Brown University
School of Public Health

HRS Restricted Data File Companion: LTCfocus

Long-Term Care: Facts on Care in the US

Data Description and Usage
Version 1
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Preface

The Health and Retirement Study (HRS) is the largest and longest running national survey of the elderly population in the United States. It gathers extensive data about the physical and mental health status, insurance coverage, financial status, family support systems, labor market status, and retirement planning of older Americans. Brown University has developed a market level long-term care data base (LTCfocus) as a readily linkable restricted data module to, when linked to the HRS, make possible a new way of studying how older adults use nursing homes, expanding our knowledge in this increasingly important area.

The *Shaping Long-Term Care in America* NIA funded program project grant (PPG) [P0-1-AG-27296] being conducted at the Brown University Center for Gerontology and Health Care Research is exploring the effect of state policies and market forces on the availability and quality of nursing home care in the US. As part of this effort, Brown researchers have compiled, analyzed, aggregated and cleaned pertinent data at the provider, county and state level for the period 2000 to 2010. These data, called LTCfocus, detail the health and functional status of nursing home residents, the characteristics of care facilities, the state policies relevant to long-term care services and financing, and the characteristics of markets in which facilities exist. The data, currently available on the project website http://ltcfocus.org/, can be used interactively and the entire data base can be down-loaded, allowing researchers to address their own questions regarding the relationship between state policies and local market forces and the quality of long-term care. In spite of their usefulness to date in understanding provider behavior and documenting temporal and geographic variation in US nursing homes, a whole new class of questions can be addressed by linking these data to the rich individual-level HRS data.

With funding from the NIA under research grant R03AG046482, Brown University has created the HRS-LTCfocus restricted data module - a user friendly version of the data available at www.ltcfocus.org, designed to be readily linkable by zip-code, Skilled Nursing Facility (SNF) provider ID, county, and state to numerous HRS-restricted files. It contains variables with consistent and intuitive naming conventions. There is one file for each of 3 levels of data: SNF facility, county, and state, with information for most variables spanning 2000-2010. Each file contains 1 observation per unit-level per year.

We are grateful for the continued support and funding from the NIA. We would also like to thank the HRS research team for their enthusiasm and support of this endeavor.

We look forward to receiving feedback on this first rollout of the HRS-LTCfocus restricted data module. All comments, questions, and suggestions can be sent to hrsquestions@umich.edu.

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1. Introduction and Overview

This report documents the HRS-LTCfocus data files - nursing facility, county and state level files for the period 2000 to 2010 that detail the health and functional status of NH residents, the characteristics of NHs, the state policies relevant to long-term care services and financing, and the characteristics of markets in which NHs exist. There is one file for each level of data with information for most variables spanning 2000-2010. Each file contains 1 observation per unit-level per year.

Data are included for all Medicare and Medicaid certified facilities in the 48 continental states and Hawaii, not all of which will be represented in the HRS file. Alaska and Washington, DC are excluded due to sample size limitations. County level data are included only for those counties with at least one NH.

The datafiles are designed to be used in combination with other HRS-restricted files that contain nursing facility, zip-code, county, and state level IDs. Once merged to these restricted files, they are then fully-compatible with and linkable to the public use data files.

1.1 Confidentiality and Access Restrictions

The data described in this document are at the nursing facility, county, and state levels. While the information contained in the stand-alone files is not sensitive, when linked to individual HRS respondents it becomes so. Therefore, the data are only available under terms of a formal agreement negotiated between the researcher and HRS. Researchers can go to the Restricted Data Overview page of the HRS website (hrsonline.isr.umich.edu) for an explanation of the application process.

1.2 Data Files Structure

The HRS-LTCfocus data are distributed in three separate files which include one observation per year per unit of data. During the application process, the researcher may request to receive any or all of these three files. The earliest year of data in LTCfocus is 2000, and therefore they should not be used to describe market characteristics for any earlier survey wave. Researchers must also be careful when using the data in conjunction with the 2000 HRS survey, keeping in mind that many of the questions that ask about nursing home use in particular refer to the 2-year period prior to the survey.

The HRS-LTCfocus datafiles are distributed in SAS, Stata, and SPSS formats.

1.3 Variable naming conventions

With few exceptions, variable names in the HRS-LTCfocus datafiles follow a consistent pattern. All variables are given a suffix depending on the level of data. See Table 1 for suffix names. When a particular piece of information is aggregated at all three levels, the root name of the variable remains the same across files.

Table 1. Variable Suffixes

File level	Suffix
Nursing facility level	_fac
County level	_cty
State level	_sta

1.4 Missing Values

Variables come from many sources and may contain missing values for a number of reasons. Because much of the data are aggregated from CMS data, which are covered under the strict terms of a data use agreement, the most prevalent reason that a facility will be missing information on an item is to adhere to CMS's cell suppression policy. This policy stipulates that no cell (e.g. admittances, discharges, patients, services) 10 or less may be displayed. Also, no use of percentages or other mathematical formulas may be used if they result in the display of a cell 10 or less. Therefore, in these data, if either the numerator or the denominator was less than or equal to 10 after aggregating, the result was set to missing. Because this is done after aggregating, facilities whose values were set to missing in the facility-level file can still contribute to the measure at the county and state levels.

In the codebooks found in Appendices 1, 2 and 3, missingness due to general item non-response or unavailability for a given year is denoted with an '.' (or ' ' for string variables). Missingness due to cell suppression is denoted with '.*'. In the datafiles themselves, missingness due to cell suppression is coded differently depending on the statistical package used. See Table 2.

Table 2. Coded Missingness in Data

Statistical Package	String variables	Numeric variables	
		Cell Suppression	Other
SAS	blank	.L	.
SPSS	blank	-9	.
Stata	blank	.L	.

Appendix 4 provides summary tables of the level of missingness per item, overall and by calendar year. These tables can be useful in determining the feasibility of a study given data availability. Note that 9 of the 80 facility measures, for example, are missing information for more than 50% of study observations across all years. Those items should be used with caution.

2 File Components

2.1 Data Sources

The variables in LTCfocus were developed from several sources. Descriptions of each follow. Each variable label includes the source of the data.

2.1.1 Online Survey Certification And Reporting (OSCAR)

OSCAR data are administrative data collected by state survey agencies during nursing facility annual certification inspections. The OSCAR data are maintained by the Centers for Medicare and Medicaid Services (CMS). Inspection surveys generally occur at least once every 15 months and all data gathered during inspections are compiled in the OSCAR database. The OSCAR database includes data on nursing home organizational characteristics, aggregate resident characteristics, staffing, and quality deficiencies identified during inspections.

Because each facility is not assessed every 12 months, there are some without a survey in a given calendar year. Therefore, yearly estimates are derived from the closest survey within 6 months of the given year of interest (before or after). The date of the survey is provided in the file for reference. Note that for some facilities, information for adjacent years are taken from a

single survey. Facilities that do not have a survey within the given timeframe have missing information for the year.

2.1.2 Minimum Data Set (MDS)

MDS data are resident level data related to resident clinical and functional status. The MDS is collected for every nursing home resident upon admission and at least quarterly thereafter. It is also collected whenever there is a change in residents' overall status. Data include the residents' diagnoses, treatments, medications, activities of daily living (ADL), and mood/behaviors.

Nursing homes submit MDS assessments to their state. CMS, in turn, collects all assessments from the state into a national repository. The LTCfocus data used here spans 2000 – 2010 and therefore used MDS version 2.0. The MDS transitioned to version 3.0 in October 2010. The two versions are not compatible across many items. In addition, data quality dropped for the last quarter of data collected under version 2.0, spanning July to October 2010. Therefore, MDS measures provided for facilities in 2010 reflect data collected in the first half of the year extrapolated to the entire year.

MDS data have been aggregated to the nursing facility, county, and state levels. We have created two forms of MDS aggregates for this purpose: incidence measures are based on all admissions in the facility, county, or state in each calendar year; and prevalence measures are based on all residents in the facility, county, or state on the first Thursday in April. Research has shown that the nursing home population fluctuates both by season during the year and by day of the week. The nursing home population is highest during the winter months and lowest during the summer months. In addition, we have found that nursing home admissions and discharges fluctuate during each week, with the greatest number of admissions occurring on Mondays and the greatest number of discharges occurring on Fridays. We sought to avoid these issues by calculating all MDS prevalence measures based on the nursing home population on the first Thursday in April each year.

2.1.3 State Policy Data (SP)

Beginning in early 2002, our research team at Brown University's Center for Gerontology and Health Care Research developed and implemented a protocol for collecting data about state policies from Medicaid officials. Building on the State Medicaid policy book assembled by Charlene Harrington and colleagues, the survey gathers information on states' Medicaid policies, payment rates, reimbursement methodology, and bed hold policies, among others. Information is available from 2000-2009.

2.1.4 Area Resource File (ARF)

The ARF is a national county level health resources database maintained by the Health Resources and Services Administration (HSRA). It contains data about the health professionals and facilities in each county. The ARF is available annually and contains data gathered from the Census Bureau, CMS, and the Bureau of Labor Statistics, among others.

2.1.5 Residential History File (RHF)

The RHF is a data resource developed at the Brown University Center for Gerontology and Healthcare Research. It is built using Medicare enrollment data, Medicare claims, and MDS data. It can be used to track individuals as they move through the long-term care system, including between different care settings and different care types (e.g., hospice).

The goal of the RHF is to create a per-person chronological history of health service utilization and location of care within a pre-specified calendar (e.g., throughout a calendar year). The first step of the algorithm assigns utilizations/locations to days in a calendar. Depending upon the type of claim, the basic information from a claim is the location of care (hospital, nursing home, emergency room or observation days, and home) and type of provider (e.g. free-standing, hospital based, or swing bed). The sequence of data entered into the calendar is determined by a hierarchy formed according to our trust in the reliability of the claim, and the type of information it provides. Inpatient claims are first filled into dates of the calendar followed by days marking emergency department (ER) and observation days paid as outpatient claims. Next Skilled Nursing Facility (SNF) claims are entered onto days, followed by outpatient claims for skilled nursing service in a nursing home, and lastly home health claims are filled into days. The above claims are location specific. Hospice claims, on the other hand, are not location specific, since hospice can be provided in community or institutional settings; therefore episodelets of any type that overlap a period of hospice services will be called hospice in that location. In particular there are nursing home and community hospice episodelets. Once the calendar is filled by all information obtained from claims (except for hospice), the remaining non-filled days are referred to as gap days. During gap days individuals may have received continued, non-SNF covered nursing home care, or were in an assisted living facility, receiving other services not paid by Medicare, or are at a non-institutional setting. At this point we use MDS assessments to infer probable periods of time of nursing home care. MDS assessments are conducted according to a CMS mandated schedule. Admission assessments are required within two weeks of admission, quarterly assessments around 90 days, and annual assessments are required each calendar year, around the time of the closest designated quarterly assessment. Discharge tracking assessments are required by CMS and may be used to determine date of nursing home discharge when they are present. Using the regulation schedule we can infer periods of nursing

home care within gap periods. For example, quarterly assessments may be used to project nursing home care between two MDS assessments (not to exceed 120 days) or between an MDS assessment date and the end of the preceding episodelet. MDS assessments within gap episodes can project nursing home care following the assessment date if the gap time from the assessment leads into an inpatient episodelet within 90 days. Additionally, since MDS assessments must be conducted within 14 days of nursing home admission, we consider any gap days during the 14 days prior to a MDS admission assessments to be nursing home stay days. Consecutive days with the same utilization are aggregated into episodelets of care.[1]

2.2 LTCfocus files

Data are provided at three different levels in separate datasets: nursing facility, county, and state levels. Each file contains information derived from all Medicare and Medicaid certified facilities in the United States excluding Alaska and Washington, DC. Table 2 provides a description of the items available and the files in which they can be found. More detailed descriptions of each variable can be found in level-specific codebooks in the Appendix.

Table 2. Availability of LTCfocus Variables Across Levels

Variable Group	Variable Name (excluding suffix)	Data Source	Short Description	Presence in File		
				Nursing facility	County	State
Identification[2]						
	county	OSCAR	Facility County	x	x	
	~~nhlat~~	~~Brown University~~	~~Nursing facility latitude.~~	~~x~~		
	~~nhlong~~	~~Brown University~~	~~Nursing facility longitude.~~	~~x~~		
	prov0475	OSCAR	Facility Name	x		
	prov1680	OSCAR	ID number assigned to the facility by CMS.	x		
-	~~prov2720~~	~~OSCAR~~	~~Facility Address~~	~~x~~		
	prov2905	OSCAR	Facility Zipcode	x		
	prov3225	OSCAR	Facility City	x		
	state	OSCAR	Facility State	x	x	x
	year		Calendar Year	x	x	x
Acuity (all admissions)						

[1] For a complete overview of RHF methodology see: Intrator O, Hiris J, Berg K, Miller SC, Mor V (2011). The Residential History File: Studying Nursing Home Residents' Long-Term Care Histories. *Health Services Research*. 46(1p1): 120-137.

