Dartmouth Atlas of Health Care Data
HRS-CDR Dataset Documentation

Contents

Dataset Overview

The Dartmouth Atlas of Health Care dataset documents how medical resources are distributed and used in the United States. It uses primary data collected by Medicare. Data are organized topically by year, with multiple levels of geographic specificity usually provided for each topic. For example, data on surgical discharge rates are available at the State, Hospital Referral Region (HRR), and Hospital Service Area (HSA) levels of analysis (details on the meaning of HRR and HSA follow later in this document). Data availability across years varies from topic to topic; see the variable codebook for details.

Dataset Summary

Dataset Name: Dartmouth Atlas of Health Care

Data Source: Dartmouth University

Data Source URL: dartmouthatlas.org

Data Collection Method: Data provided by Medicare Units of Observation and Sample: County and Census Tract; population

Years Collected: The data range from 1992 to 2011. Not all topical areas contain every year within this range, and some use multiyear averages. See Table 1 and the dataset codebook for details.

Geographic Level of Collection: Hospitals, HSAs, HRRs, Counties, States (plus Washington, D.C. and US national aggregates for State-level files)

Years Available and Temporal Interpolation

The data range from 1992 to 2011. Not all topical areas contain every year within this range, and some use 3- or 5-year averages (denoted with a combined year code [e.g., 2003-2005 average is denoted by those year code 0305]). Table 1 provides a general summary of the years and geographies available for each of the dataset's 12 topics. Some variables within each topic file have more restricted availability. Variable-level information can be found in the dataset codebook.

None of the Dartmouth Atlas data have been temporally interpolated.

Table 1. Availability for Dartmouth Atlas Data by Category

Category	Years Available	Geography Available
Care Of Chronically Ill Patients During The Last 2 Years Of Life (All)	Annual: 2003-2007, 2010 Pooled: 2001-2005, 2003-2007	HRR, Hospital, State
Care Of Chronically Ill Patients During The Last 2 Years Of Life (Cancer)	Annual: 2010 Pooled: 2003-2007	HRR, Hospital, State
Selected Hospital & Physician Capacity Measures	Annual:1996, 2006	HRR, HSA
Selected Measures Of Inpatient Utilization During The Last 6 Months Of Life	Annual: 1994-2007	HRR, HSA, State
Selected Medical Discharge Rates	Annual: 1992-2010 Pooled: 2008-2010	HRR, HSA, State
Medicare Mortality Rates	Annual: 1999-2011	HRR, HSA, State
Selected Medicare Reimbursement Measures (Claims-Based)	Annual: 2003-2010	HRR, HSA, County, State
Selected Medicare Reimbursement Measures (CMHS-Based)	Annual: 1992-2007	HRR, HSA, State
Post-Discharge Events	Annual: 2004, 2008-2010 Pooled: 2008-2010	Hospital, HRR, County, State
Prescription Drug Use In Medicare Part D	Annual: 2010	HRR, HSA, State
Selected Surgical Discharge Rates	Annual: 1992-2010 Pooled: 2008-2010	HRR, HSA, State
Selected Measures Of Primary Care Access & Quality	Annual: 1992-2010 Pooled: 2003-2005, 2003-2007, 2006-2007	HRR, HSA, County, State
Pacemaker Insertion	Annual: 2006	HRR

Geocoding and Spatial Interpolation

Topical data within the Dartmouth Atlas is available at multiple geographic scales. These range from points (hospitals) to states, with various regional-level scales in-between. Two such scales are the Hospital Service Area (HSA) and Hospital Referral Region (HRR).

HSAs are local health care markets for hospital care. An HSA is a collection of ZIP codes whose residents receive most of their hospitalizations from the hospitals in that area. HSAs were defined by assigning ZIP codes to the hospital area where the greatest proportion of their Medicare residents were hospitalized. Minor adjustments were made to ensure geographic contiguity. This process resulted in 3,436 HSAs. When these regions were created in the early 1990s, most hospital service areas contained only one hospital. In the intervening years, hospital closures have left some HSAs with no hospital; these HSAs have been maintained as distinct areas in order to preserve the continuity of the database.

HRRs represent regional health care markets for tertiary medical care that generally requires the services of a major referral center. The regions were defined by determining where patients were referred for major cardiovascular surgical procedures and for neurosurgery. Each hospital service area (HSA) was examined to determine where most of its residents went for these services. The result was the aggregation of the 3,436 hospital service areas into 306 HRRs. Each HRR has at least one city where both major cardiovascular surgical procedures and neurosurgery are performed.

