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# Add Health Wave I-IV Documentation



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# **HUD-Assisted Housing** Supplementary Data Documentation



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#### Introduction

The U.S. Department of Housing and Urban Development (HUD) provides rent assistance to low-income households through a variety of subsidy programs. The basic goal of these programs is to provide low-income households with access to affordable and adequate housing. To make housing more affordable, HUD programs only require participating households to pay 30 percent of their income towards rent; HUD then covers the difference between that contribution and the full rent amount. To ensure units supported by HUD subsidies are physically adequate, federal statutory requirements mandate that all HUD-assisted housing units meet livability standards and undergo regular inspection.

In 2019–2020, HUD supported the linkage of HUD administrative data to the National Longitudinal Study of Adolescent to Adult Health (Add Health). The goal of the linkage was to create a dataset that allows researchers to investigate how residence in HUD-assisted housing units affects future outcomes. To identify Add Health respondents who have participated in HUD programs, research staff at the Carolina Population Center searched over 70.6 million HUD administrative records using probabilistic linkage methods and then conducted a manual verification of all potential matches. This linkage process identified 1,159 Add Health respondents who lived in HUD-assisted housing between 1995 and 2017.<sup>1</sup>

The HUD data provided by the supplementary datafile includes information about the HUD-assisted housing residence characteristics of these 1,159 Add Health respondents, including: date of residence in HUD- assisted housing, length of residence in HUD-assisted housing, and type of housing assistance received. The supplementary datafile also includes Add Health respondent identifiers (AIDs) for all records and can easily be linked to all other Add Health data.

The HUD-specific data included in the supplementary datafile come from administrative forms. These forms are collected by local public housing authorities (PHAs) or private-market landlords that administer HUD programs at the local level.<sup>2</sup> The purpose of these forms is to track compliance with federal statutory

<sup>&</sup>lt;sup>1</sup> Data on HUD administrative records come from two sources: (i) the Inventory Management System of Public and Indian Housing Information Center (IMS/PIC) and (ii) Tenant Rental Assistance Certification system. See the appendix for reports that provide more details about these sources.

<sup>&</sup>lt;sup>2</sup> Very broadly, local public housing authorities administer the public housing and Housing Choice Voucher programs, and these housing authorities are responsible for reporting tenant data to HUD. In contrast, HUD directly administers the multifamily programs (which includes Project-Based Section 8 and the other multifamily categories Add Health is a program project directed by Kathleen Mullan Harris and designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris at the University of North Carolina at Chapel Hill, and funded by grant P01-HD31921 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development, with cooperative funding from 23 other federal agencies and foundations. Information on how to obtain the Add Health data files is available on the Add Health website (http://www.cpc.unc.edu/addhealth).

requirements of HUD programs and describe the characteristics of the households they serve through HUD programs. Because requirements differ across HUD programs, HUD uses different forms to collect this information. All data in the supplementary datafile were created through three such forms: (i) HUD 50058 (also referred to as the "Family Report"); (ii) HUD 50058-MTW (also referred to as the "MTW family report"); and (iii) HUD 50059, which private owners of HUD multifamily properties complete. See data dictionary for more information about these forms.

To learn more about the HUD data, please see the reports included in the notes section of this user guide — one of which is a more detailed report about the methods used to create this supplementary datafile. HUD data quality has generally improved over time, but past reports have identified data quality issues such as incomplete or inaccurate mailing addresses and social security number information. These limitations are relevant because they may have prevented accurate cross-identification of people who resided in HUD-assisted housing *and* participated in the Add Health study. That noted, the data included in this supplementary datafile were manually checked by Add Health research staff for accuracy and reliability, and records deemed unreliable by staff were discarded. Thus, there should not be any major data quality issues associated with the supplementary datafile.