[2] Note: Variables nhlat, nhlong and prov2720 have been removed from the facilities dataset available through the MiCDA Enclave

	agg_adl	MDS	The average Activities of Daily Living (ADL) score for all residents admitted during the calendar year. Range is from 0 to 28. 0 indicates completely independent and 28 completely dependent.	x		
	agg_cmi	MDS	The average Resource Utilization Group Nursing Case Mix Index (a measure of the relative intensity of care of different nursing home populations) for all residents admitted during the calendar year.	x	x	x
	agg_cps	MDS	Proportion of residents admitted during the calendar year with a Cognitive Performance Scale (CPS) score of 5 or 6 (severe cognitive impairment).	x		
	agg_dnr	MDS	Proportion of residents admitted during the calendar year with a Do Not Resuscitate order.	x		
	agg_low_care	MDS	Proportion of residents admitted during the calendar year who were low care, according to the broad definition.	x	x	x
	agg_nh	MDS	Proportion of residents admitted during the calendar year who had had a prior nursing home stay.	x		
Acuity (prevalence)						
	avgadl	MDS	The average Activities of Daily Living (ADL) score for all residents present on the 1st Thursday in April.	x	x	x
	avgrugcmi	MDS	The average Resource Utilization Group Nursing Case Mix Index (a measure of the relative intensity of care of different nursing home populations) for all residents present on the 1st Thursday in April.	x	x	x
	avgrxnum	MDS	Average number of medications in the past 7 days per resident present on the 1st Thursday in April.	x	x	x

	pctbedft	MDS	Proportion of residents present on the 1st Thursday in April who are bedfast.	x	x	x
	pctcath	MDS	Proportion of residents present on the 1st Thursday in April who have a catheter.	x	x	x
	pctchf	MDS	Proportion of residents present on the 1st Thursday in April who have congestive heart failure.	x	x	x
	pctdnh	MDS	Proportion of residents present on the 1st Thursday in April who are Do Not Hospitalize.	x	x	x
	pctdnr	MDS	Proportion of residents present on the 1st Thursday in April who are Do Not Resuscitate.	x	x	x
	pcthighcps	MDS	Proportion of residents present on the 1st Thursday in April with a Cognitive Performance Scale (CPS) score of 5 or 6 (severe cognitive impairment).	x	x	x
	pctlowcps	MDS	Proportion of residents present on the 1st Thursday in April with a Cognitive Performance Scale (CPS) score of 0, 1, or 2 (low cognitive impairment).	x	x	x
	pcthyper	MDS	Proportion of residents present on the 1st Thursday in April with hypertension.	x	x	x
	pctincont_bladr	MDS	Proportion of residents present on the 1st Thursday in April who are bladder incontinent.	x	x	x
	pctincont_bowel	MDS	Proportion of residents present on the 1st Thursday in April who are bowel incontinent.	x	x	x
	pctlocare	MDS	Proportion of residents present on the 1st Thursday in April who were low care, according to the broad definition.	x	x	x
	pctobese	MDS	Proportion of residents present on the 1st Thursday in April who had a body mass index (BMI) of 35 or higher.	x	x	x
	pctrxdep	MDS	Proportion of residents in the facility on the 1st Thursday in April receiving antidepressants.	x	x	x
	pctrxpsych	MDS	Proportion of residents in the facility on the 1st Thursday in April receiving antipsychotics.	x	x	x
	pctrxpsyoff	MDS	Proportion of residents in the facility receiving antipsychotics off-label.	x	x	x

	pctschiz_bipol	MDS	Proportion of residents present on the 1st Thursday in April with Schizophrenia or Bi-polar Disorder.	x	x	x
	pctuti	MDS	Proportion of residents present in the county on the 1st Thursday in April with a urinary tract infection.	x	x	x
	pctvent	MDS	Proportion of residents present on the 1st Thursday in April who are on a ventilator.	x	x	x
	pctwalking	MDS	Proportion of residents present on the 1st Thursday in April who can walk in corridor.	x	x	x
Demographics (all admissions)						
	agg_female	MDS	Proportion of residents admitted during the calendar year who were female.	x	x	x
	agg_home	MDS	Proportion of all admissions during the calendar year that were from home.	x	x	x
	agg_u65	MDS	Proportion of residents admitted during the calendar year who were below age 65.	x	x	x
	avgage	MDS	Average age of residents residents on the 1st Thursday in April.	x	x	x
	agg_hosp	MDS	Proportion of all admissions during the calendar year that were from an acute care hospital.	x		
	agg_black	MDS	Proportion of residents admitted during the calendar year who were Black.	x	x	x
	agg_hispanic	MDS	Proportion of residents admitted during the calendar year who were Hispanic.	x	x	x
	agg_white	MDS	Proportion of residents admitted during the calendar year who were White.	x	x	x
Demographics (prevalence)						
	pctfem	MDS	Proportion of residents present on the 1st Thursday in April who are female.	x	x	x
	pctunder65	Residential History File	Proportion of residents present on 1st Thursday in April who are under 65 years old.	x	x	x
	pctblack	MDS	Proportion of residents present on the 1st Thursday in April who are Black.	x	x	x

	pcthisp	MDS	Proportion of residents present on the 1st Thursday in April who are Hispanic.	x	x	x
	pctwhite	MDS	Proportion of residents present on the 1st Thursday in April who are White.	x	x	x
Facility Characteristics						
	adefscore	OSCAR	Average weighted deficiency score (all deficiencies) for the facility.	x		
	alzunit	OSCAR	The proportion of facilities that have an Alzheimer's SCU in the county.	x	x	x
	anyunit	OSCAR	Indicates whether or not facility has any Special Care Unit (SCU) (excluding Ventilator Units).	x		
	facpoor	OSCAR	Proportion of facilities in the county considered low-resource based on resident payer mix	x	x	x
	hospbase	OSCAR	Indicates whether or not facility is hospital-based	x		
	multifac	OSCAR	The proportion of facilities within the county that are part of chains.	x	x	x
	profit	OSCAR	The proportion of for-profit facilities within the county.	x	x	
	restrain	OSCAR	Average proportion of facility residents who were restrained across facilities in the county.	x	x	x
	totbeds	OSCAR	Number of beds as reported on the annual OSCAR (imputed from previous year if missing or implausible)	x	x	x
General						
	nresid	Residential History File	Number of nursing home residents	x	x	x
	srvydate	OSCAR	OSCAR Survey Date	x		
Insurance Coverage						
	paymcaid	OSCAR	Proportion of facility residents whose primary support is Medicaid averaged across all facilities in the county.	x	x	x
	paymcare	OSCAR	Proportion of facility residents whose primary support is Medicare averaged across all	x	x	x

			facilities in the county.			
	pctHMO	Residential History File	Proportion of residents present on the 1st Thursday in April who were covered by a Medicare HMO (Health Maintenance Organization).	x	x	x
Market Availability						
	la_hbedstot_000e	Area Resource File	Number of hospital beds in the county for every 1000 persons age 65 or older.		x	
	la_hha000e	Area Resource File	Number of home health agencies in the county for every 1000 persons age 65 or older.		x	
	la_medmcpen	Area Resource File	Medicare managed care organization penetration rate.		x	
	la_nursall_000e	Area Resource File	Number of nurses (RNs & LPNs) in the county for every 1000 persons age 65 or older.		x	
Saturation						
	occpct	OSCAR	Number of occupied beds in facility divided by the total number of beds and aggregated to the county level.	x	x	x
	adm_bed	MDS	Number of admissions divided by total number of beds.	x		
	agg_adm	MDS, OSCAR	Total number of nursing home admissions in the year	x	x	x
	la_avgempbed	OSCAR	Number of empty nursing home beds in the county divided by the number of nursing homes in the county.		x	
	la_herfbeds	OSCAR	Measure of nursing home concentration/competition in the county ranging from 0 to 1. The closer to 1, the closer the county is to having a monopoly in nursing home beds.		x	
Service Utilization						
	hospptyr	Residential History File	Number of hospitalizations during the calendar year for every 365 nursing home resident days in a facility aggregated to the county level.	x	x	x
	nhdays	Residential History File	Total Nursing Home days for the facility.	x		x
	pctlshosp	Residential History File	Percent quarter 2 long-stay residents that were hospitalized in 6 months	x	x	x

	pctnhdayshospice	Residential History File	Proportion of all nursing home days during the calendar year that were hospice.	x	x	x
	pctNHdaysSNF	Residential History File	Proportion of all nursing home days during the calendar year that were SNF (skilled nursing facility) Medicare covered days.	x	x	x
	rehosp	Residential History File	30-day rehospitalization rate	x	x	x
Staffing						
	anymdex	OSCAR	Indicates the presence of any Nurse Practioners or Physician Assistants in the facility.	x		
	cnahrppd	OSCAR	The average CNA hours per resident day among all facilities in the county.	x	x	x
	dchrppd	OSCAR	The number of direct-care staff hours per resident day within facility averaged across facilities in the county.	x	x	x
	lpnhrppd	OSCAR	The number of LPN hours per resident day within facility averaged across facilities in the county.	x	x	x
	rn2nrs	OSCAR	Ratio of number of RN FTEs divided by number of RN FTEs plus LPN FTEs	x		
	rnhrppd	OSCAR	RN hours per resident day; For county and state this is the average RN HPRD among all facilities in the county.	x	x	x
State Policy						
	adj_mrate	Brown University State Policy Survey	Rate of Medicaid spending to total Medicaid days in nursing homes for the state.			x
	bedhold	Brown University State Policy Survey	Indicates whether or not state has a Medicaid Bed Hold payment.			x
	casemix	Brown University State Policy Survey	Indicates whether or not state has a case mix reimbursement system.			x
	pthru	Brown University State Policy Survey	Indicates whether or not state has a Medicaid wage pass-through policy.			x
	tax	Brown University State Policy	Indicates whether or not the state collects a daily bed or resident tax.			x

Table 3 provides summary information for each datafile.

Table 3. Number of Variables and Observations

	Datafile		
	Nursing facility	**County**	**State**
Number of variables	80	67	64
Number of observations			
2000	16,964	2,944	49
2001	16,779	2,942	49
2002	16,555	2,937	49
2003	16,367	2,937	49
2004	16,181	2,933	49
2005	16,048	2,932	49
2006	15,941	2,929	49
2007	15,876	2,927	49
2008	15,800	2,923	49
2009	15,750	2,916	49
2010	15,726	2,916	49
Total	177,987	32,236	539

3. Distribution and Technical Notes[3]

The HRS-LTCfocus data are distributed with the following:

- Documentation: an electronic version of this document
- SAS files (one set per level of data)
  - Raw ASCII datafile (.dat)
  - SAS program to create a SAS datafile
- Stata files (one set per level of data)
  - Raw ASCII datafile (.dat)
  - Stata program (.do) and dictionary (.dct) files to create a Stata datafile
- SPSS files (one set per level of data)
  - Raw ASCII datafile (.dat)
  - SPSS program (.sps) to create an SPSS datafile

[3] In the MiCDA Enclave, the HRS-LTCfocus data are stored in system file format.

Note: User must edit the paths found in the program code to point to their own file locations.

3.1 Using the Data with Other HRS Files

The identifiers needed to link the LTCfocus files to an HRS respondent (nursing facility, county, or state ID) are all restricted items according to HRS and so it not possible to link the files directly to the HRS. Rather, LTCfocus data are meant to accompany other HRS-restricted files, and therefore can only be used in combination with at least one other restricted file.

Refer to the list of Restricted Data Products on the HRS website. All HRS Medicare claims data are able to link directly to the LTCfocus data at the state and county levels. In addition, Skilled Nursing Facility (SNF) claims, nursing home (aka, MDS) data, and the SNF portion of the MedPAR file can link directly to the LTCfocus data at the nursing facility level. With permission from the HRS team, any other restricted files that contain zipcode, county, or state codes can be linked to these LTCfocus files. Researchers should work with the HRS team to see what is allowable.

Zipcode, State and County merging

The LTCfocus and Medicare restricted data, for example, should be merged on both ID variable and year to get the most accurate link. When not directly available, year can be calculated by using dates found in the restricted files. Types of dates that can be used are claim start and end dates and admission and discharge dates. Researchers will need to rename the LTCfocus linking variables (e.g,. county, state, year, etc.) to be compatible with the names in the files with which they wish to link. NOTE that counties are only specific within state, and so county-level files must be merged by state and county in addition to year.

Nursing facility merging

The Skilled Nursing Facility file, the MDS, and the MedPAR files can be merged to the State, County and nursing facility files. Merging on state and county can be done in the same way as described above. Merging to the facility level file involves an additional step. The provider number found in the HRS-restricted files must be mapped to the provider (i.e., facility) number (prov1680) in the LTCfocus facility file.

The nursing facility LTCfocus file can also be merged to other restricted data using zip-code, county, or state.

3.2 Structure of Codebooks

The codebooks were generated using Stata. There is one codebook for each level of data. Each can be found in an Appendix at the end of this document. Within the codebooks there are two

main types of display corresponding to string and numeric variables. We have pasted examples of each below. The circled numbers correspond to comments below the entries.

String variable

```
-------------------------------------------------------------------------------
(1) PROV1680                                                  (2) Provider Number
-------------------------------------------------------------------------------

                  type:  string (str6)

     (4) unique values:  20001                 (5) missing "":  0/177987

             examples:  "145447"
                        "225518"
                        "335769"   (7)
                        "445160"

(6) PROV1680:
  1.  variable group: NA
  2.  short description: ID number assigned to the facility by CMS
  3.  long description: ID number assigned to the facility by CMS
```

Numeric variable

```
-------------------------------------------------------------------------------
(1) totbeds_fac                    (2) Facility level  (OSCAR): number of beds
-------------------------------------------------------------------------------

                  type:  numeric (int) (3)

                 range:  [2,1389]                       units:  1
     (4) unique values:  502                   (5) missing .:  0/177987

                  mean:   104.692
             std. dev:   65.1881   (8)

         percentiles:  10%       25%       50%       75%       90%
                        40        60        99       126       179
```

```
(6) totbeds_fac:
  1.  variable group: Facility Characteristics
  2.  Short Description :  Number of beds as reported on the annual OSCAR
(imputed from previous year if missing or implausible)
  3.  Long Description :  A two step process is used to create the total
number of beds.  Some facilities report the number of available beds instead
of the number of Medicare/Medicaid certified beds.  Therefore, if the number
of residents is less than or equal to the number of certified beds, we use
the number of certified beds as the total beds.  If, however, the number of
residents is greater than the number of certified beds we use the number of
available beds for total beds.  This is done to keep the number of beds and
all staffing related variables consistent because if a facility is reporting
```

available beds they are also most likely reporting staffing related to available beds. We further clean the total beds data by determining if the number of beds in a facility is consistent over time. If the number of beds is missing in the current survey, or implausible based on previous years' data, we impute totbeds based on previous values. If the number of beds is missing in the current survey, or implausible based on previous years' data, we impute totbeds based on previous values.