GIS shapefiles for HSA and HRR boundaries can be found at http://www.dartmouthatlas.org/tools/downloads.aspx?tab=39. This page also has crosswalk files for locating hospitals within the appropriate HSA/HRR, and for matching ZIP codes with HSAs and HRRs..

None of the Dartmouth Atlas data have been spatially interpolated.

Dataset Notes

Dartmouth Atlas Terms and Conditions (http://www.dartmouthatlas.org/pages/terms_and_conditions)

According to the terms and conditions of using these data you must include the following acknowledgement in all publications:

> The data were obtained from The Dartmouth Atlas, which is funded by the Robert Wood Johnson Foundation and the Dartmouth Clinical and Translational Science Institute, under award number UL1TR001086 from the National Center for Advancing Translational Sciences (NCATS) of the National Institutes of Health (NIH).

Glossary

The following sections provide information on measurement construction for each of the dataset's 12 topics as listed In Table 1. Explanation of the medical acronyms and other terminology used throughout the dataset can be found in Appendix A. Information reported here is adopted from the Dartmouth Atlas itself (see www.dartmouthatlas.org/data/topic/ and www.dartmouthatlas.org/tools/glossary.aspx).

Dartmouth Atlas Measurement Construction

The following is an overview of how the different measures found in The Dartmouth Atlas were constructed by topic. A more general discussion of the methods used in constructing the dataset can be found in the methodological FAQ at http://www.dartmouthatlas.org/tools/faq/researchmethods.aspx.

Important Note: Rates based on fewer than 26 events per geographic unit (e.g., county, HRR, HSA) are reported as negative values to indicate lack of statistical precision. These rates are considered unreliable if the margin of error is greater than 20%. It is up to the user to decide whether unreliable cases, indicated with negative values, should be removed for analytic purposes. If the cases are not removed, the negative values should be converted into positive values in order to achieve a distribution of positive numbers. A list of variables that contain observations with negative values can be found in the section titled "Treatment of negative Values" on pg. 12.

Care Of Chronically Ill Patients During The Last 2 Years Of Life (All and Cancer)

The primary database is derived from eight CMS research files for traditional (fee-for-service) Medicare: the Denominator file (which provides information on all Medicare beneficiaries' demographic data, eligibility status and date of death) and files that contain records of Medicare claims: the MedPAR file, the Inpatient file, the Physician/Supplier Part B file, the Outpatient file, and the Home Health Agency, Hospice, and Durable Medical Equipment files.

The measures are for two study populations, one based on assignment of decedents to the hospital they most frequently used in the last two years of life, and the other on place of residence at time of death. To allow for two years of follow-back for all patients, the populations are restricted to those whose age on the date of death was 67 to 99 years, and to those having full Part A and Part B entitlement throughout the last two years of life. Persons enrolled in managed care organizations were excluded from the analyses. Blank cells indicate that a hospital did not have a sufficient study population (400 deaths during the five-year study period) to measure Part B and outpatient events. Hospital and regional event measures based on a count of fewer than 11 patients are also not displayed for reasons of patient confidentiality.

Selected Hospital & Physician Capacity Measures

Capacity represents the capital investments and labor that permit the delivery of medical services. Two types of capacity determine the majority of health care costs. The first is hospital capacity, including the number of general and intensive care beds, imaging devices, and procedure suites like operating rooms and cardiac catheterization labs. Health care labor is the second and related component of capacity, and includes the physicians, nurses, allied health professionals and administrative staff who work in hospitals and physician practices.

The American Hospital Association (AHA) hospital survey was used as the primary source for measurement of acute care hospital beds and employment. Dartmouth Atlas uses staffed beds as the best indicator of the hospital's capacity to admit patients. When a hospital did not report to the AHA, they used the CMS Cost Report file, then the CMS Provider of Services file, to determine the hospital's capacity. In the unusual situation that none of these sources provided measures of beds and employment, they used the AHA survey estimates.

The count of physicians was derived from the American Medical Association (AMA) Masterfile, which includes a record for nearly every allopathic and osteopathic physician in the U.S. with information about physician location and self-reported specialty. Primary care physicians included family and general practitioners, general pediatricians, and general internists. Almost all other physicians were categorized as specialists. Dartmouth Atlas limited physicians to those who have completed post-graduate medical education (residency) and work for more than 20 hours a week in an office or hospital-based practice. Residents are reported separately. The age of physicians was limited to 26 to 65.

