g6x] [VAR: q7g7]	<u>PUNCH</u>	During the past 12 months, about how many days did you miss work at a job or business because you or someone you care for was ill or injured? RESPONSE Entered response Were you paid for the days you missed because you were sick?

	PUNCH 1 2 3 4 97 98 99	RESPONSE Paid for some Paid for all Not paid Self-employed/not applicable No answer Don't know Refused
[VAR: q7g8]	PUNCH 1 2 97 98 99	How many of the days you missed were used to care for your own health, rather than care for someone else? RESPONSE None Entered number No answer Don't know Refused
[VAR: q7g8x]	<u>PUNCH</u>	How many of the days you missed were used to care for your own health, rather than care for someone else? RESPONSE Entered number
[VAR: q7surveyyear]		Survey Year
[VAR: q7surveymonth]		Survey Month
[VAR: q7weight_p] [See Appendix A]		Person level weight
[VAR: q7weight_pu] [See Appendix A]		Family level weight
[VAR: q7late]	<u>PUNCH</u> 1 2	Flag indicating whether subject took the 21m survey late. RESPONSE Yes No

Appendix A

Overview

This memo details our approach to survey weighting, by which we ensure that the Robin Hood Poverty Tracker sample is representative of New Yorkers age 18 and over. The primary Poverty Tracker is selected from an option survey at the conclusion of the Community Healthy Survey. The CHS is a Random Digit Dial (RDD) phone sample conducted by the survey research organization SRBI. The first panel generated a sample of approximately 3,403 RDD sample members. We included both landline and cell phone numbers in our sample frame. In addition, a second pool of 505 participants were recruited from agencies that provide assistance to low-income individuals. The purpose of this second pool was to oversample those using social service agencies in New York City. Oversample specific populations characteristics (social service agencies in this case) is a statistically and efficient way to increase the sample sizes of populations of interest in surveys.

Survey weights are then used to adjust statistical parameters (estimates) so that inferences made from the data apply to the overall population from which the sample was drawn (in this case, NYC). Data are weighted to a three-year American Community Survey (ACS) dataset provided by the United States Census Bureau.

The weighting approach that we employ, which adjusts for oversampling and for random over- or underrepresentation, for non-response, and for attrition, is used in all nationally and locally representative studies.

In the remainder of this memo, we provide more technical details on the construction of Poverty Tracker survey weights. The target population is adults (18+) who are New York City residents.

Structure of baseline sample

SRBI

The SRBI phone sample consists of 3,403 New York City residents contacted by random digit dialing (RDD). Of the 3,403 respondents, 1,774 were contacted by cellphone and 1,629 by landline.

Agency

The face-to-face sample includes 505 respondents from 26 agencies.

SRBI cell phone 1,774

SRBI landline 1,629

Agency 505

Total 3,908

Subsequent waves

For subsequent survey waves, we adjust for panel attrition using the stratification response propensity score method. Non-coverage is addressed by post-stratification. For each survey wave we compute individual weights for each respondent as well as family (poverty unit) weights.

Poverty units

The definition of the poverty unit differs from the traditional family in that unmarried partners are included as family members. Poverty unit weights are obtained from the personal weights by dividing by the number of adults in the poverty unit.

Post-stratification

The data used for post-stratification comes from 2014-2016 American Community Survey (ACS) NYC sample. We approximate the population distributions of the post-stratification variables using weighted ACS numbers.¹

For agency sample, one variable, social service use, is not collected by the ACS. While, it is important to post-stratify on this variable because the agency sample oversamples individuals who use these services. We use the SRBI sample to estimate social service use in the population, which we used to post-stratify to.

Baseline weights

Constructing the baseline weights consists of three steps:

- 1. Weight the SRBI phone sample to match the NYC adult population (see the SRBI weights section).
- 2. Use the weighted SRBI sample to estimate the population distribution of social service use (see the Agency weights section).
- 3. Combine the SRBI and agency samples and weight to match social service use and demographics (see the Combined weights section).

SRBI weights

Using the SRBI phone sample only, we adjust for selection bias and nonresponse to match the ACS data:

 Adjustment for the number of adults in the household and family. The larger household, the smaller the selection probability is for each individual. However, the larger the family, the larger the response probability from the family. We therefore need to weight up larger households while weighting down larger families. Gelman and Little (1988) recommend square roots for this weighting adjustment because inverse probability weights for household sizes tend to

 $^{^{}f 1}$ That is, we use the weights provided with the ACS and obtain a weighted frequency for each post-stratification variable.

overcorrect in telephone surveys. For each respondent we use the square root of the ratio of the number of adults in the household to the number of adults in the family.

2. Adjustment for phone availability. Respondents with multiple phones in the household are more likely to be selected into the sample, while those who experience interrupted phone service are less likely to be selected. In this stage of the weighting process, we assign respondents in these two categories weights of ½ and 2, respectively.