1. Variable name – when a variable is included in all three levels of data, the root will be the same, and the suffix will be either _fac, _cty, or _sta.
2. Variable label – Apart from the basic identifiers, the labels include the level of the data as well as the source of the information in parentheses.
3. Variable type
    a. String variables include the length of the variable (e.g., str5 indicates a string variable with a length of 5)
    b. Numeric variables can be integers (int), byte, double, or long
4. Reports the number of unique values in the variable
5. Demonstrates how missingness is assigned. Generally it is a blank space (" ") in a string variable and a period "." in a numeric variable. Some variables also include a sub-type of missing, coded as .L or -9 in the data itself and summarized as .* in the codebooks found in this manual to indicate missing due to CMS cell suppression.
6. For each variable, as applicable, there are up to 3 notes. They include the variable group and short descriptions that were provided in Table 2 as well as a long description.
7. For string variables, examples of the information found in the variable are provided. Each unique value is NOT listed.
8. For numeric variables, summary information is included. For most numeric variables (int, byte, long), the range, mean, standard deviation, and percentiles are provided. For numeric byte variables the mean, standard deviation and percentiles are replaced with a tabulation of the count of observations within each category.

Appendices

NH level codebook

County level codebook

State level codebook

Summary Tables – Missingness

Appendix 1. Nursing Facility Level Codebook

```
Number of variables:  80
Number of observations:  177,987

------------------------------------------------------------------------------
county                                                        FIPS County code
------------------------------------------------------------------------------

                  type:  string (str3)

         unique values:  293                      missing "":  72/177,987

              examples:  "023"
                         "049"
                         "086"
                         "129"

------------------------------------------------------------------------------
nhlat
Nursing Facility level (Brown University): Nursing home latitude
------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [19.202955,76.42113]         units:  1.000e-08
         unique values:  17,925                   missing .:  24/177,987

                  mean:   38.2289
             std. dev:   4.84601

           percentiles:        10%       25%       50%       75%       90%
                            31.4508   34.5544   39.2584   41.6626   43.5436

nhlat:
  1.  Variable Group :  Identification
  2.  Short Description :  Nursing facility latitude.
  3.  Long Description :  Facility addresses are from OSCAR and then Brown
      University's Population Studies and Training Center (PSTC) used ARC-GIS
      for geocoding. For the few hundreds that came back without a geocoding
      (e.g they used a PO Box or something like "route 1" with no number) we
      called them by phone and used Google Earth while on the phone to figure
      out the exact building and dropped a pin on it to get the latitude and
      longitude.

------------------------------------------------------------------------------
nhlong
Nursing Facility level (Brown University): Nursing home longitude
------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [-159.67342,-66.987031]      units:  1.000e-08
         unique values:  17,935                   missing .:  24/177,987

                  mean:  -90.6308
```

```
              std. dev:   14.2015

           percentiles:        10%       25%       50%       75%       90%
                            -117.253  -96.6525  -87.8981  -80.8381  -74.3092
```

nhlong:
1. Variable Group : Identification
2. Short Description : Nursing facility longitude.
3. Long Description : Facility addresses are from OSCAR and then Brown University's Population Studies and Training Center (PSTC) used ARC-GIS for geocoding. For the few hundreds that came back without a geocoding (e.g they used a PO Box or something like "route 1" with no number) we called them by phone and used Google Earth while on the phone to figure out the exact building and dropped a pin on it to get the latitude and longitude.

---

prov0475 — OSCAR: Facility Name

```
                  type:  string (strL)

         unique values:  36,982                   missing "":  0/177,987

              examples:  "COUNTRY VILLA UNIVERSITY PARK"
                         "HICKORY CREEK AT FRANKLIN"
                         "MONTCLAIR MANOR CONVALESCENT HOSPITAL"
                         "SHORELAND HLTH CARE & RETIREME"

               warning:  variable has embedded blanks
```

prov0475:
1. Variable Group : Identification
2. Short Description : Facility Name
3. Long Description : Facility name as reported on OSCAR survey.

---

prov1680 — OSCAR: Nursing Facility Number

```
                  type:  string (str6)

         unique values:  20,001                   missing "":  0/177,987

              examples:  "145447"
                         "225518"
                         "335769"
                         "445160"
```

prov1680:
1. Variable Group : Identification
2. Short Description : ID number assigned to the facility by CMS.
3. Long Description : Current Medicare Provider Number, as assigned by CMS.

---

prov2720 — OSCAR: Street Address

```
                  type:  string (strL)

         unique values:  31,518                   missing "":  1/177,987

              examples:  "14518 E. LOS ANGELES ST."
                         "2370 HARBOR BLVD"
                         "4033 SIXTH AVENUE EXT"
                         "6901 NORTH 72ND STREET"

               warning:  variable has leading and embedded blanks

prov2720:
  1.  Variable Group :  Identification
  2.  Short Description :  Facility Address
  3.  Long Description :  Facility address as reported on OSCAR survey.

-------------------------------------------------------------------------------
prov2905                                                        OSCAR: Zip Code
-------------------------------------------------------------------------------

                  type:  string (str5)

         unique values:  10,301                   missing "":  0/177,987

              examples:  "23602"
                         "43950"
                         "59845"
                         "76201"

prov2905:
  1.  Variable Group :  Identification
  2.  Short Description :  Facility Zipcode
  3.  Long Description :  Facility zipcode as reported on OSCAR survey.

-------------------------------------------------------------------------------
prov3225                                                            OSCAR: City
-------------------------------------------------------------------------------

                  type:  string (str22)

         unique values:  5,746                    missing "":  0/177,987

              examples:  "COOS BAY"
                         "HONESDALE"
                         "MOUND CITY"
                         "SAN BERNARDINO"

               warning:  variable has embedded blanks

prov3225:
  1.  Variable Group :  Identification
  2.  Short Description :  Facility City
  3.  Long Description :  Facility city as reported on OSCAR survey.

-------------------------------------------------------------------------------
state                                                  State Abbreviation
```

```
-------------------------------------------------------------------------------

                  type:  string (str2)

         unique values:  49                       missing "":  0/177,987

              examples:  "GA"
                         "MA"
                         "NJ"
                         "PA"

state:
  1.  Variable Group :  Identification
  2.  Short Description :  Facility State
  3.  Long Description :  Facility State

-------------------------------------------------------------------------------
year                                                                Year of data
-------------------------------------------------------------------------------

                  type:  numeric (int)

                 range:  [2000,2010]                 units:  1
         unique values:  11                       missing .:  0/177,987

                  mean:   2004.92
             std. dev:   3.17033

           percentiles:        10%       25%       50%       75%       90%
                              2001      2002      2005      2008      2009

year:
  1.  Variable Group :  Identification
  2.  Short Description :  Calendar year
  3.  Long Description :  Calendar year

-------------------------------------------------------------------------------
agg_adl_fac                Nursing Facility level (MDS): Long ADL  (all admits)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [0,28]                      units:  1.000e-10
         unique values:  89,031                   missing .:  950/177,987
       unique mv codes:  2                       missing .*:  3,658/177,987

                  mean:   15.4666
             std. dev:    3.1057

           percentiles:        10%       25%       50%       75%       90%
                           11.8049   13.7903   15.7107    17.439   18.9297

agg_adl_fac:
  1.  Variable Group :  Acuity (all admissions)
  2.  Short Description :  The average Activities of Daily Living (ADL) score
      for all residents admitted during the calendar year.  Range is from 0 to
      28.  0 indicates completely independent and 28 completely dependent.
```

3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Individual scores were calculated from the Physical Functioning Self performance section of the MDS (section G,A), which measures an individual's independence on 7 ADLs - bed mobility, transfer, locomotion on unit, dressing, eating, toilet use, and personal hygiene. If personal hygiene was missing on the MDS assessment, the score for dressing was used twice. Each ADL is scored from 0-4, with 0 indicating total independence in that ADL and 4 indicating total dependence in that ADL. All individuals scores were then averaged.

---

agg_cmi_fac Nursing Facility level (MDS): Average RUGS NCMI (all admits)

---

type:	numeric (double)		
range:	[.46,1.7]	units:	1.000e-11
unique values:	138,415	missing .:	1,021/177,987
unique mv codes:	2	missing .*:	3,658/177,987
mean:	1.02661		
std. dev:	.127177		

percentiles:	10%	25%	50%	75%	90%
	.858182	.971615	1.04654	1.10583	1.15849

agg_cmi_fac:

1. Variable Group : Acuity (all admissions)
2. Short Description : The average Resource Utilization Group Nursing Case Mix Index (a measure of the relative intensity of care of different nursing home populations) for all residents admitted during the calendar year.
3. Long Description : Aggregated at the facility level, the average Nursing Case Mix Index (NCMI) was calculated by applying the Resource Utilization Groups version III (RUG-III) resident classification system currently used by CMS to adjust Medicare payments in recognition of resident acuity. This system classifies residents into homogeneous categories based on their estimated resource utilization. Associated with each of these categories is a case-mix index or weight, which approximates the relative staff time associated with caring for the average resident in each group. Thus, the higher the NCMI score, the more severe the average acuity profile of the residents in a facility. The resident-level NCMI was calculated in two steps. First, the RUG-III 5.12 code (44 categories in total) was used to generate a RUG classification for each resident. Second, the RUG code was converted into a NCMI value following the CMS proposed rule regarding fiscal year 2004 Skilled Nursing Facility (SNF) payment policies (Centers for Medicare & Medicaid Services 2003).

---

agg_cps_fac Nursing Facility level (MDS): Percent CPS=5,6 (all admits)

---

type:	numeric (double)		
range:	[0,100]	units:	1.000e-10
unique values:	16,038	missing .:	950/177,987

```
       unique mv codes:  2                       missing .*:  90,219/177,987

                   mean:   12.6131
              std. dev:   10.7917

          percentiles:        10%       25%       50%       75%       90%
                               0   5.67686   10.5263   17.1717   25.2941
```

agg_cps_fac:
1. Variable Group : Acuity (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year with a Cognitive Performance Scale (CPS) score of 5 or 6 (severe cognitive impairment).
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Each individual's Cognitive Performance Scale (CPS) score was calculated from the admission MDS assessment and the proportion of individuals with a CPS score of 5 or 6 was recorded.

---

agg_dnr_fac
Nursing Facility level (MDS): Percent with Do-Not-Resuscitate order (all admits)

```
                   type:  numeric (double)

                  range:  [0,100]                      units:  1.000e-09
          unique values:  30,668                    missing .:  950/177,987
       unique mv codes:  2                       missing .*:  23,984/177,987

                   mean:   42.8729
              std. dev:    22.745

          percentiles:        10%       25%       50%       75%       90%
                           13.3333   24.6753   41.6058   59.6491   74.5223
```

agg_dnr_fac:
1. Variable Group : Acuity (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year with a Do Not Resuscitate order.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Information about whether an individual had a Do Not Resuscitate (DNR) order was gathered from MDS using Section A: Identification and Background Information, Question 10b: Advanced directives, DNR. The proportion of individuals admitted with a DNR was then calculated.

---

agg_low_care_fac Nursing Facility level (MDS): Percent low care (all admits)

```
                   type:  numeric (double)

                  range:  [0,100]                      units:  1.000e-09
          unique values:  7,482                     missing .:  950/177,987
       unique mv codes:  2                       missing .*:  126,564/177,987
```

```
                mean:   7.74613
            std. dev:   14.0989

          percentiles:        10%       25%       50%       75%       90%
                               0         0         0   10.1266   21.5385
```

agg_low_care_fac:
1. Variable Group : Acuity (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were low care, according to the broad definition.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. The 'broad' definition of low-care status is met if a resident does not require physical assistance in any of the four late-loss ADLs—bed mobility, transferring, using the toilet, and eating—and is not classified in either the 'Special Rehab' or 'Clinically Complex' Resource Utilization Group (RUG-III). This was then averaged to the facility level.

---

agg_nh_fac Nursing Facility level (MDS): Percent any prior NH stay (all admits)

```
                type:  numeric (double)

               range:  [0,100]                      units:  1.000e-09
         unique values:  24,834                  missing .:  963/177,987
      unique mv codes:  2                       missing .*:  23,715/177,987

                mean:   34.5145
            std. dev:   13.6706

          percentiles:        10%       25%       50%       75%       90%
                           18.2143   25.1462   33.3333   42.5676   51.8987
```

agg_nh_fac:
1. Variable Group : Acuity (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who had had a prior nursing home stay.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Information about whether an individual had had a prior nursing home stay was gathered from MDS using Section AB: Demographic Information, Question 5: Residential Histor 5 Years Prior to Entry, yes to either a: Prior stay at this nursing home, or b: Stay in other nursing home. The proportion of individuals with prior nursing home stays was then calculated within each facility.

---

avgadl_fac Nursing Facility level (MDS): Long ADL (prevalence)

```
                type:  numeric (double)

               range:  [0,28]                       units:  .01
         unique values:  2,716                   missing .:  2,147/177,987
      unique mv codes:  2                       missing .*:  8,692/177,987
```

```
                  mean:   15.6782
             std. dev:   3.20432

          percentiles:        10%       25%       50%       75%       90%
                            11.91     13.85     15.84     17.71     19.33
```

avgadl_fac:

1. Variable Group : Acuity (prevalence)
2. Short Description : The average Activities of Daily Living (ADL) score for all residents present on the 1st Thursday in April.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Individual scores were calculated from the Physical Functioning Self performance section of the MDS using Section G: Physical Functioning and Structural Problems, Question A: ADL self-performance. This score measures an individual's independence on 7 ADLs - bed mobility, transfer, locomotion on unit, dressing, eating, toilet use, and personal hygiene. If personal hygiene was missing on the MDS assessment, the score for dressing was used twice. Each ADL is scored from 0-4, with 0 indicating total independence in that ADL and 4 indicating total dependence in that ADL. The ADL score range is from 0 to 28, where 0 indicates completely independent and 28 completely dependent. All individuals' scores were then averaged.