All rates were adjusted for regional border crossing of patients and for differences in population age and sex using the indirect method.

Selected Measures Of Inpatient Utilization During The Last 6 Months Of Life

The intensity of care in the last six months of life is an indicator of the propensity to use life-saving technology. For rates pertaining to the last six months of life, the denominator was the Medicare population who died during the measurement year. Numerator events were determined using the Medicare Provider Analysis and Review (MedPAR) file. Rates for inpatient care per capita were computed using only the portion of the event (hospital stay or ICU stay) falling within the six-month period prior to death. Rates were age, sex and race adjusted using the indirect method.

Selected Medical Discharge Rates

The counts of discharges (numerators) for medical conditions are determined from the Medicare Provider Analysis and Review (MedPAR) file. Medical discharges are identified using the Medicare diagnosis-related group (DRG) system. Specific ambulatory care-sensitive conditions were identified using International Classification of Disease (ICD-9-CM) diagnosis codes. Enrollee counts were obtained from the Medicare Denominator file. The Medicare enrollee population includes those alive and age 65 to age 99 on June 30 of the measurement year.

Medicare Mortality Rates

This data consists of two figures taken directly from Medicare: The percentage of deaths among all Medicare enrollees during the year, and the percentage of deaths among Medicare enrollees during the year without HMO coverage. Both are adjusted for enrollee age, sex, and race.

Selected Medicare Reimbursement Measures (Claims- and CMHS-Based)

Dartmouth Atlas Medicare reimbursement rates are calculated from Medicare claims files from CMS. Fee-for-service patients enrolled in Medicare Parts A and B are included. Patients enrolled in risk-bearing health maintenance organizations (HMOs) are excluded from our analyses. Health maintenance organizations receive capitated payments from Medicare – a fixed annual amount per enrollee – in exchange for which the HMO must provide all required services. Since HMOs do not submit individual claims to Medicare, members of HMOs are excluded from claims analyses. The rates are adjusted for the age, sex and race of the underlying Medicare population using the indirect method. They are also adjusted for regional differences in prices.

Post-Discharge Events

The data in this category show variation in the care of Medicare patients after they are discharged from the hospital. Several important aspects of post-discharge care are featured, including 30-day readmission rates, the percent of patients visiting a primary care clinician or any clinician within two weeks after discharge, and the percent having an emergency room visit within 30 days. To help understand the extent of problems with discharge planning and care coordination, Dartmouth Atlas examined six Medicare patient populations: those discharged for medical conditions, for surgical conditions, for hip fracture, and for three common causes of medical hospitalization -- congestive heart failure, heart attacks and pneumonia.

The study population consists of 100% of fee-for-service Medicare beneficiaries who resided in the 306 Dartmouth Atlas hospital referral regions and had full Part A (acute care in facilities, including hospitals) and Part B (clinician services) coverage during the study periods. Beneficiaries had to be age 65 or older on July 1, 2003 for Time 1 (2004) and on July 1, 2008 (2009) for Time 2. Persons enrolled in managed care organizations were excluded from the analyses. For each study period, Dartmouth Atlas first identified hospital claims from short-term acute or critical access hospitals among the study population for each cohort. They excluded cohort hospitalizations with the discharge status on the claim indicating expired (died in the hospital), left against medical advice or discharged to hospice. For the remaining cohort hospitalization records, they excluded hospitalizations when the patient had any acute care hospitalizations in the 90 days prior to cohort admission date. Transfers (defined as (1) within one-day

transfer, (2) both stays had the same cohort event, and (3) both indicated transfer status) were considered as a single cohort hospitalization. For each study period, only one cohort hospitalization (index hospitalization) was selected for each patient for each cohort (we randomly selected one if more than one hospitalization met the criteria). Dartmouth Atlas further excluded index hospitalizations with the discharge status field indicating another acute care hospitals that did not meet the transfer criteria.