### Data Structure and Form

The supplementary datafile identifies Add Health respondents who lived in HUD-assisted housing at any point between 1995 and 2017. For these Add Health respondents, the supplementary datafile provides unique Add Health respondent identifiers (AID) and household-level information about the characteristics of their HUD housing residence. The supplementary datafile is a hierarchical (i.e., long-format data file), with each row representing a unique HUD administrative record that is linked to an AID. In total, the hierarchical file includes a total of 8,587 HUD records on 1,159 unique Add Health respondents identified through the linkage.

# **Data Dictionary**

This section provides a high-level overview of the supplementary datafile. It specifically describes how to interpret (i) variables on HUD-assisted housing characteristics and (ii) how to interpret and utilize the "housing episode" variables, which allows researchers to identify whether Add Health respondents have received HUD assistance at different points-in-time throughout their life. Summary statistics and further details about each variable are provided in the codebook.

#### **HUD Record Characteristics**

HUD-assisted Housing Record Year	HUD01Y
- Year of HUD-housing record.	
HUD-assisted Housing Record Quarter	HUD01Q
- Quarter of HUD-housing record.	
Form Type	HUD02
- Form 50058: Indicates that the record came from HUD 50058 form, which is often refe	rred to

simply as the "Family Report." This is the primary form that local PHAs complete to collect

discussed later) through private-market landlords. These private-market landlords (or their property managers) are responsible for reporting tenant data.

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information on assisted households. http://portal.hud.gov/hudportal/documents/huddoc?id=HUD50058.pdf

- Form 50058-MTW<sup>3</sup>: Indicates that the record came from HUD-50058 MTW form, which is often referred to as the "MTW Family report". The MTW-site flag is important because the MTW program provides local PHAs with the regulatory and financial flexibility to implement program reforms e.g., altered rent standards, enhanced supportive services that achieve cost efficiencies, increase economic self-sufficiency among residents, and further housing choice. Thus, Add Health respondents with MTW records may have been subject to novel program standards that need to be controlled for in statistical analyses.
  https://www.hud.gov/sites/documents/DOC 10236.pdf
- Form 50059: Indicates that the record came from HUD-50059 form. In contrast to the HUD 50058 form which is completed by local PHAs (i.e., public entities), these forms are completed by owners and management agents (i.e., private entities) who administer HUD's project-based assistance programs, such as the project-based Section 8 program described below. Aside from this difference, the HUD-50059 and HUD-50058 collect highly comparable information on assisted households. https://www.hud.gov/sites/documents/50059.PDF

Program Type......HUD03

- <u>Public Housing</u>: Respondent received HUD assistance through the Public Housing program, which provides low-income households with access to affordable rental units managed by local PHAs.
- Housing Choice Voucher: Respondent received HUD assistance through the "Section 8" Housing Choice Voucher (HCV) program, which provides rent vouchers for private units that meet federal rent and livability standards. This category also includes HUD voucher programs that are substantively identical to the HCV program but operate under different names or have been absorbed into the HCV program, including: Section 8 Certifications, Section 8 Vouchers, Mod Rehab, MTW Tenant Based Vouchers, MTW Project Based Vouchers.
- Multifamily Project-based Section 8: Respondent received HUD-assistance through the Project-based Section 8 program, which is the largest "multifamily housing program" operated by HUD's Office of Housing. Similar to the HCV program, this program subsidizes private market units that meet federal rent and livability for low-income households. In contrast to HCV, however, HUD directly works with private-market owners and agents participating in this program rather than relying on local PHAs to carry out program administration.
- Other Multifamily: Respondent received assistance through one of HUD's other multifamily programs. Many of these programs have been dissolved or absorbed into other major HUD programs in recent decades. The specific programs included within this category include Section 101 (Rent Supplement), RAP (Rental Assistance Program, Section 236, Section 221(d)(3) BMIR (Below Market Interest Rate, Section 202 PRAC (Project Rental Assistance Contract, Section 811 PRAC (Project Rental Assistance Contract).

