**Appendix A**

We compare current and future housing assistance recipients based upon the idea that those on a waitlist for HUD housing assistance are likely to be similar to those receiving housing assistance, differing only in the fact of receiving assistance. The HUD linkage data provides some information on the date of waitlist entry. However, we did not use waitlist data in our primary analysis for two reasons. First, waitlist entry dates were not available for multifamily housing. This would restrict our analysis only to public housing and housing choice vouchers. Second, waitlist entry dates were missing for 18% of linked respondents in public housing and housing choice vouchers, and there were further concerns about the reliability and comprehensiveness of waitlist entry dates for the remaining respondents.19 Instead of a standard waitlist comparison, we used a 2-year future period as a substitute, given that the mean waitlist time for HUD housing assistance programs was 2 years.

Among those entering public housing and housing choice vouchers within 2 years, existing waitlist data suggest that the majority were on a HUD waitlist, but many individuals had no populated data. As a sensitivity test, we performed our main models using those on a waitlist (for public housing and housing choice vouchers only) instead of all individuals in the future category. The results of these models are shown in Appendix Table A for fair/poor health and psychological distress. The results of this analysis are similar to those in the primary analysis for housing choice vouchers and public housing, suggesting that our future/current comparison is identifying the effect of a waitlist.

**Appendix B**

Given geographic differences in the distribution and characteristics of each housing assistance program, there may be unobserved characteristics that lead to differential selection into each housing program type. Public housing and multifamily housing tend to be more common in urban areas and in the South region, while housing choice vouchers are more common in suburban areas and in the West region. These differences will impact the likelihood that adults enter one program over another. In addition, there is likely to be some selection with housing authorities in terms of the characteristics of individuals who enter one program over another. This may be related to self-selection effects (individual preferences) or social network effects (social relationships provide the gateway to HUD housing). For these reasons, we may want to consider each housing assistance program separately, since we are concerned that selection effects impact the likelihood of entering particular programs. In addition, we would like to examine the sensitivity of our results to the inclusion of an interaction effect in the logistic regression model. Results of these models are shown in Appendix Tables B (fair/poor health) and C (psychological distress). The similarity of these results to our main analysis assures us that the findings are robust to modeling strategy and program-specific selection effects.

**Appendix C**

In order to consider the possibility that our findings reflect differential effects by duration of HUD housing assistance, we replicate our models restricting “current” housing assistance recipients to those who have been living in HUD housing for 2 years or less. The results are shown in Appendix Table C. The coefficients for public housing and multifamily housing are very similar to those found in the main models, although the statistical power is limited by the reduced sample.

**Appendix D**

Our main estimates of the impact of housing assistance on adult health represent average effects across all racial and ethnic groups. Although statistical power is limited detect statistical differences, we calculate estimates of the difference in each health outcome for non-Hispanic whites, non-Hispanic blacks, and Hispanics. These differences are presented in Appendix Table E. Although few differences reach statistical significance, there are interesting differences between race-ethnicity groups in the apparent benefits of each housing program. The health benefits of public housing are observed for whites and blacks, but not for Hispanics. Whites also show a non-statistically significant reduction in each health outcome for housing choice vouchers. The health benefits of multifamily housing also appear to be concentrated among blacks. Future work should examine racial and ethnic differences in the health effects of housing assistance more closely.

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| --- | --- | --- | --- |
| Appendix Table A: Logistic Regression Comparing Current and Waitlist Recipients | | | |
|  |  | Fair/Poor Health | Serious Psychological Distress |
| Housing Timing (Waitlist)a | |  |  |
|  | Current | 1.02 (0.84-1.24) | 1.09 (0.82-1.44) |
| Program Category (Housing Choice Vouchers) | |  |  |
|  | Public Housing | 1.34 (1.02-1.76)\* | 1.36 (0.89-2.08) |
| Interaction | |  |  |
|  | Current x Public Housing | 0.71 (0.51-0.97)\* | 0.58 (0.36-0.94)\* |
|  | n | 7,686 | 6,913 |
| Notes: All models control for age, age-squared, sex, interview year, individual-level covariates, and neighborhood-level covariates. Reference category in parentheses. HUD waitlist information not available for multifamily housing programs. | | | |
| a Non-current on waitlist for HUD housing assistance  \* p<0.05 \*\* p<0.01 | | | |