---

avgrugcmi_fac Nursing Facility level (MDS): Average RUGS NCMI (prevalence)

```
                  type:  numeric (double)

                 range:  [.4629,1.6285]               units:  .0001
           unique values:  7,174                  missing .:  2,147/177,987
        unique mv codes:  2                      missing .*:  8,692/177,987

                  mean:   .794407
             std. dev:   .096093

          percentiles:        10%       25%       50%       75%       90%
                             .6965      .737     .7839     .8378     .8992
```

avgrugcmi_fac:

1. Variable Group : Acuity (prevalence)
2. Short Description : The average Resource Utilization Group Nursing Case Mix Index (a measure of the relative intensity of care of different nursing home populations) for all residents present on the 1st Thursday in April.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Aggregated at the facility level, the average Nursing Case Mix Index (NCMI) was calculated by applying the Resource Utilization Groups version III (RUG-III) resident classification system currently used by CMS to adjust Medicare payments in recognition of resident acuity. This system classifies residents into homogeneous categories based on their estimated resource utilization. Associated with each of these categories is a case-mix index or weight, which approximates the relative staff time associated with caring for the average resident in each group. Thus, the higher the NCMI score, the more severe the average acuity profile of the

residents in a facility. The resident-level NCMI was calculated in two steps. First, the RUG-III 5.12 code (44 categories in total) was used to generate a RUG classification for each resident. Second, the RUG code was converted into an NCMI value following the CMS proposed rule regarding fiscal year 2004 Skilled Nursing Facility (SNF) payment policies (Centers for Medicare & Medicaid Services 2003).

---

avgrxnum_fac
Nursing Facility level (MDS): Average number of medications (prevalence)

---

type:	numeric (double)		
range:	[0,21]	units:	.01
unique values:	1,416	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	8,692/177,987
mean:	9.88015		
std. dev:	1.823		

percentiles:	10%	25%	50%	75%	90%
	7.56	8.61	9.85	11.11	12.2

avgrxnum_fac:
1. Variable Group : Acuity (prevalence)
2. Short Description : Average number of medications in the past 7 days per resident present on the 1st Thursday in April.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. The number of different medications each individual received in the past 7 days was drawn from the most recent MDS assessment using Section O: Medications, Question 1: Number of Medications used in last seven days. This measure was averaged for the facility level.

---

pctbedft_fac Nursing Facility level (MDS): Percent Bed fast (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	2,521	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	114,114/177,987
mean:	4.11373		
std. dev:	9.81386		

percentiles:	10%	25%	50%	75%	90%
	0	0	0	0	15.49

pctbedft_fac:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are bedfast.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in

April. Whether or not an individual was bedfast was drawn from the most recent MDS using Section G: Physical Functioning and Structural Problems, Question 6: Modes of Transfer, Bedfast all or most of the time. The facility level measure is the proportion of residents with a 'yes' (indicating the resident is bedfast).

---

pctcath_fac Nursing Facility level (MDS): Percent Catheter (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	2,316	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	139,977/177,987
mean:	8.2351		
std. dev:	9.42261		

percentiles:	10%	25%	50%	75%	90%
	0	0	7.93	12.79	17.58

pctcath_fac:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who have a catheter.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Whether an individual had an indwelling catheter was drawn from the most recent MDS assessment using Section H: Continence in last 14 days, Question 3d: Appliances and Programs, Indwelling Catheter. The facility level measure is the proportion of residents who have a catheter.

---

pctchf_fac Nursing Facility level (MDS): Percent CHF (prevalence)

---

type:	numeric (double)		
range:	[0,94.44]	units:	.01
unique values:	3,694	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	65,531/177,987
mean:	22.6232		
std. dev:	8.87182		

percentiles:	10%	25%	50%	75%	90%
	12.87	16.67	21.6	27.59	34.09

pctchf_fac:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who have congestive heart failure.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Whether an individual had congestive heart failure was drawn from

the most recent MDS assessment using Section I: Disease Diagnoses, Question 1f. Note that the MDS instructions state to check only those diseases that have a relationship to current ADL status, cognitive status, mood and behavior status, medical treatments, nursing monitoring, or risk of death. The facility level measure if the proportion of residents with CHF.

---

pctdnh_fac

Nursing Facility level (MDS): Percent with a Do-Not-Hospitalize order

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	3,326	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	74,450/177,987
mean:	3.28201		
std. dev:	10.1016		

percentiles:	10%	25%	50%	75%	90%
	0	0	0	0	13.33

pctdnh_fac:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are Do Not Hospitalize.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Each individual's Do Not Hospitalize (DNH) status was drawn from the most recent MDS admission or annual assessment using Section A: Identification and Background Information, Question 10c: Advanced directives, DNH. The facility level measure is the proportion of residents with a 'yes' (indicating the resident has a filed DNH order).

---

pctdnr_fac

Nursing Facility level (MDS): Percent with Do-Not-Resuscitate order (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	7,552	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	21,262/177,987
mean:	60.8837		
std. dev:	22.3789		

percentiles:	10%	25%	50%	75%	90%
	28.57	45	63.85	78.89	88.18

pctdnr_fac:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are Do Not Resuscitate.

3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Each individual's Do Not Resuscitate (DNR) status was drawn from the most recent MDS admission or annual assessment using Section A: Identification and Background Information, Question 10b: Advanced directives, DNR. The facility level measure is the proportion of residents with a 'yes' (indicating the resident has a filed DNR order).

---

pcthighcps_fac Nursing Facility level (MDS): Percent CPS=5,6 (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	4,908	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	73,555/177,987
mean:	25.1289		
std. dev:	12.8842		

percentiles:	10%	25%	50%	75%	90%
	12.37	16.88	23.08	31.2	40.6

pcthighcps_fac:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April with a Cognitive Performance Scale (CPS) score of 5 or 6 (severe cognitive impairment).
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Each individual's Cognitive Performance Score (CPS) was calculated from the most recent MDS assessment and the proportion of residents with a CPS score of 5 or 6 was then calculated at the facility level.

---

pctlowcps_fac Nursing Facility level (MDS): Percent CPS=0,1,2 (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	5,758	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	26,572/177,987
mean:	41.1943		
std. dev:	14.2505		

percentiles:	10%	25%	50%	75%	90%
	24	31.31	40.21	50	59.47

pctlowcps_fac:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April with a Cognitive Performance Scale (CPS) score of 0, 1, or 2 (low cognitive impairment).
3. Long Description : The Residential History File was used to establish

facility population on the 1st Thursday in April. Each individual's Cognitive Performance Score (CPS) was calculated from the most recent MDS assessment and the proportion of residents with a CPS score of 0, 1, or 2 was then calculated at the facility level.

---

pcthyper_fac Nursing Facility level (MDS): Percent Hypertension (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	5,739	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	17,195/177,987
mean:	52.9203		
std. dev:	13.2118		

percentiles:	10%	25%	50%	75%	90%
	35.92	43.75	52.94	62.26	70

pcthyper_fac:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April with hypertension.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Whether an individual had hypertension was drawn from the most recent MDS assessment using Section I: Disease Diagnoses, Question 1h. Note that the MDS instructions state 'check only those diseases that have a relationship to current ADL status, cognitive status, mood and behavior status, medical treatments, nursing monitoring, or risk of death.' The proportion of residents with hypertension was then calculated at the facility level.

---

pctincont_bladr_fac
Nursing Facility level (MDS): Percent Bladder incontinent (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	5,775	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	13,776/177,987
mean:	62.2724		
std. dev:	12.5497		

percentiles:	10%	25%	50%	75%	90%
	46.51	54.55	62.75	70.59	77.55

pctincont_bladr_fac:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are bladder incontinent.
3. Long Description : The Residential History File was used to establish

the population of residents in each facility on the 1st Thursday in April. Whether or not an individual was bowel incontinent was drawn from the most recent MDS using Section H: Continence in last 14 days, Question 1b, values 2, 3, or 4 (indicating 'occasionally,' 'frequently,' or 'always' incontinent in the past 14 days). The proportion of residents who are bladder incontinent was then calculated at the facility level.

---

pctincont_bowel_fac
Nursing Facility level (MDS): Percent Bowel incontinent (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	6,040	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	21,197/177,987
mean:	51.0598		
std. dev:	14.3714		

percentiles:	10%	25%	50%	75%	90%
	32.73	41.55	51.22	60.63	68.97

pctincont_bowel_fac:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are bowel incontinent.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Whether or not an individual was bowel incontinent was drawn from the most recent MDS using Section H: Continence in last 14 days, Question 1a, values 2, 3, or 4 (indicating 'occasionally,' 'frequently,' or 'always' incontinent in the past 14 days). The proportion of residents who are bowel incontinent was then calculated at the facility level.

---

pctlocare_fac Nursing Facility level (MDS): Percent low care (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	4,850	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	87,517/177,987
mean:	20.6309		
std. dev:	13.4975		

percentiles:	10%	25%	50%	75%	90%
	6.67	13.17	18.99	26.27	34.78

pctlocare_fac:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who were low care, according to the broad definition.
3. Long Description : The Residential History File was used to establish

the population of residents in each facility on the 1st Thursday in April. This measure was calculated from the most recent MDS assessment. The 'broad' definition of low-care status is met if a resident does not require physical assistance in any of the four late-loss ADLs—bed mobility, transferring, using the toilet, and eating—and is not classified in either the 'Special Rehab' or 'Clinically Complex' Resource Utilization Group (RUG-III). This measure is then averaged at the facility level.

---

pctobese_fac Nursing Facility level (MDS): Percent Obese (prevalence)

---

type:	numeric (double)		
range:	[0,75]	units:	.01
unique values:	3,127	missing .:	2,148/177,987
unique mv codes:	2	missing .*:	75,579/177,987
mean:	20.2075		
std. dev:	7.29997		

percentiles:	10%	25%	50%	75%	90%
	12.12	15.28	19.48	24.44	29.67

pctobese_fac:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who had a body mass index (BMI) of 35 or higher.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. The proportion of residents in the facility with a body mass index (BMI) of 35 or greater was then calculated using the height and weight data from the most recent MDS assessment using Section K: Oral/Nutritional Status, questions 1a (height in inches) and 1b (weight in lbs.). Calculations resulting in highly improbable BMI (<10 or >60) were set to missing. The proportion of residents with a BMI 35 or greater was calculated at the facility level.

---

pctrxdep_fac Nursing Facility level (MDS): Percent receiving antidepressants (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	5,541	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	17,739/177,987
mean:	49.2565		
std. dev:	12.4389		

percentiles:	10%	25%	50%	75%	90%
	32.89	40.91	50	57.98	64.97

pctrxdep_fac:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents in the facility on the 1st Thursday in April receiving antidepressants.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Whether an individual was receiving antidepressants was drawn from the most recent MDS assessment using Section O: Medications, question 4c: Number of days during the last 7 days the resident received antidepressant medication (if this value is greater than 0 then the resident was counted as receiving antidepressant medication). The proportion of residents receiving antidepressants was calculated at the facility level.

---

pctrxpsych_fac Nursing Facility level (MDS): Percent receiving antipsychotics (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	5,913	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	49,007/177,987
mean:	29.6977		
std. dev:	14.0317		

percentiles:	10%	25%	50%	75%	90%
	16.39	20.83	26.92	34.85	45.31

pctrxpsych_fac:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents in the facility on the 1st Thursday in April receiving antipsychotics.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Whether an individual was receiving antipsychotics was drawn from the most recent MDS assessment using Section O: Medications, question 4a: Number of days during the last 7 days the resident received antipsychotic medication (if this value is greater than 0 then the resident was counted as receiving antipsychotic medication). The proportion of residents receiving antipsychotics was calculated at the facility level.

---

pctrxpsyoff_fac
Nursing Facility level (MDS): Percent of non-psychotic residents receiving antipsychotics off-label (prevalence)

---

type:	numeric (double)		
range:	[0,93.51]	units:	.01
unique values:	3,685	missing .:	2,147/177,987
unique mv codes:	2	missing .*:	63,903/177,987
mean:	23.2856		
std. dev:	8.42287		

```
          percentiles:        10%       25%       50%       75%       90%
                            13.98     17.65     22.41        28     34.04
```

pctrxpsyoff_fac:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents in the facility on the 1st Thursday in April receiving antipsychotics off-label.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Whether an individual was receiving antipsychotics off-label was drawn from the most recent MDS assessment using Section O: Medications, question 4a: Number of days during the last 7 days the resident received antipsychotic medication (if this value is greater than 0 then the resident was counted as receiving antipsychotic medication). Use was considered off label if the resident does not have schizophrenia and/or bi-polar disorder (MDS Section I: Disease Diagnoses, question 1ff (Bipolar disease) or question 1gg (Schizophrenia)). The proportion of residents receiving antipsychotics off-label was calculated at the facility level.

---

pctschiz_bipol_fac
Nursing Facility level (MDS): Percent Schizophrenic or Bi-polar (prevalence)

```
                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
           unique values:  4,484                  missing .:  2,147/177,987
        unique mv codes:  2                     missing .*:  126,592/177,987

                  mean:   12.4451
             std. dev:   17.5815

          percentiles:        10%       25%       50%       75%       90%
                                0         0      7.34     17.78     34.29
```

pctschiz_bipol_fac:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April with Schizophrenia or Bi-polar Disorder.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Whether an individual had schizophrenia and/or bi-polar disorder was drawn from the most recent MDS assessment using Section I: Disease Diagnoses, question 1ff (Bipolar disease) or question 1gg (Schizophrenia). Note that the MDS instructions state 'check only those diseases that have a relationship to current ADL status, cognitive status, mood and behavior status, medical treatments, nursing monitoring, or risk of death.' The proportion of residents with hypertension was then calculated at the facility level.

---

pctuti_fac Nursing Facility level (MDS): Percent UTI (prevalence)

```
                  type:  numeric (double)

                 range:  [0,81.25]                    units:  .01
           unique values:  2,012                   missing .:  2,147/177,987
        unique mv codes:  2                      missing .*:  133,008/177,987

                  mean:   10.7368
             std. dev:   6.74776

            percentiles:        10%       25%       50%       75%       90%
                                  0       7.3     11.29     14.81     18.52
```

pctuti_fac:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April with a urinary tract infection.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Whether an individual had a urinary tract infection (UTI) was drawn from the most recent MDS using section I: Disease Diagnoses, question 2c (Urinary tract infection in last 30 days). The proportion of residents with a UTI was calculated at the facility level.