Prescription Drug Use In Medicare Part D

Expanding upon a construct established in prior Atlas work, prescription drugs can be divided into three broad categories: drugs that are effective in most patients at preventing or treating significant clinical outcomes; discretionary medications that require individuals to consider carefully the likelihood of uncertain benefits against potential risks or costs; and potentially harmful medications that have unfavorable risk-benefit tradeoffs for specific patients such as the elderly. Variation in effective drug use highlights regions that should serve as national benchmarks of quality prescribing as well as regions where targeted interventions and increased accountability are necessary to address a critical disconnect between evidence and practice. Variation in the use of high-risk medications provides an additional objective indicator of prescribing performance by identifying regions where physicians needlessly overuse risky medications. Lastly, variation in discretionary medication use demonstrates how physicians and patients respond to clinical uncertainty and highlights the importance of shared decision-making.

Selected Measures Of Primary Care Access & Quality

Effective care refers to services that are of proven value and have no significant tradeoffs -- that is, the benefits of the services so far outweigh the risks that all patients with specific medical needs should receive them. These services, such as beta-blockers for heart attack patients, are backed by well-articulated medical theory and strong evidence of efficacy, determined by clinical trials or valid cohort studies. Failure to provide effective care can lead to serious consequences; for example, amputation of a leg is an infrequent but devastating complication of peripheral vascular disease and diabetes.

The claims-based analyses of effective care focus on either the entire fee-for-service Medicare population eligible for both Part A and B and between the ages of 65 and 99 or a subset of that population at risk for a specific procedure or service. For example, the analysis of amputations examines the entire Medicare population, while the analyses of testing among diabetics are restricted to Medicare beneficiaries between the ages of 65 and 75 with a diagnosis of diabetes. When appropriate, statistical adjustments are carried out to account for differences in age, race and sex. The Dartmouth Atlas also reports quality measures regarding the underuse of effective care derived from the consensus measure set of the Hospital Quality Alliance (HQA), the first initiative to routinely report data on U.S. hospitals nationally. Data are posted on the CMS Hospital Compare web site. They provide summary scores on

five measures for treating acute myocardial infarction (AMI); two for congestive heart failure (CHF); and three for pneumonia, for all reporting hospitals located within each hospital referral region. In addition, they report a composite score, which is the weighted average of the three condition-specific summary scores. For individual hospitals, summary scores are based on measures for which there are 25 or more eligible patients.

CMS also posts on the Hospital Compare web site the results of a national survey of the patient experience: the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS). The HCAHPS survey provides measures of patient experience based on a sample of patients recently discharged from a participating hospital. The results of each survey question are given for participating hospitals. For all measures from CMS Hospital Compare, hospital measures were aggregated to the hospital referral region and state levels based on hospital location.

Selected Surgical Discharge Rates

The rates of inpatient surgery are based on the Medicare Provider Analysis and Review (MedPAR) file. The procedure codes (numerators) used in the MedPAR file are based on the International Classification of Disease (ICD-9-CM). Selection of procedure codes was based on review of the literature and/or consultation with clinical experts. Enrollee counts were obtained from the Medicare Denominator file. The Medicare enrollee population includes those alive and age 65 to age 99 on June 30 of the measurement year. Measures based on a count of fewer than 11 patients are not displayed for reasons of patient confidentiality.

Pacemaker Insertion

Pacemaker insertion rates were created at the HRR level for specific purposes by the Dartmouth Atlas of Care (http://www.dartmouthatlas.org/downloads/atlases/cardiovascular_atlas.pdf). Pacemakers are considered a therapeutic intervention usually implanted in patients with tachycardia and bradycardia syndromes. The battery-powered generator-sensors are inserted surgically under the skin of the chest wall; a wire is fed through a large vein to the heart. The number of pacemaker insertions per HRR were identified from Medicare Part B claims using CPT codes (33200-33208, 33212-33217). Pacemaker insertion rates were adjusted using the indirect method for age, sec, and race using the corresponding 2006 Medicare population as the standard.