<sup>&</sup>lt;sup>3</sup> MTW PHAs may choose not to include all of their programs within their MTW participation. In general, however, most MTW agencies include their public housing and HCV programs (except special purpose vouchers) as part of the MTW program.

#### Transaction Record Type......HUD04

PHAs and private-market HUD-housing providers must complete HUD administrative forms on a regular basis and also must complete these forms when they perform certain administrative actions, such as admitting a new resident or moving a resident into a new unit. Thus, HUD records are assigned a "transaction type" code that identifies why that form was completed. There are 18 different transaction types included in the supplementary datafile. These transaction codes are outlined in the code book in more detail.

#### Total Household Members.......HUD05

Total number of household members listed in the HUD record. Value indicates the number of individuals who live in the specific unit subsidized by HUD, not necessarily the overall family size.

#### **Episode Demarcation Flag**

Some Add Health respondents identified through the linkage experienced multiple, distinct housing episodes between 1995 and 2017, meaning that they exited HUD-assisted housing for a period of time and then re-entered at a later date. The HUD housing episode flag helps researchers distinguish between these distinct episodes. It does so by providing a unique value for the HUD record which indicates whether that record represents the following:

#### Episode Demarcation Flag.......HUD06

- First Record Listed: initial entry into HUD-assisted housing—that is, the first point in time at which the Add Health respondent appears in HUD administrative records, within the timeframe evaluated.
- New episode: the beginning of a new episode of HUD-assisted housing residence—that is, the point in time at which the Add Health respondent re-appears in HUD administrative records after exiting for a period of time.
- Continued episode: indicates that a record is a continuation of an episode, not the beginning of a new episode.

As shown in the codebook, the episode variable distinguishes between MTW vs. non-MTW flags. This is because episodes were calculated differently for these records. MTW sites may implement policies that result in them reporting data less frequently to HUD; for example, many have implemented policies whereby the agency only recertifies tenants' incomes biennially (every other year). Thus, longer breaks between administrative record dates for Add Health respondents living at these sites may reflect this caveat, rather than a legitimate exit and re-entry into HUD-assisted housing.

Based on guidance provided by HUD, episode lengths were calculated as follows:

- Non-MTW records: if a break in transaction records was 425 days or more, those records were to represent two distinct episodes. If the opposite was true, those records were considered to represent a single episode. The 425-day period is the standard because non-MTW sites must complete recertifications every 425 days (one year plus 60 days of leeway).
- MTW records: if a break in transaction records was 790 days or more, those records were considered to represent two distinct episodes. If the opposite was true, those records were considered to represent a single episode. The 790-day period is used as the threshold because most MTW sites must complete recertifications every 790 days.

## Linked Data Storage and Access

Though the linked HUD-Add Health dataset excludes all personal identifiers and the data have undergone deductive or statistical disclosure risk assessment, they are considered restricted access data and will not be released as public use files. Consequently, researchers interested in obtaining access to the linked dataset, as well as any other restricted-use Add Health data, must apply for a restricted-use contract using the Carolina Population Center (CPC) Data Portal.<sup>4</sup> The restricted-use contract is a data use agreement between UNC and the institution that is requesting the data file. This agreement is signed by an institutional representative of each institution.

Key elements of the restricted use contract include:5

- Completion of the Data Use Agreement (DUA), in which the applicant must provide information about the project, agree to CPC's terms for usage of restricted-use data, and secure the signature of an institutional representative.
- A security plan for the sensitive data (see below).
- Data justification, in which the applicant states how the requested datasets relate to their research.
- Supplemental agreements signed by all other researchers (those with authorization to access Add Health data).
- Security pledges signed by the principal investigator, other researchers, collaborators (those
  involved in the research but who do not access the Add Health data), IT staff, and officemates of
  the PI, co-investigators, and research staff.
- Payment of the restricted-use dataset fee (as of 2020, this fee is \$1,000 for a new restricted use data contract. Some Add Health datasets require an additional fee).
- IRB approval letter for the research project.
- A designated downloader form.