---

pctvent_fac Nursing Facility level (MDS): Percent Ventilator (prevalence)

```
                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
           unique values:  1,187                   missing .:  2,147/177,987
        unique mv codes:  2                      missing .*:  18,540/177,987

                  mean:     .2767
             std. dev:   3.24621

            percentiles:        10%       25%       50%       75%       90%
                                  0         0         0         0         0
```

pctvent_fac:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are on a ventilator.
3. Long Description : The Residential History File was used to establish facility, county, or state nursing home population on the 1st Thursday in April. Whether an individual was being treated with a ventilator/respirator was drawn from the most recent MDS assessment using Section P: Special treatments and procedures received during the last 14 days, question 1l: Ventilator/respirator. The proportion of residents with a ventilator was calculated at the facility level.

---

pctwalking_fac
Nursing Facility level (MDS): Percent Walk independently in corridor (prevalence)

```
                  type:  numeric (double)
```

```
                range:  [0,100]                     units:  .01
          unique values:  5,280                  missing .:  2,147/177,987
       unique mv codes:  2                       missing .*:  79,835/177,987

                 mean:   22.5785
            std. dev:   16.0518

          percentiles:        10%       25%       50%       75%       90%
                               0      13.4     21.37     30.11        40
```

pctwalking_fac:
  1. Variable Group : Acuity (prevalence)
  2. Short Description : Proportion of residents present on the 1st Thursday in April who can walk in corridor.
  3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. This measure was drawn from the most recent MDS and the proportion of residents able to walk independently was calculated using MDS section G, question 1A, part d ("walk in corridor", value = 0). This ADL self-performance scale ranges from 0 (independent) to 4 (total dependence). The proportion of residents with a 0 (independent) was calculated at the facility level.

---

agg_female_fac Nursing Facility level (MDS): Percent Female (all admits)

```
                 type:  numeric (double)

                range:  [0,100]                     units:  1.000e-09
          unique values:  22,806                 missing .:  950/177,987
       unique mv codes:  2                       missing .*:  9,057/177,987

                 mean:   64.1089
            std. dev:   10.7579

          percentiles:        10%       25%       50%       75%       90%
                           51.087   58.3876   64.8352   70.6731   76.3023
```

agg_female_fac:
  1. Variable Group : Demographics (all admissions)
  2. Short Description : Proportion of residents admitted during the calendar year who were female.
  3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Each individual's gender was drawn from the MDS assessments using Section AA: Identification Information, Question 2: Gender. The proportion of individuals admitted to the facility who were female was then calculated.

---

agg_home_fac
Nursing Facility level (MDS): Percent of admissions from home (all admits)

```
                 type:  numeric (double)
```

```
                range:  [0,100]                     units:  1.000e-10
          unique values:  9,844                   missing .:  978/177,987
       unique mv codes:  2                       missing .*:  84,803/177,987

                 mean:   15.4376
            std. dev:   12.3103

          percentiles:        10%       25%       50%       75%       90%
                           2.17786   6.62252   12.8543   21.4286   31.8182
```

agg_home_fac:

1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of all admissions during the calendar year that were from home.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Information about whether an individual was admitted to the facility from home was gathered from MDS using Section AB: Demographic Information, Question 2: Admitting From at Entry, response # 1 or 2. The proportion of individuals admitted from home was then calculated within each facility.

---

agg_u65_fac
Nursing Facility level (MDS): Percent under 65 years old (all admits)

```
                 type:  numeric (double)

                range:  [0,100]                     units:  1.000e-10
          unique values:  21,423                  missing .:  950/177,987
       unique mv codes:  2                       missing .*:  77,250/177,987

                 mean:   16.9552
            std. dev:   17.3666

          percentiles:        10%       25%       50%       75%       90%
                                0   6.49351   12.3596   21.6667   37.2549
```

agg_u65_fac:

1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were below age 65.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Each individual's age at admission was calculated from the date of birth listed on the MDS assessment using Section AA: Identification Information, question 3 (birthdate). The proportion of individuals under age 65 at admission was then calculated within each facility.

---

avgage_fac Nursing Facility level (MDS): Average age

```
                 type:  numeric (double)

                range:  [2.17,96.26]                units:  .01
          unique values:  5,052                   missing .:  2,147/177,987
```

```
       unique mv codes:  2                       missing .*:  8,692/177,987

                  mean:   80.6103
             std. dev:   7.21616

          percentiles:        10%       25%       50%       75%       90%
                            72.91     78.34     82.19     84.96     86.94
```

avgage_fac:

1. Variable Group : Demographics (prevalence)
2. Short Description : Average age of residents present on the 1st Thursday in April.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Individual age was calculated using the date of birth from the Medicare denominator data. For individuals not covered by Medicare, age was calculated using the date of birth found on their most recent MDS assessment using Section AA: Identification Information, question 3 (birthdate). Ages of all individuals were averaged to the facility level

---

agg_hosp_fac
Nursing Facility level (MDS): Percent of admissions from acute care (all admits)

```
                  type:  numeric (double)

                 range:  [0,100]                      units:  1.000e-08
           unique values:  19,318                  missing .:  978/177,987
       unique mv codes:  2                       missing .*:  15,581/177,987

                  mean:   73.6223
             std. dev:   18.4835

          percentiles:        10%       25%       50%       75%       90%
                            47.619   62.1622   76.7857   88.2353   95.1049
```

agg_hosp_fac:

1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of all admissions during the calendar year that were from an acute care hospital.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Information about whether an individual was admitted to the facility from an acute care hospital was gathered from MDS using Section AB: Demographic Information, Question 2: Admitting From at Entry, response #5: Acute care hospital. The proportion of individuals admitted from acute care hospital was then calculated within each facility.

---

agg_black_fac Nursing Facility level (MDS): Percent Black (all admits)

```
                  type:  numeric (double)

                 range:  [0,100]                      units:  1.000e-10
           unique values:  20,005                  missing .:  950/177,987
```

```
       unique mv codes:  2                       missing .*:  64,849/177,987

                   mean:   12.8108
              std. dev:   20.3526

          percentiles:        10%       25%       50%       75%       90%
                               0         0         0   18.1818   41.8219
```

agg_black_fac:
1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were Black.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Information about each individual's race was gathered from MDS Section AA 4 (race/ethnicity). This variable reflects the proportion of individuals admitted to the facility who were 'Black, not of Hispanic origin' (response #3).

---

agg_hispanic_fac Nursing Facility level (MDS): Percent Hispanic (all admits)

```
                   type:  numeric (double)

                  range:  [0,100]                      units:  1.000e-10
            unique values:  10,997                  missing .:  950/177,987
       unique mv codes:  2                       missing .*:  64,799/177,987

                   mean:    3.6909
              std. dev:    11.463

          percentiles:        10%       25%       50%       75%       90%
                               0         0         0         0    11.726
```

agg_hispanic_fac:
1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were Hispanic.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Information about each individual's race was gathered from MDS Section AA 4 (race/ethnicity). The proportion of individuals at the facility who were 'Hispanic' (response #4) was then calculated.

---

agg_white_fac Nursing Facility level (MDS): Percent White (all admits)

```
                   type:  numeric (double)

                  range:  [0,100]                      units:  1.000e-09
            unique values:  26,776                  missing .:  950/177,987
       unique mv codes:  2                       missing .*:  7,265/177,987

                   mean:   85.6385
              std. dev:   19.6461
```

```
          percentiles:        10%       25%       50%       75%       90%
                           57.0423   80.4598   94.1814   98.8095       100
```

agg_white_fac:
1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were White.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Information about each individual's race was gathered from MDS Section AA 4 (race/ethnicity). The proportion of individuals admitted in the facility who were 'White, not of Hispanic origin' (response #5) was then calculated within each facility.

---

pctfem_fac — Nursing Facility level (MDS): Percent Female (prevalence)

```
                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
           unique values:  5,612                  missing .:  2,147/177,987
        unique mv codes:  2                      missing .*:  11,508/177,987

                  mean:   71.6487
             std. dev:   11.6829

          percentiles:        10%       25%       50%       75%       90%
                            56.82     65.96     73.42     79.41     84.21
```

pctfem_fac:
1. Variable Group : Demographics (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are female.
3. Long Description : The Residential History File was used to establish the population of residents in the nursing facility on the 1st Thursday in April. Each individual's sex was drawn from the most recent MDS assessment using section AA: Identification Information, Question 2: Gender. The facility level measure is the proportion of residents who are female.

---

pctunder65_fac
Nursing Facility level (MDS): Percent under 65 years old (prevalence)

```
                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
           unique values:  5,506                  missing .:  2,147/177,987
        unique mv codes:  2                      missing .*:  107,328/177,987

                  mean:   20.4269
             std. dev:   20.0192

          percentiles:        10%       25%       50%       75%       90%
```

```
                                0      6.76     16.44     27.78     45.88

pctunder65_fac:
  1.  Variable Group :  Demographics (prevalence)
  2.  Short Description :  Proportion of residents present on 1st Thursday in
      April who are under 65 years old.
  3.  Long Description :  The Residential History File was used to establish
      the population of residents in each facility on the 1st Thursday in
      April.  Individual age was calculated using the date of birth from the
      Medicare denominator file.  For individuals not covered by Medicare, age
      was calculated using the date of birth found on their most recent MDS
      assessment using Section AA: Identification Information, question 3
      (birthdate). The proportion of facility residents under age 65 was then
      calculated at the facility level.

-------------------------------------------------------------------------------
pctblack_fac           Nursing Facility level (MDS): Percent Black (prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
           unique values:  6,355                  missing .:  2,147/177,987
        unique mv codes:  2                     missing .*:  73,790/177,987

                  mean:   14.1898
             std. dev:   22.1357

            percentiles:        10%       25%       50%       75%       90%
                                  0         0         0     22.83     47.69

pctblack_fac:
  1.  Variable Group :  Demographics (prevalence)
  2.  Short Description :  Proportion of residents present on the 1st Thursday
      in April who are Black.
  3.  Long Description :  The Residential History File was used to establish
      the population of residents in each facility on the 1st Thursday in
      April.  Each individual's race was drawn from the most recent MDS
      assessment using Section AA: Identification Information, Question 4:
      Race/Ethnicity. If race was missing on the MDS it was drawn from the
      Medicare denominator file. On the MDS 'Black, not of Hispanic origin' is
      one of five race/ethnicity categories. The facility level measure is the
      proportion of residents who are Black.

-------------------------------------------------------------------------------
pcthisp_fac          Nursing Facility level (MDS): Percent Hispanic (prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
           unique values:  3,759                  missing .:  2,147/177,987
        unique mv codes:  2                     missing .*:  64,595/177,987

                  mean:   3.25584
             std. dev:   11.5969
```

```
          percentiles:        10%       25%       50%       75%       90%
                               0         0         0         0     10.31
```

```
pcthisp_fac:
  1.  Variable Group :  Demographics (prevalence)
  2.  Short Description :  Proportion of residents present on the 1st Thursday
      in April who are Hispanic.
  3.  Long Description :  The Residential History File was used to establish
      the population of residents in each facility on the 1st Thursday in
      April.  Each individual's race was drawn from the most recent MDS
      assessment using Section AA: Identification Information, Question 4:
      Race/Ethnicity. If race was missing on the MDS it was drawn from the
      Medicare denominator file. On the MDS 'Hispanic' is one of five
      race/ethnicity categories. The proportion of residents who are Hispanic
      was calculated at the facility level.
```

```
--------------------------------------------------------------------------------
pctwhite_fac          Nursing Facility level (MDS): Percent White (prevalence)
--------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
        unique values:  6,908                  missing .:  2,147/177,987
       unique mv codes:  2                    missing .*:  12,502/177,987

                  mean:   85.2558
             std. dev:   19.8601

          percentiles:        10%       25%       50%       75%       90%
                            55.17     79.31     94.06     98.94       100
```

```
pctwhite_fac:
  1.  Variable Group :  Demographics (prevalence)
  2.  Short Description :  Proportion of residents present on the 1st Thursday
      in April who are White.
  3.  Long Description :  The Residential History File was used to establish
      the population of residents in each facility on the 1st Thursday in
      April.  Each individual's race was drawn from the most recent MDS
      assessment using Section AA: Identification Information, Question 4:
      Race/Ethnicity. If race was missing on the MDS it was drawn from the
      Medicare denominator file. On the MDS 'White' is one of five
      race/ethnicity categories. The proportion of residents who are White was
      calculated at the facility level.
```

```
--------------------------------------------------------------------------------
adefscore_fac
Nursing Facility level (OSCAR): Weighted deficiency score, all deficiencies, 99a--
--------------------------------------------------------------------------------

                  type:  numeric (int)

                 range:  [0,7332]                     units:  1
        unique values:  795                    missing .:  7,340/177,987

                  mean:   66.7792
             std. dev:    80.255
```

```
          percentiles:        10%       25%       50%       75%       90%
                               8        24        48        84       140

adefscore_fac:
  1.  Variable Group :  Facility Characteristics
  2.  Short Description :  Average weighted deficiency score (all deficiencies)
      for the facility.
  3.  Long Description :  Average weighted deficiency score (all deficiencies)
      for the facility as reported in the annual OSCAR survey for the nursing
      facility.

-------------------------------------------------------------------------------
alzunit_fac       Nursing Facility level (OSCAR): Alzheimer's special care unit
-------------------------------------------------------------------------------

                  type:  numeric (byte)

                 range:  [0,1]                        units:  1
         unique values:  2                        missing .:  0/177,987

            tabulation:  Freq.  Value
                       146,597  0
                        31,390  1

alzunit_fac:
  1.  Variable Group :  Facility Characteristics
  2.  Short Description :  Indicates whether or not facility has an Alzheimer's
      disease Special Care Unit (SCU).
  3.  Long Description :  Whether a facility has an Alzheimer's Disease special
      care unit (SCU) was derived from the annual OSCAR data.  In the OSCAR
      data this is reported as number of beds.  If a facility reported having
      any Alzheimer's Disease beds they were considered to have an Alzheimer's
      Disease SCU.

-------------------------------------------------------------------------------
anyunit_fac
Nursing Facility level (OSCAR): Any special care unit (excluding ventilator unit
-------------------------------------------------------------------------------

                  type:  numeric (byte)

                 range:  [0,1]                        units:  1
         unique values:  2                        missing .:  0/177,987

            tabulation:  Freq.  Value
                       141,934  0
                        36,053  1

anyunit_fac:
  1.  Variable Group :  Facility Characteristics
  2.  Short Description :  Indicates whether or not facility has any Special
      Care Unit (SCU) (excluding Ventilator Units).
  3.  Long Description :  Whether a facility has any special care unit (SCU)
      was derived from the annual OSCAR data.  In the OSCAR data this is
      reported as number of beds.  If a facility reported having any SCU beds,
      excluding Ventilator beds, they were considered to have an SCU.  We
```

```
      excluded Ventilator beds because, unlike other special care beds, these
      are generally not found in designated special units.

-------------------------------------------------------------------------------
facpoor_fac
       Nursing Facility level (OSCAR): Low resource facility based on payer mix
-------------------------------------------------------------------------------

                  type:  numeric (byte)

                 range:  [0,1]                        units:  1
         unique values:  2                        missing .:  4/177,987

            tabulation:  Freq.  Value
                       161,049  0
                        16,934  1
                             4  .

facpoor_fac:
  1.  Variable Group :  Facility Characteristics
  2.  Short Description :  Idicates a facility is considered a low-resource
      facility based on resident payer mix.
  3.  Long Description :  Indicator of whether the facility is considered
      low-resource based on resident payer mix. The annual OSCAR data was used
      to determine if a facility was considered low-resource based on the
      breakdown of the primary payer of residents during the two weeks prior to
      their annual survey.

-------------------------------------------------------------------------------
hospbase_fac         Nursing Facility level (OSCAR): Facility is hospital-based
-------------------------------------------------------------------------------

                  type:  numeric (byte)

                 range:  [0,1]                        units:  1
         unique values:  2                        missing .:  0/177,987

            tabulation:  Freq.  Value
                       161,656  0
                        16,331  1

hospbase_fac:
  1.  Variable Group :  Facility Characteristics
  2.  Short Description :  Indicates whether or not facility is hospital-based.
  3.  Long Description :  Whether a facility is hospital-based.

-------------------------------------------------------------------------------
multifac_fac        Nursing Facility level (OSCAR): Facility is part of a chain
-------------------------------------------------------------------------------

                  type:  numeric (byte)

                 range:  [0,1]                        units:  1
         unique values:  2                        missing .:  0/177,987

            tabulation:  Freq.  Value
                        82,394  0
```

```
                     95,593  1

multifac_fac:
  1.  Variable Group :  Facility Characteristics
  2.  Short Description :  Indicates whether or not facility is part of a
      chain.
  3.  Long Description :  Whether a facility was owned or leased by a
      multi-facility (chain) organization was derived from the annual OSCAR
      data.

-------------------------------------------------------------------------------
profit_fac              Nursing Facility level (OSCAR): Facility is for-profit
-------------------------------------------------------------------------------

                  type:  numeric (byte)

                 range:  [0,1]                        units:  1
         unique values:  2                        missing .:  51/177,987

            tabulation:  Freq.  Value
                        59,698  0
                       118,238  1
                            51  .

profit_fac:
  1.  Variable Group :  Facility Characteristics
  2.  Short Description :  Indicates whether or not the facility is for-profit.
  3.  Long Description :  Each facility's profit status was drawn from the
      annual OSCAR data, specifically the ownership variable.  Ownership is a
      12 category variable with 3 for-profit categories (individual,
      partnership, or corporation).

-------------------------------------------------------------------------------
restrain_fac      Nursing Facility level (MDS): Percent Restrained (prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
         unique values:  4,019                    missing .:  4/177,987

                  mean:   6.84078
             std. dev:    9.4187

           percentiles:        10%       25%       50%       75%       90%
                                 0         0      3.85      9.52      17.5

restrain_fac:
  1.  Variable Group :  Facility Characteristics
  2.  Short Description :  Proportion of facility residents who were
      restrained.
  3.  Long Description :  The number of facility residents who were restrained
      (at the time of the annual survey) was drawn from the annual OSCAR data,
      as was the total number of facility residents. The proportion of
      residents in the facility who were restrained was then calculated.

-------------------------------------------------------------------------------
```