Because the landline and cellular RDD frames overlap there are cases of dual-service, that is, respondents from the landline sample who also have a cell phone in the household or respondents from the cell phone sample who also have landline service. We use frame integration weights (Lohr, 2009) to combine the landline and cellular components of the sample, with the dual-service respondents from the two frames integrated in proportion to their effective sample sizes. We can make this adjustment by assuming that the dual-service households from each of the two groups are random samples from the population of dual-service households.

To compute the effective sample sizes, we first calculate a design effects for both landline and cellular groups. For the cellular sample we take the weights for the respondents who also have landline and compute the coefficient of variation cv_C . For the landline sample the calculation of cv_L is analogous. We take the design effects to be $1+cv_C^2$ and $1+cv_L^2$, respectively. The effective sample sizes (ESS) for the dual-service cases are then computed as the raw sample sizes divided by the design effects.

Finally, the frame integration weights for the dual-service cell phone cases (cell phone respondents who have a landline) are $\mathrm{fiw}_{\mathrm{C}} = \frac{ESS_{\mathrm{C}}}{ESS_{\mathrm{C}} + ESS_{\mathrm{L}}}$, which is the ratio of the effective number of dual-service cases among the cell phone respondents to the total effective number of dual-service cases in the landline and cell phone respondents combined. For the dual-service landline respondents, the frame integration weights are computed analogous as $\mathrm{fiw}_{\mathrm{L}} = \frac{ESS_{\mathrm{L}}}{ESS_{\mathrm{C}} + ESS_{\mathrm{L}}}$. Single-service cases (in this case landline-only or cellphone-only) are given a frame integration weight of 1.

3. Adjustment for deviation on SES information from corresponding ACS-NYC 2014-2016 weighted totals. Before making this adjustment, we obtain individual weights by multiplying the household weights obtained in the previous step by the number of adults in the household.² We then match the marginal distributions of post-stratification factors via raking procedure. Although the joint distribution by cross tabulation is available, we use raking under an independence assumption to control the variability due to small post-stratification cell sizes. The information used for post-stratification includes gender, age, education, immigration status,

25

² For this calculation, the number of adults in the household is capped at 4 due to spareness at larger values.

tenure (own or rent home), race, the number of children in the household, the number of seniors in the household, the number of working aged adults in the household, a poverty gap measure for the household³, and interactions between many of the demographics and the poverty measure to account for dependencies between these factors. After the raking procedure, we trim the resulting weights at the 97.5% percentile.

Because the weights adjust for the unequal selection, under-coverage and nonresponse, there is no simple formula for estimating the variance. We use the bootstrapping method implemented in the R *survey* package to obtain 50 sets of replicate weights for each set of sampling weights, from which we can obtain variance estimates.

Agency weights

For the Agency sample, we adjust weights by the (self-reported) frequency of agency services usage. To avoid over-representation, the more frequently an individual uses a service, the smaller the assigned weight.

Combined weights

The SRBI and Agency samples are then combined.⁴ Again we correct for differences due to oversampling from poor households by post-stratifying the household weights to the ACS household information. This is essentially the same adjustment that is made in the SRBI weights (see Step 3 in the SRBI weights section) but here we perform the adjustment on the combined SRBI and Agency samples. We then multiply the household weights by the number of adults in the household to obtain the person (individual) weights. Similarly, to Step 4 in the SRBI weights section, using these person weights we then post-stratify to adjust for deviations of the two samples from the corresponding ACS-NYC 2014 weighted totals. We also again adjust for frequency of social service use by including it as a post-stratification variable.⁵

Subsequent wave weights

Subsequent waves in the Poverty Tracker study have longitudinal weights calculated. These weights use the baseline weights as a basis but make two adjustments. The first adjustment corrects for nonresponse between the baseline and the wave of interest. The second adjustment is a raking adjustment back to the baseline population demographics.

The method for the first adjustment is inverse propensity scoring. This method uses a logistic regression to predict nonresponse given baseline characteristics, including race, education, immigration status,

³ From the World Bank: Poverty gap is the mean shortfall from the poverty line (counting the non-poor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

 $^{^{\}rm 4}$ The weights for each sample are also separately normalized to each have a mean of 1.

⁵ There will be unbalanced coverage of agency service visitors because frequent service users will be over-represented in the Agency sample. For the purpose of representing the general population of NYC adults, it is necessary to down-weight individuals in the sample who frequently use social service agencies. In order to post-stratify on frequency of service use, we need a measure of the distribution of social service use in the population. Unfortunately, we do not have any gold standard for the distribution

source – how many respondents were originally contacted, use of service frequency, the number of working adults in the household, the number of seniors in the household, spouse or partner in the

household, material hardship, severe health disadvantage, OPM income to needs ratio, OPM poverty status, receipt of government housing, and mental health status. From this model, the probability of

responding was predicted for each respondent, which we then broken into 20 quantiles to reduce noise. For each quantile, the inverse of the probability of responding is calculated, which we then use to adjust the baseline weights for nonresponse. After that, we do the second adjustment, raking procedure. We then trimmed and created replicate weights with the same technique as described for the baseline.

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