Terminology Used In the Dartmouth Atlas Data

- **[AAA]** - Abdominal aortic aneurysm.
- **[ACS conditions]** - Ambulatory care-sensitive (ACS) conditions - such as asthma, pneumonia, chronic pulmonary obstructive disease and congestive heart failure - refer to those for which hospitalization is often preventable when access to primary care is adequate.
- **[AMI]** - Acute myocardial infarction, commonly referred to as heart attack.
- **[Arthroplasty]** - Surgical replacement of a joint, such as a hip, knee or shoulder.
- **[CABG]** - Coronary artery bypass grafting, often referred to as coronary artery bypass surgery, heart bypass, or open heart surgery.
- **[Capitated]** - Under capitation, the federal government pays health maintenance organizations (HMO) a fixed annual amount per Medicare enrollee, in exchange for which the HMO must provide all required services. If the total costs of care exceed the amount the government pays, then the HMO must absorb the loss; if they are less, then the HMO may retain the difference.
- **[CHF]** - Congestive heart failure.
- **[CMHS file]** - Continuous Medicare History Sample file. This file includes a record for each beneficiary in a 5% sample for each year, going back thirty years. It includes summary expenditure data and is used to estimate Medicare spending by program component.
- **[CMS]** - The Centers for Medicare and Medicaid Services (CMS) is the U.S. federal agency that administers Medicare and Medicaid.
- **[Confidence interval]** - A range of values within which a measurement falls corresponding to a given probability. A 95% confidence interval indicates that, if the same population was sampled on numerous occasions and interval estimates were made on each occasion, the resulting intervals would bracket the true population measure in approximately 95% of the cases.
- **[COPD]** - Chronic obstructive pulmonary disease, including emphysema and chronic bronchitis.
- **[CPT codes]** - Current Procedural Terminology codes are used in medical claims to describe the services and procedures for which the bill was submitted.
- **[DME]** - Durable medical equipment, such as wheelchairs, prosthetics and oxygen for home use
- **[DRG]** - Diagnosis-related groups (DRGs) are used as part of Medicare's prospective payment system to classify hospital claims with similar characteristics into groups that can be expected to have similar hospital resource use. DRGs are assigned based on diagnoses, procedures, age, sex, discharge status, and the presence of complications or comorbidities.

- **[E&M]** - Evaluation & management (E&M) services include physician visits and consultations in all settings. Claims are classified as E&M by BETOS codes.
- **[EOL]** - End of life.
- **[ESRD]** - End stage renal disease. Medicare provides a national health insurance program for people with ESRD.
- **[FQHC]** - Federally Qualified Health Center. FQHC services are similar to those provided in rural health clinics (RHCs). FQHC services also include preventive primary health services.
- **[FTE]** - Full-time equivalent (FTE) is a standardized measure of work effort. An FTE of 1.0 means the equivalent of one full-time worker. Physician labor input measures use work relative value units (RVUs) to measure FTEs.
- **[HCI index]** - Hospital Care Intensity index. The HCI index is based on two variables: the number of days patients spent in the hospital and the number of physician encounters (visits) they experienced as inpatients. It is computed as the age-sex-race-illness standardized ratio of patient days and visits. For each variable, the ratio of a given hospital's utilization rate to the national average was calculated, and these two ratios were averaged to create the index.
- **[HMO]** - Health Maintenance Organization. Risk-bearing HMOs received capitated payments for each member, in exchange for which they must provide all required services.
- **[HRR]** - Hospital referral regions (HRRs) are regional market areas for tertiary medical care. Each HRR contains at least one hospital that performs major cardiovascular procedures and neurosurgery.
- **[HSA]** - Hospital service areas (HSAs) are local health care markets for hospital care. An HSA is a collection of ZIP codes whose residents receive most of their hospitalizations from the hospitals in that area.
- **[MUA/MUP]** - Medically Underserved Areas/Populations are areas or populations designated by HRSA as having too few primary care providers, high infant mortality, high poverty, and/or high elderly population.
- **[NCQA]** - The National Committee for Quality Assurance (NCQA) is a private, not-for-profit organization dedicated to improving health care quality.
- **[Part A]** - Part A is Medicare's hospital insurance program. It covers inpatient care in hospitals, nursing homes, skilled nursing facilities, and critical access hospitals.
- **[Part B]** - The coverage provided by Medicare Part B includes medically necessary doctor's services, outpatient care, and most other services that Part A does not cover (such as some

physical or occupational therapies and some home health care services). Part B covers preventive services as well.

- **[Part D]** - Part D is prescription drug coverage insurance that is provided by private companies approved by Medicare.
- **[PCI]** - Percutaneous coronary intervention, commonly known as coronary angioplasty.
- **[Revascularization]** - Surgical procedure to establish or improve blood supply to a body part or organ.

Dartmouth Atlas Variable Names:

Variable names contain information about the data source, geographic level, and year(s).