totbeds_fac Nursing Facility level (OSCAR): Number of beds

---

type: numeric (int)

range: [2,1389] units: 1
unique values: 502 missing .: 0/177,987

mean: 104.692
std. dev: 65.1881

percentiles:	10%	25%	50%	75%	90%
	40	60	99	126	179

totbeds_fac:
1. Variable Group : Facility Characteristics
2. Short Description : Number of beds as reported on the annual OSCAR (imputed from previous year if missing or implausible).
3. Long Description : A two step process is used to create the total number of beds. Some facilities report the number of available beds instead of the number of Medicare/Medicaid certified beds. Therefore, if the number of residents is less than or equal to the number of certified beds, we use the number of certified beds as the total beds. If, however, the number of residents is greater than the number of certified beds we use the number of available beds for total beds. This is done to keep the number of beds and all staffing related variables consistent because if a facility is reporting available beds they are also most likely reporting staffing related to available beds. We further clean the total beds data by determining if the number of beds in a facility is consistent over time. If the number of beds is missing in the current survey, or implausible based on previous years' data, we impute totbeds based on previous values.

---

nresid_fac
Nursing Facility level (MDS): Number of MDS-assessed residents in facility on 1st Thurs in April

---

type: numeric (int)

range: [11,1354] units: 1
unique values: 610 missing .: 2,147/177,987
unique mv codes: 2 missing .*: 8,692/177,987

mean: 80.8949
std. dev: 52.5747

percentiles:	10%	25%	50%	75%	90%
	32	48	72	99	136

nresid_fac:
1. Variable Group : General
2. Short Description : Number of nursing home residents.
3. Long Description : The Residential History File (RHF) was used to establish the number of residents present in the nursing facility on the 1st Thursday in April. This value is used as the denominator in the

prevalence measures.

---

srvydate Nursing Facility level (OSCAR): Survey date (copy of PROV2740)

```
                 type:  numeric daily date (long)

                range:  [14427,18799]                units:  1
       or equivalently:  [02jul1999,21jun2011]       units:  days
         unique values:  3,380                    missing .:  0/177,987

                 mean:   16587.8 = 31may2005 (+ 20 hours)
            std. dev:   1165.77

          percentiles:        10%       25%       50%       75%       90%
                           14993     15571     16574     17596     18220
                         18jan2001 19aug2002 18may2005 05mar2008 19nov2009
```

srvydate:

1. Variable Group : General
2. Short Description : OSCAR Survey Date
3. Long Description : OSCAR Survey Date used to populate the OSCAR items for the calendar year. Because facilities are not surveyed every 12 months, we have allowed the survey date to be 6 months prior or 6 months post the calendar year for which it is providing information. As a result, in some instances 2 consecutive years of data for a facility may come from the same OSCAR survey.

---

paymcaid_fac Nursing Facility level (OSCAR): Percent Medicaid (prevalence)

```
                 type:  numeric (double)

                range:  [0,100]                      units:  .01
         unique values:  7,227                    missing .:  4/177,987

                 mean:   60.8509
            std. dev:   24.7945

          percentiles:        10%       25%       50%       75%       90%
                            21.57     51.06     66.24     77.78     86.84
```

paymcaid_fac:

1. Variable Group : Insurance coverage
2. Short Description : Proportion of facility residents whose primary support is Medicaid.
3. Long Description : The number of facility residents whose primary support was Medicaid (at the time of the annual survey) was drawn from the annual OSCAR data, as was the total number of facility residents. The proportion of residents whose primary support was Medicaid was then calculated.

---

paymcare_fac Nursing Facility level (OSCAR): Percent Medicare (prevalence)

```
                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
         unique values:  4,629                    missing .:  4/177,987

                  mean:   14.9175
             std. dev:   19.0768

           percentiles:        10%       25%       50%       75%       90%
                                 0      4.84        10     16.67     28.46
```

paymcare_fac:
  1. Variable Group : Insurance coverage
  2. Short Description : Proportion of facility residents whose primary support is Medicare.
  3. Long Description : The number of facility residents whose primary support was Medicare (at the time of the annual survey) was drawn from the annual OSCAR data, as was the total number of facility residents. The proportion of residents whose primary support was Medicare was then calculated.

---

pctHMO_fac Nursing Facility level (RHF): Percent with HMO (prevalence)

```
                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
         unique values:  5,191                    missing .:  2,356/177,987
       unique mv codes:  2                      missing .*:  78,917/177,987

                  mean:   12.3276
             std. dev:   19.9337

           percentiles:        10%       25%       50%       75%       90%
                                 0         0         0     19.81     44.19
```

pctHMO_fac:
  1. Variable Group : Insurance coverage
  2. Short Description : Proportion of residents present on the 1st Thursday in April who were covered by a Medicare HMO (Health Maintenance Organization).
  3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. The proportion of residents covered by a Medicare Health Maintenance Organization (HMO) in a facility was then determined based on Medicare enrollment records.

---

occpct_fac Nursing Facility level (OSCAR): Occupancy rate

```
                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
         unique values:  5,854                    missing .:  139/177,987
```

```
                  mean:   84.0061
             std. dev:   15.5061

          percentiles:        10%       25%       50%       75%       90%
                            62.96     77.78     88.89        95     98.04
```

occpct_fac:
1. Variable Group : Facility Characteristics
2. Short Description : Number of occupied beds in facility divided by the total number of beds.
3. Long Description : Occupancy rate is the number of residents divided by total number of beds. The numerator comes directly from the OSCAR . The denominator is a cleaned estimated number of beds in the facility - (see the description of totbeds for more information).

---

adm_bed_fac — Nursing Facility level (MDS): Number of admissions per bed

---

```
                  type:  numeric (double)

                 range:  [1.2223859,72.666667]        units:  1.000e-09
           unique values:  13,071                  missing .:  950/177,987
        unique mv codes:  2                      missing .*:  155,703/177,987

                  mean:   9.88495
             std. dev:   8.47046

          percentiles:        10%       25%       50%       75%       90%
                            2.78788      3.48   5.51835      15.6   22.9412
```

adm_bed_fac:
1. Variable Group : Saturation (all admissions)
2. Short Description : Number of admissions divided by total number of beds.
3. Long Description : All MDS records each year were first aggregated to the facility using the Federal Facility Provider number found on the MDS. All of the pre-admission and admission MDS records were then counted each year for each facility and divided by the total number of beds in the facility. See description of the variable 'totbeds' for complete details about how the total number of beds was derived from OSCAR data. Due to the change to MDS 3.0, only 9 months of MDS data were available in 2010. Therefore, we derived annual rates for 2010 by multiplying the number of MDS admissions in each facility by 1.33 before dividing by the number of beds.

---

agg_adm_fac
Nursing Facility level (MDS): Number of admissions to facility in year

---

```
                  type:  numeric (int)

                 range:  [11,2552]                    units:  1
           unique values:  1,408                   missing .:  950/177,987
        unique mv codes:  2                      missing .*:  3,658/177,987
```

```
                mean:   167.671
           std. dev:   167.077

      percentiles:        10%       25%       50%       75%       90%
                           32        60       117       214       366
```

agg_adm_fac:
1. Variable Group : Saturation (all admissions)
2. Short Description : Total number of nursing home admissions in the year.
3. Long Description : All MDS admission records were aggregated to the facility using the Federal Facility Provider number found on the MDS. Admissions were counted using the Primary Reason for Assessment variable in the MDS dataset. This was then aggregated to the facility level.

---

hospptyr_fac
Nursing Facility level (RHF): Number of hospitalizations per resident year

---

```
                type:  numeric (double)

               range:  [0,36.5]                    units:  1.000e-12
        unique values:  158,761                 missing .:  406/177,987

                mean:   .966769
           std. dev:   .743651

      percentiles:        10%       25%       50%       75%       90%
                       .361533   .540409   .799937   1.14571   1.65494
```

hospptyr_fac:
1. Variable Group : Service Utilization
2. Short Description : Number of hospitalizations during the calendar year for every 365 nursing home resident days.
3. Long Description : The Residential History File (RHF) was used to determine the number of nursing home days for all residents in the facility during the calendar year. (Facilities with fewer than 4500 nursing home days were set to LNE.) This number of nursing homes days was then divided by 365 to establish the number of resident years. The RHF was then used to count the number of hospitalizations of Medicare fee-for-service residents that occurred directly from the nursing home during the calendar year.

---

nhdays_fac Nursing Facility level (RHF): Total nursing home days in year

---

```
                type:  numeric (long)

               range:  [0,303554]                  units:  1
        unique values:  55,692                  missing .:  398/177,987

                mean:   25124.1
           std. dev:   17473.7

      percentiles:        10%       25%       50%       75%       90%
```

```
                            7207     13383     21961     33263     44786

nhdays_fac:
  1.  Variable Group :  Service Utilization
  2.  Short Description :  Total Nursing Home days for the facility.
  3.  Long Description :  Total nursing home days for the year in the facility.
      The Residential History File (RHF) was used to establish the number of
      nursing home days for all residents in the facility during the calendar
      year.

-------------------------------------------------------------------------------
pctlshosp_fac
Nursing Facility level (RHF): Percent quarter 2 long-stay residents hospitalized in
6 months
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
         unique values:  3,895                    missing .:  3,077/177,987

                  mean:   21.5482
             std. dev:   13.4382

           percentiles:        10%       25%       50%       75%       90%
                              7.69     12.82     19.59     27.59     36.36

pctlshosp_fac:
  1.  Variable Group :  Service Utilization
  2.  Short Description :  Percent quarter 2 long-stay residents that were
      hospitalized in 6 months.
  3.  Long Description :  The Residential History File (RHF) was used to the
      number of nursing facility residents during the 2nd quarter of the given
      year who are judged to be long-stay residents at the time of the
      assessment.  This served as the denominator of the measure.  The
      numerator is the number of the above residents who subsequently had a
      fee-for-service Medicare hospital admission within 6 months (183 days) of
      the date of the MDS assessment.

-------------------------------------------------------------------------------
pctnhdayshospice_fac
  Nursing Facility level (RHF): Percent of total nursing home days with hospice
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [0,94.176262]                units:  1.000e-13
         unique values:  150,578                  missing .:  406/177,987

                  mean:   3.23228
             std. dev:   4.35409

           percentiles:        10%       25%       50%       75%       90%
                                 0   .196319   1.62631   4.67069   8.72499

pctnhdayshospice_fac:
  1.  Variable Group :  Service Utilization
```

2. Short Description : Proportion of all nursing home days during the calendar year that were hospice.
3. Long Description : The Residential History File (RHF) was used to establish the number of nursing home days for all residents in the facility in the calendar year. The RHF was also used to determine the number of those days that were hospice days. The proportion of days that were hospice was then calculated at the facility level using these two counts.