Regarding the sensitive data security plan, Add Health allows for restricted-use data to be stored on an encrypted stand-alone desktop computer, an encrypted external hard drive, or a secure server. Regarding the latter, the server may either be a compute server (where files are stored on the server and the processing of all data is done on the server) or a file server (where files are stored on the server but processing occurs on a user's computer). Regardless of storage option, applicants must complete and have approved a data security plan prior to receiving restricted-use data.

Furthermore, Add Health Restricted-Use Data Contracts require that investigators submit annual reports to the Add Health Contract Administrator. The annual report must include a current IRB letter, list of public presentations and papers accepted for publication using results based on Add Health data, grants awarded for use of Add Health data, and dissertations/theses completed using Add Health data. Additionally, investigators must provide a list of those associated with the contract (researchers,

<sup>&</sup>lt;sup>4</sup> The CPC data portal is accessed online at https://data.cpc.unc.edu/.

<sup>&</sup>lt;sup>5</sup> All information in this section is current as of September 2020 but is superseded by any information on the CPC or Add Health websites or in written communication from any CPC or Add Health staff member.

collaborators, administrative support, IT staff, and officemates) in addition to a list of individuals previously associated with the contract but who are no longer associated with it.

#### Notes

Further information about the linkage process used to create this supplementary datafile and the underlying HUD data that it includes can be obtained from the following reports:

Jaramillo, A., Hussey, J., Webb, M.D., Monbureau, T., Marrufo, M. 2020. *Linkage of National Longitudinal Study of Adolescent to Adult Health Data to 1995-2017 U.S. Department of Housing and Urban Development Administrative Records*.

https://www.huduser.gov/portal/publications/pdrpubli.html

National Center for Health Statistics. (2019). *NCHS-HUD Linked Data Analytic Considerations and Guidelines*. <a href="https://www.cdc.gov/nchs/data/datalinkage/NCHS-HUD-Linked-Data-Methodology-and-Analytic-Considerations.pdf">https://www.cdc.gov/nchs/data/datalinkage/NCHS-HUD-Linked-Data-Methodology-and-Analytic-Considerations.pdf</a>

US Department of Housing and Urban Development, Office of Policy Development and Research. *Quality Control for Rental Subsidy Determinations*. Various years.

https://www.huduser.gov/portal/taxonomy/term/3501

US Department of Housing and Urban Development, Office of the Inspector General. Internal Audit Reports Issued by the Office of the Inspector General 1995-2007. *Review of the Administration of the Portability Features of the Section 8 Housing Choice Voucher Program*. Audit Report No.: 2004-BO-0006. <a href="http://archives.hud.gov/offices/oig/reports/oiginter.cfm">http://archives.hud.gov/offices/oig/reports/oiginter.cfm</a>

US Department of Housing and Urban Development, Office of the Inspector General. Internal Audit Reports Issued by the Office of the Inspector General 1995-2007. *Audit Report on Application Controls over Data Integrity Within the Public and Indian Housing Information Center (PIC)* Audit Report No.: 2004-DP-0003. http://archives.hud.gov/offices/oig/reports/oiginter.cfm

US Government Accountability Office. *GAO-01-103: Status of Actions to Resolve Serious Internal Control Weaknesses*. <a href="http://www.gao.gov/products/GAO-01-103">http://www.gao.gov/products/GAO-01-103</a>. Published October 16, 2000.

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http://portal.hud.gov/hudportal/documents/huddoc?id=DOC 9012.pdf. Published January 2010.

Brummet, Q. (2014). *Comparison of survey, federal, and commercial address data quality* (No. 2014-06). Center for Economic Studies, US Census Bureau.

https://www.census.gov/content/dam/Census/library/working-papers/2014/adrm/carra-wp-2014-06.pdf