- All variables begin with the letter 'd' to indicate the variable is from the Dartmouth Atlas of Health Care.
- This is followed by a 3-digit number representing the measure.
- A two letter code denotes the level of geography.
- The last four digits reflect the year(s) of the measure

For example, the variable d117hr2003 is the "Hospital care intensity index" at the level of Hospital referral region for 2003. The variable d117hr0307 is the "Hospital care intensity index" at the level of Hospital referral region for the combined years 2003-2007.

Example: d117hr2003	
d	Dartmouth Atlas of Health Care
117	Hospital care intensity index
hr	Hospital referral region
2003	Year

Geographic identifiers, including those that can be used to link to HRS respondent data, do not contain 4-digit year codes.

Treatment of Negative Values:

Rates based on fewer than 26 events per geographic unit (e.g., county, HRR, HSA) are reported as negative values to indicate lack of statistical precision. These rates are considered unreliable if the margin of error is greater than 20%. It is up to the user to decide whether unreliable cases, indicated with negative values, should be removed for analytic purposes. If the cases are not removed, the negative values should be converted into positive values in order to achieve a distribution of positive numbers. A list of variables that contain observations with negative values is below.

Data File Name	Variable Number	State	HRR	County	HSA
da_hrr_chronill_cancer	d199		x		x
da_hsa_medicare_mort_rt	d296				x
	d297				x
da_hsa_sel_measures_inp_util_last6	d265				x
da_state_sel_med_disch_rt; da_hrr_sel_med_disch_rt; da_hsa_sel_med_disch_rt	d280				x
	d281				x
	d282				x
	d283	x	x		x
	d284				x
	d285				x
	d286		x		x
	d287				x
	d288	x	x		x
	d289	x	x		x
	d290				x
	d291		x		x
	d292		x		x
	d293				x
	d294				x
da_state_sel_medicare_reimb_rt_cmhs; da_hrr_sel_medicare_reimb_rt_cmhs	d318	x	x		
	d327	x	x		
	d328		x		

(cont.)

(cont.)

Data File Name	Variable Number	State	HRR	County	HSA
da_state_sel_measures_primecare_access_qual; da_hrr_sel_measures_primecare_access_qual; da_county_sel_measures_primecare_access_qual; da_hsa_sel_measures_primecare_access_qual	d623		x	x	x
	d624		x	x	x
	d625		x	x	x
	d626	x	x	x	x
	d627	x	x	x	x
	d628	x	x	x	x
	d629		x	x	x
	d630		x	x	x
	d631		x	x	x
	d632			x	x
	d633			x	x
	d634			x	x
	d635	x	x	x	x
	d636	x	x	x	x
	d637	x	x	x	x
	d638			x	x
	d639			x	x
	d640			x	x
da_state_sel_surg_disch_rt; da_hrr_sel_surg_disch_rt; da_hsa_sel_surg_disch_rt	d642				x
	d643		x		x
	d644				x
	d645				x
	d646				x
	d647				x
	d648				x
	d649				x
	d650				x
	d651				x
	d652				x
	d653	x	x		x
	d654		x		x
	d655		x		x
	d656		x		x
	d657		x		x
	d658		x		x

Note: Variables numbers are non-unique across datasets. Data file specific identifiers should be added (e.g., d658 should be d658ha for the HSA version of this variable). Negative values indicate too few events within the geographic level to be considered statistically reliable and there are, therefore, more variables with negative values at smaller levels of geography.

Dartmouth Atlas Geographic Identifiers:

HRR

- **STATEUSPS –** char 2 – State abbreviation
- **HRRID** – char 3 – HRR ID*
- **d104hr** – char 29 – HRR Name

HSA

- **STATEUSPS –** char 2 – State abbreviation
- **HSAID** – char 6 – HSA ID*
- **d108ha** – char 27 – HSA Name

State

- **d100st –** char 2 – State ID‡
- **d101st** – char 20 – State Name
- **STATEUSPS** – char 2 – State Abbreviation*

*Link to HRS geo data

‡ *STATEUSPS* in HRS geo data

Working with HRS Address Data:

Note to users: Respondent addresses are carried forward to the next wave and they appear for waves in which the interview may not have occurred. xIWTYPE in the Tracker file indicates whether someone was actually interviewed in that wave, in which case, the address would have been confirmed. If users want to limit analyses to waves in which the R was interviewed keep waves of observations where xIWTYPE = 1. In summary, an address appearing on a given line does not indicate that an interview took place in that wave; it is simply the address that was on record at the time.