---

pctNHdaysSNF_fac
Nursing Facility level (RHF): Percent NH days Medicare Reimbursed SNF

---

type:	numeric (double)		
range:	[0,100]	units:	1.000e-11
unique values:	162,015	missing .:	406/177,987
mean:	16.9548		
std. dev:	19.6413		

percentiles:	10%	25%	50%	75%	90%
	1.52756	6.50113	11.845	18.7373	32.066

pctNHdaysSNF_fac:
1. Variable Group : Service Utilization
2. Short Description : Proportion of all nursing home days during the calendar year that were SNF (skilled nursing facility) Medicare covered days.
3. Long Description : The Residential History File (RHF) was used to establish the number of nursing home days for all residents in the facility in the calendar year. The RHF was also used to determine the number of those days that were skilled nursing facility (SNF) Medicare covered days. The proportion of days that were SNF was then calculated at the facility level using these two counts.

---

rehosp_fac Nursing Facility level (RHF): Facility 30-day rehospitalization rate

---

type:	numeric (double)		
range:	[0,200]	units:	.01
unique values:	2,969	missing .:	1,062/177,987
mean:	15.7015		
std. dev:	8.35245		

percentiles:	10%	25%	50%	75%	90%
	5.17	10.34	15.63	20.83	25.81

rehosp_fac:
1. Variable Group : Service Utilization
2. Short Description : 30-day rehospitalization rate.
3. Long Description : The Residential History File was used to determine how many admissions from the hospital were rehospitalized within 30 days

of entry. This was aggregated to the facility level and divided by the total number of admissions to the facility to get the rehospitalization rate.

---

anymdex_fac Nursing Facility level (OSCAR): Facility has an NP or PA

---

type:	numeric (byte)		
range:	[0,1]	units:	1
unique values:	2	missing .:	0/177,987

tabulation:	Freq.	Value
	128,970	0
	49,017	1

anymdex_fac:
1. Variable Group : Staffing
2. Short Description : Indicates the presence of any Nurse Practioners or Physician Assistants in the facility.
3. Long Description : Whether a facility has any nurse practitioner (NP) or physician's assistant (PA) was derived from the annual OSCAR data. In the OSCAR data this is reported as number of hours of physician extender services. If a facility reported having any hours, the facility was considered to have an NP or PA.

---

cnahrppd_fac Nursing Facility level (OSCAR): CNA hours per resident day

---

type:	numeric (double)		
range:	[0,24]	units:	1.000e-11
unique values:	112,276	missing .:	765/177,987
mean:	2.28584		
std. dev:	1.2888		

percentiles:	10%	25%	50%	75%	90%
	1.38776	1.74167	2.10916	2.54231	3.08571

cnahrppd_fac:
1. Variable Group : Staffing
2. Short Description : CNA hours per resident day.
3. Long Description : Facilities report the number of Certified Nursing Assistant (CNA) hours during the two weeks prior to their annual survey. CMS converts the number of hours into full-time equivalents (based on a 35 hour work week) and this is what is reported on the annual OSCAR data. We convert the FTEs back into hours, by multiplying by 35, and divide the total number of CNA hours by the number of residents in the facility (also drawn from the OSCAR) to arrive at the CNA hours per resident day (HPRD). We also clean this variable when the FTEs reported are implausible. We set to missing when total FTEs are 995 or higher or if there are more 3 times the number of CNAs reported than the number of beds in a facility. We also verify staffing variables based on a facility's data from previous years and impute based on previous data if

staffing levels are less than 1/3 the median of previous years or greater than 3 times the median, for example.

---

dchrppd_fac
Nursing Facility level (OSCAR): Direct care staff hours per resident day

---

type:	numeric (double)		
range:	[.03647959,24]	units:	1.000e-10
unique values:	126,154	missing .:	1,326/177,987
mean:	3.49095		
std. dev:	1.71167		

percentiles:	10%	25%	50%	75%	90%
	2.28012	2.69053	3.15698	3.75333	4.69687

dchrppd_fac:
1. Variable Group : Staffing
2. Short Description : The number of direct-care staff hours per resident day.
3. Long Description : Facilities report the number of Registered Nurse (RN), Licensed Practical Nurse (LPN), and Certified Nursing Assistant (CNA) hours during the two weeks prior to their annual survey. CMS converts the number of hours into full-time equivalents (based on a 35 hour work week) and this is what is reported on the annual OSCAR data. We convert the FTEs back into hours, by multiplying by 35, and divide the total number of RN plus LPN plus CNA hours by the number of residents in the facility (also drawn from the OSCAR) to arrive at the direct-care hours per resident day (DC HPRD). Because this variable is created using the previous cleaned RN, LPN, and CNA hours (as described in RN HPRD, LPN HPRD, and CNA HPRD) we do not do any additional cleaning of this variable.

---

lpnhrppd_fac Nursing Facility level (OSCAR): LPN hours per resident day

---

type:	numeric (double)		
range:	[0,24]	units:	1.000e-12
unique values:	91,537	missing .:	330/177,987
mean:	.851321		
std. dev:	.952457		

percentiles:	10%	25%	50%	75%	90%
	.380556	.547059	.73427	.933945	1.18605

lpnhrppd_fac:
1. Variable Group : Staffing
2. Short Description : LPN hours per resident day.
3. Long Description : Facilities report the number of Licensed Practical Nurse (LPN) hours during the two weeks prior to their annual survey. CMS converts the number of hours into full-time equivalents (based on a 35

hour work week) and this is what is reported on the annual OSCAR data. We convert the FTEs back into hours, by multiplying by 35, and divide the total number of LPN hours by the number of residents in the facility (also drawn from the OSCAR) to arrive at the LPN hours per resident day (HPRD). We also clean this variable when the FTEs reported are implausible. We set to missing when total FTEs are 995 or higher or if there are more RN and LPNs reported than the number of beds in a facility. We also verify staffing variables based on a facility's data from previous years and impute based on previous data if staffing levels are less than 1/3 the median of previous years or greater than 3 times the median, for example.

---

rn2nrs_fac Nursing Facility level (OSCAR): Ratio of RNs to RNs + LPNs

---

type:	numeric (double)		
range:	[0,1]	units:	.001
unique values:	1,000	missing .:	33/177,987
mean:	.311195		
std. dev:	.204636		

percentiles:	10%	25%	50%	75%	90%
	.079	.157	.274	.428	.596

rn2nrs_fac:

1. Variable Group : Staffing
2. Short Description : Ratio of number of RN FTEs divided by number of RN FTEs plus LPN FTEs.
3. Long Description : Registered Nurse (RN) and Licensed Practical Nurse (LPN) full-time equivalents (FTEs) were drawn from each facility's annual OSCAR data. We also clean this variable when the FTEs reported are implausible. We set to missing when total FTEs are 995 or higher or if there are more 3 times the number of CNAs reported than the number of beds in a facility. We also verify staffing variables based on a facility's data from previous years and impute based on previous data if staffing levels are less than 1/3 the median of previous years or greater than 3 times the median, for example. A ratio was then calculated by dividing total RN FTEs by the total RN FTEs plus total LPN FTEs within a facility.

---

rnhrppd_fac Nursing Facility level (OSCAR): RN hours per resident day

---

type:	numeric (double)		
range:	[0,24]	units:	1.000e-12
unique values:	78,877	missing .:	114/177,987
mean:	.475575		
std. dev:	.909215		

percentiles:	10%	25%	50%	75%	90%
	.07	.151471	.282051	.470192	.781967

rnhrppd_fac:

1. Variable Group : Staffing
2. Short Description : RN hours per resident day.
3. Long Description : Facilities report the number of Registered Nurse (RN) hours during the two weeks prior to their annual survey. CMS converts the number of hours into full-time equivalents (based on a 35 hour work week) and this is what is reported on the annual OSCAR data. We convert the FTEs back into hours, by multiplying by 35, and divide the total number of RN hours by the number of residents in the facility (also drawn from the OSCAR) to arrive at the RN hours per resident day (HPRD). We also clean this variable when the FTEs reported are implausible. We set to missing when total FTEs are 995 or higher or if there are more RN and LPNs reported than the number of beds in a facility. We also verify staffing variables based on a facility's data from previous years and impute based on previous data if staffing levels are less than 1/3 the median of previous years or greater than 3 times the median, for example.

Appendix 2. County Level Codebook

```
Number of variables:  67
Number of observations:  32,236

-------------------------------------------------------------------------------
county                                                      FIPS County code
-------------------------------------------------------------------------------

                  type:  string (str3)

         unique values:  293                      missing "":  0/32,236

              examples:  "027"
                         "061"
                         "099"
                         "149"

county:
  1.  Variable Group :  Identification
  2.  Short Description :  Facility County
  3.  Long Description :  Facility County (unique within state)

-------------------------------------------------------------------------------
state                                                     State Abbreviation
-------------------------------------------------------------------------------

                  type:  string (str2)

         unique values:  49                       missing "":  0/32,236

              examples:  "ID"
                         "MI"
                         "NE"
                         "TN"

-------------------------------------------------------------------------------
year                                                            Year of data
-------------------------------------------------------------------------------

                  type:  numeric (int)

                 range:  [2000,2010]                 units:  1
         unique values:  11                       missing .:  0/32,236

                  mean:   2004.99
             std. dev:   3.16195

           percentiles:        10%       25%       50%       75%       90%
                              2001      2002      2005      2008      2009
```

year:
  1. Variable Group : Identification
  2. Short Description : Calendar year
  3. Long Description : Calendar year

---

agg_cmi_cty County level (MDS): Average RUGS NCMI (all admits)

---

type: numeric (double)

range:	[.46,1.7]	units:	1.000e-12
unique values:	30,997	missing .:	13/32,236
unique mv codes:	2	missing .*:	296/32,236

mean:	1.02602
std. dev:	.10425

percentiles:	10%	25%	50%	75%	90%
	.887143	.980404	1.04599	1.09349	1.13328

agg_cmi_cty:
  1. Variable Group : Acuity (all admissions)
  2. Short Description : The average Resource Utilization Group Nursing Case Mix Index (a measure of the relative intensity of care of different nursing home populations) for all residents admitted during the calendar year.
  3. Long Description : Aggregated at the facility level, the average Nursing Case Mix Index (NCMI) was calculated by applying the Resource Utilization Groups version III (RUG-III) resident classification system currently used by CMS to adjust Medicare payments in recognition of resident acuity. This system classifies residents into homogeneous categories based on their estimated resource utilization. Associated with each of these categories is a case-mix index or weight, which approximates the relative staff time associated with caring for the average resident in each group. Thus, the higher the NCMI score, the more severe the average acuity profile of the residents in a facility. The resident-level NCMI was calculated in two steps. First, the RUG-III 5.12 code (44 categories in total) was used to generate a RUG classification for each resident. Second, the RUG code was converted into a NCMI value following the CMS proposed rule regarding fiscal year 2004 Skilled Nursing Facility (SNF) payment policies (Centers for Medicare & Medicaid Services 2003).

---

agg_low_care_cty County level (MDS): Percent Low care (all admits)

---

type: numeric (double)

```
                range:  [0,100]                     units:  1.000e-11
          unique values:  11,510                 missing .:  10/32,236
       unique mv codes:  2                     missing .*:  14,195/32,236

                 mean:   6.61758
            std. dev:   6.56144

           percentiles:        10%       25%       50%       75%       90%
                           1.11214   2.40361   4.73282   8.96552   14.2857
```

agg_low_care_cty:

1. Variable Group : Acuity (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were low care, according to the broad definition.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. The 'broad' definition of low-care status is met if a resident does not require physical assistance in any of the four late-loss ADLs—bed mobility, transferring, using the toilet, and eating—and is not classified in either the 'Special Rehab' or 'Clinically Complex' Resource Utilization Group (RUG-III). This was then averaged at the county level.

---

avgadl_cty — County level (MDS): Long ADL (prevalence)

```
                 type:  numeric (double)

                range:  [0,26.65]                   units:  .01
          unique values:  1,420                  missing .:  13/32,236
       unique mv codes:  2                     missing .*:  57/32,236

                 mean:   15.3021
            std. dev:    2.3092

           percentiles:        10%       25%       50%       75%       90%
                              12.42     13.75     15.32     16.89      18.2
```

avgadl_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : The average Activities of Daily Living (ADL) score for all residents present on the 1st Thursday in April.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Individual scores were calculated from the Physical Functioning Self performance section of the MDS using Section G: Physical Functioning and Structural Problems, Question A: ADL self-performance. This score measures an individual's independence on 7 ADLs - bed

mobility, transfer, locomotion on unit, dressing, eating, toilet use, and personal hygiene. If personal hygiene was missing on the MDS assessment, the score for dressing was used twice. Each ADL is scored from 0-4, with 0 indicating total independence in that ADL and 4 indicating total dependence in that ADL. The ADL score range is from 0 to 28, where 0 indicates completely independent and 28 completely dependent. All individuals' scores were then averaged at the county level.