|  |  |  |  |  |  |  |  |
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| Appendix Table B: Logistic regression predicting odds of fair/poor reported health as a function of housing assistance timing considering each HUD housing assistance program separately | | | | | | | |
|  | Public Housing | | Housing Choice Vouchers | | Multifamily Housing | |
| Housing Timing (Future)a | |  | |  | |  | |
| Current | 0.75 (0.60-0.95)\* | | 1.07 (0.90-1.28) | | 0.79 (0.64-0.97)\*\* | |
| n | 3,170 | | 5,614 | | 4,002 | |
| Notes: All models control for age, age-squared, sex, interview year, individual-level covariates, and census tract covariates. Reference category in parentheses  a Non-current but will receive housing assistance within 2 years | | | | | | | |

\* p<0.05 \*\* p<0.01

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Appendix Table C: Logistic regression predicting odds of serious psychological distress as a function of housing assistance timing considering each HUD housing assistance program separately | | | | | | | |
|  | Public Housing | | Housing Choice Vouchers | | Multifamily Housing | |
| Housing Timing (Future)a | |  | |  | |  | |
| Current | 0.55 (0.39-0.78)\*\* | | 1.10 (0.86-1.42) | | 1.09 (0.76-1.51) | |
| n | 2,836 | | 4,942 | | 3,633 | |
| Notes: All models control for age, age-squared, sex, interview year, individual-level covariates, and census tract covariates. Reference category in parentheses  a Non-current but will receive housing assistance within 2 years | | | | | | | |

\* p<0.05 \*\* p<0.01

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| Appendix Table D: Logistic Regression Restricting to 2 years in HUD | | | |
|  |  | Fair/Poor Health | Serious Psychological Distress |
| Housing Timing (Future)a | |  |  |
|  | Current | 1.06 (0.87-1.28) | 1.03 (0.78-1.35) |
| Program Category (Housing Choice Vouchers) | |  |  |
|  | Public Housing | 1.32 (1.06-1.66)\* | 1.45 (1.07-2.00)\* |
|  | Multifamily Housing | 1.12 (0.90-1.39) | 0.95 (0.68-1.34) |
| Interaction | |  |  |
|  | Current x Public Housing | 0.75 (0.54-1.05) | 0.57 (0.37-0.89)\* |
|  | Current x Multifamily Housing | 0.74 (0.56-0.99)\* | 1.06 (0.68-1.65) |
|  | n | 7,757 | 6,638 |
| Notes: All models control for age, age-squared, sex, interview year, individual-level covariates, and census tract covariates. Reference category in parentheses | | | |
| a Non-current but will receive housing assistance within 2 years | | | |

\* p<0.05 \*\* p<0.01

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| --- | --- | --- | --- | --- |
| Appendix Table E: Difference in percent reporting fair/poor health and serious psychological distress between current and future assistance by race/ethnicity | | | | |
|  |  | Difference between current and future assistance | | |
|  |  | Public Housing | Housing Choice Vouchers | Multifamily Housing |
| Fair/Poor Health (%) | |  |  |  |
|  | Non-Hispanic White | 10.0 (2.7-17.2)\*\* | 3.7 (-1.9-9.2) | 3.5 (-2.8-9.8) |
|  | Non-Hispanic Black | 6.6 (-0.8-13.9) | -3.8 (-10.2-2.9) | 9.2 (1.0-17.5)\* |
|  | Hispanic | -6.7 (-17.8-4.5) | -1.5 (-10.6-7.7) | 0.7 (-9.4-10.9) |
|  |  |  |  |  |
| Serious Psychological Distress (%) | | |  |  |
|  | Non-Hispanic White | 7.1 (0.4-13.7)\* | 2.7 (-1.0-6.4) | -0.3 (-4.6-4.4) |
|  | Non-Hispanic Black | 4.7 (0.3-9.1)\* | -2.6 (-2.8-7.9) | 1.7 (-3.1-6.4) |
|  | Hispanic | 5.7 (-1.3-12.7) | -2.9 (-7.8-2.2) | 0.0 (-5.9-5.8) |

Notes: Differences refer to the change in the predicted probability of each health outcome when moving from future assistance to current assistance.

\* p<0.05 \*\* p<0.01