---

avgrugcmi_cty County level (MDS): Average RUGS NCMI (prevalence)

---

type:	numeric (double)		
range:	[.4889,1.1826]	units:	.0001
unique values:	3,196	missing .:	13/32,236
unique mv codes:	2	missing .*:	57/32,236
mean:	.777264		
std. dev:	.060383		

percentiles:	10%	25%	50%	75%	90%
	.7056	.7348	.7719	.8139	.8578

avgrugcmi_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : The average Resource Utilization Group Nursing Case Mix Index (a measure of the relative intensity of care of different nursing home populations) for all residents present on the 1st Thursday in April.
3. Long Description : The Residential History File was used to establish the population of residents from each facility in the county on the 1st Thursday in April. The average Nursing Case Mix Index (NCMI) was calculated by applying the Resource Utilization Groups version III (RUG-III) resident classification system currently used by CMS to adjust Medicare payments in recognition of resident acuity. This system classifies residents into homogeneous categories based on their estimated resource utilization. Associated with each of these categories is a case-mix index or weight, which approximates the relative staff time associated with caring for the average resident in each group. Thus, the higher the NCMI score, the more severe the average acuity profile of the residents in a county. The resident-level NCMI was calculated in two steps. First, the RUG-III 5.12 code (44 categories in total) was used to generate a RUG classification for each resident. Second, the RUG code was converted into an NCMI value following the CMS proposed rule regarding fiscal year 2004 Skilled Nursing Facility (SNF) payment policies (Centers for Medicare & Medicaid Services 2003).

```
avgrxnum_cty
County level (MDS): Average number of medications in past 7 days per resident
(prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [.05,17.38]                 units:  .01
           unique values:  974                    missing .:  13/32,236
        unique mv codes:  2                      missing .*:  57/32,236

                  mean:   10.0097
             std. dev:   1.59299

           percentiles:        10%       25%       50%       75%       90%
                              7.95      8.85        10     11.11     12.06
```

avgrxnum_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : Average number of medications in the past 7 days per resident present on the 1st Thursday in April.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. The number of different medications each individual received in the past 7 days was drawn from the most recent MDS assessment using Section O: Medications, Question 1: Number of Medications used in last seven days. This measure was averaged at the county level.

```
-------------------------------------------------------------------------------
pctbedft_cty                  County level (MDS): Percent Bed fast (prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [0,56.6]                    units:  .01
           unique values:  2,014                  missing .:  13/32,236
        unique mv codes:  2                      missing .*:  15,377/32,236

                  mean:   5.85577
             std. dev:   5.81354

           percentiles:        10%       25%       50%       75%       90%
                                 0         0      4.77      8.72     13.41
```

pctbedft_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are bedfast.
3. Long Description : The Residential History File was used to establish

the population of residents in each facility in the county on the 1st Thursday in April. Whether or not an individual was bedfast was drawn from the most recent MDS using Section G: Physical Functioning and Structural Problems, Question 6: Modes of Transfer, Bedfast all or most of the time. The proportion of residents with a 'yes' (indicating the resident is bedfast) was calculated at the county level.

---

pctcath_cty County level (MDS): Percent Catheter (prevalence)

---

type:	numeric (double)		
range:	[0,39.44]	units:	.01
unique values:	1,392	missing .:	13/32,236
unique mv codes:	2	missing .*:	15,344/32,236
mean:	7.04188		
std. dev:	3.25672		

percentiles:	10%	25%	50%	75%	90%
	3.89	5.26	6.8	8.66	10.78

pctcath_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who have a catheter.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Whether an individual had an indwelling catheter was drawn from the most recent MDS assessment using Section H: Continence in last 14 days, Question 3d: Appliances and Programs, Indwelling Catheter. The proportion of residents who have a catheter was calculated at the county level.

---

pctchf_cty County level (MDS): Percent CHF (prevalence)

---

type:	numeric (double)		
range:	[0,69.39]	units:	.01
unique values:	3,445	missing .:	13/32,236
unique mv codes:	2	missing .*:	3,590/32,236
mean:	22.3231		
std. dev:	8.08905		

percentiles:	10%	25%	50%	75%	90%

	13.45	16.58	20.99	26.67	32.73

pctchf_cty:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who have congestive heart failure.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Whether an individual had congestive heart failure was drawn from the most recent MDS assessment using Section I: Disease Diagnoses, Question 1f. Note that the MDS instructions state to check only those diseases that have a relationship to current ADL status, cognitive status, mood and behavior status, medical treatments, nursing monitoring, or risk of death. The proportion of residents with CHF was calculated at the county level.

---

pctdnh_cty County level (MDS): Percent Do-Not-Resuscitate order (prevalence)

---

type:	numeric (double)		
range:	[0,85.71]	units:	.01
unique values:	2,177	missing .:	13/32,236
unique mv codes:	2	missing .*:	12,666/32,236
mean:	3.23555		
std. dev:	7.35686		

percentiles:	10%	25%	50%	75%	90%
	0	0	0	3.46	10.29

pctdnh_cty:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are Do Not Hospitalize.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Each individual's Do Not Hospitalize (DNH) status was drawn from the most recent MDS admission or annual assessment using Section A: Identification and Background Information, Question 10c: Advanced directives, DNH. The proportion of residents with a 'yes' (indicating the resident has a filed DNH order) was calculated at the county level.

---

pctdnr_cty County level (MDS): Percent Do-Not-Resuscitate order (prevalence)

```
                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
           unique values:  6,785                  missing .:  13/32,236
        unique mv codes:  2                      missing .*:  507/32,236

                  mean:   62.7495
             std. dev:   18.2926

            percentiles:        10%       25%       50%       75%       90%
                             36.75     50.46     65.11     77.07     84.64
```

pctdnr_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are Do Not Resuscitate.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Each individual's Do Not Resuscitate (DNR) status was drawn from the most recent MDS admission or annual assessment using Section A: Identification and Background Information, Question 10b: Advanced directives, DNR. The proportion of residents with a 'yes' (indicating the resident has a filed DNR order) was calculated at the county level.

---

pcthighcps_cty County level (MDS): Percent CPS=5,6 (prevalence)

```
                  type:  numeric (double)

                 range:  [0,88.24]                    units:  .01
           unique values:  3,635                  missing .:  13/32,236
        unique mv codes:  2                      missing .*:  4,938/32,236

                  mean:   21.7161
             std. dev:   8.40931

            percentiles:        10%       25%       50%       75%       90%
                             12.26     15.97     20.69     26.15     32.56
```

pcthighcps_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April with a Cognitive Performance Scale (CPS) score of 5 or 6 (severe cognitive impairment).
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Each individual's Cognitive Performance Score (CPS)

was taken from the most recent MDS assessment and the proportion of residents with a CPS score of 5 or 6 was calculated at the county level.

---

pctlowcps_cty County level (MDS): Percent CPS=0,1,2 (prevalence)

---

type:	numeric (double)		
range:	[0,97.73]	units:	.01
unique values:	4,428	missing .:	13/32,236
unique mv codes:	2	missing .*:	1,323/32,236
mean:	39.227		
std. dev:	10.3503		

percentiles:	10%	25%	50%	75%	90%
	26.47	32.53	38.855	45.37	52.24

pctlowcps_cty:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April with a Cognitive Performance Scale (CPS) score of 0, 1, or 2 (low cognitive impairment).
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Each individual's Cognitive Performance Score (CPS) was calculated from the most recent MDS assessment and the proportion of residents with a CPS score of 0, 1, or 2 was calculated at the county level.

---

pcthyper_cty County level (MDS): Percent Hypertension (prevalence)

---

type:	numeric (double)		
range:	[0,93.55]	units:	.01
unique values:	4,873	missing .:	13/32,236
unique mv codes:	2	missing .*:	619/32,236
mean:	51.5704		
std. dev:	11.1386		

percentiles:	10%	25%	50%	75%	90%
	37.57	43.805	51.14	59.17	66.45

pcthyper_cty:
1. Variable Group : Acuity (prevalence)

2. Short Description : Proportion of residents present on the 1st Thursday in April with hypertension.
3. Long Description : The Residential History File was used to establish the population of residents in each facility on the 1st Thursday in April. Whether an individual had hypertension was drawn from the most recent MDS assessment using Section I: Disease Diagnoses, Question 1h. Note that the MDS instructions state 'check only those diseases that have a relationship to current ADL status, cognitive status, mood and behavior status, medical treatments, nursing monitoring, or risk of death.' The proportion of residents with hypertension was then calculated at the county level.

---

pctincont_bladr_cty
County level (MDS): Percent Bladder incontinent (prevalence)

---

type:	numeric (double)		
range:	[19.3,95.56]	units:	.01
unique values:	4,086	missing .:	13/32,236
unique mv codes:	2	missing .*:	312/32,236
mean:	61.1507		
std. dev:	8.99769		

percentiles:	10%	25%	50%	75%	90%
	49.83	55.43	61.24	67.03	72.34

pctincont_bladr_cty:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are bladder incontinent.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Whether or not an individual was bowel incontinent was drawn from the most recent MDS using Section H: Continence in last 14 days, Question 1b, values 2, 3, or 4 (indicating 'occasionally,' 'frequently,' or 'always' incontinent in the past 14 days). The proportion of residents who are bladder incontinent was then calculated at the county level.

---

pctincont_bowel_cty County level (MDS): Percent Bowel incontinent (prevalence)

---

type:	numeric (double)		
range:	[0,95.56]	units:	.01

```
        unique values:  5,156                    missing .:  13/32,236
     unique mv codes:  2                        missing .*:  1,125/32,236

                 mean:   47.4252
            std. dev:    12.071

          percentiles:        10%       25%       50%       75%       90%
                           31.25     38.89     47.93     55.98     62.86
```

pctincont_bowel_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are bowel incontinent.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Whether or not an individual was bowel incontinent was drawn from the most recent MDS using Section H: Continence in last 14 days, Question 1a, values 2, 3, or 4 (indicating 'occasionally,' 'frequently,' or 'always' incontinent in the past 14 days). The proportion of residents who are bowel incontinent was then calculated at the county level.

---

pctlocare_cty — County level (MDS): Percent low care (prevalence)

```
                 type:  numeric (double)

                range:  [0,95.45]                   units:  .01
        unique values:  3,427                    missing .:  13/32,236
     unique mv codes:  2                        missing .*:  5,882/32,236

                 mean:   18.4118
            std. dev:   8.16566

          percentiles:        10%       25%       50%       75%       90%
                              8.79      12.5     17.69     23.48     28.95
```

pctlocare_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who were low care, according to the broad definition.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. This measure was calculated from the most recent MDS assessment. The 'broad' definition of low-care status is met if a resident does not require physical assistance in any of the four late-loss ADLs—bed mobility, transferring, using the toilet, and eating—and is not classified in either the 'Special Rehab' or 'Clinically

Complex' Resource Utilization Group (RUG-III). This measure is averaged at the county level.

---

pctobese_cty County level (MDS): Percent Obese (prevalence)

---

type:	numeric (double)		
range:	[0,47.76]	units:	.01
unique values:	2,615	missing .:	13/32,236
unique mv codes:	2	missing .*:	5,016/32,236
mean:	18.7574		
std. dev:	5.51686		

percentiles:	10%	25%	50%	75%	90%
	12.09	14.84	18.36	22.18	25.93

pctobese_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who had a body mass index (BMI) of 35 or higher.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. The proportion of residents in the county with a body mass index (BMI) of 35 or greater was then calculated using the height and weight data from the most recent MDS assessment using Section K: Oral/Nutritional Status, questions 1a (height in inches) and 1b (weight in lbs.). Calculations resulting in highly improbable BMI (<10 or >60) were set to missing.

---

pctrxdep_cty County level (MDS): Percent receiving antidepressants (prevalence)

---

type:	numeric (double)		
range:	[13.19,93.33]	units:	.01
unique values:	4,536	missing .:	13/32,236
unique mv codes:	2	missing .*:	607/32,236
mean:	49.3328		
std. dev:	10.2774		

percentiles:	10%	25%	50%	75%	90%
	35.71	42.36	49.85	56.52	62.02

pctrxdep_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents in the facility on the 1st Thursday in April receiving antidepressants.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Whether an individual was receiving antidepressants was drawn from the most recent MDS assessment using Section O: Medications, question 4c: Number of days during the last 7 days the resident received antidepressant medication (if this value is greater than 0 then the resident was counted as receiving antidepressant medication). The proportion of residents receiving antidepressants was calculated at the county level.

---

pctrxpsych_cty County level (MDS): Percent receiving antipsychotics (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	3,787	missing .:	13/32,236
unique mv codes:	2	missing .*:	3,142/32,236
mean:	27.0027		
std. dev:	8.65987		

percentiles:	10%	25%	50%	75%	90%
	17.39	21.36	26.09	31.43	37.25

pctrxpsych_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents in the facility on the 1st Thursday in April receiving antipsychotics.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Whether an individual was receiving antipsychotics was drawn from the most recent MDS assessment using Section O: Medications, question 4a: Number of days during the last 7 days the resident received antipsychotic medication (if this value is greater than 0 then the resident was counted as receiving antipsychotic medication). The proportion of residents receiving antipsychotics was calculated at the county level.

---

pctrxpsyoff_cty
County level (MDS): Percent of non-psychotic residents receiving antipsychotics

---

```
                  type:  numeric (double)

                 range:  [0,71.43]                   units:  .01
           unique values:  2,994                    missing .:  13/32,236
        unique mv codes:  2                        missing .*:  4,105/32,236

                  mean:   21.9096
             std. dev:   6.44898

            percentiles:        10%       25%       50%       75%       90%
                             14.41     17.57     21.35     25.64     30.05
```

pctrxpsyoff_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents in the facility on the 1st Thursday in April receiving antipsychotics off-label.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Whether an individual was receiving antipsychotics off-label was drawn from the most recent MDS assessment using Section O: Medications, question 4a: Number of days during the last 7 days the resident received antipsychotic medication (if this value is greater than 0 then the resident was counted as receiving antipsychotic medication). Use was considered off label if the resident does not have schizophrenia and/or bi-polar disorder (MDS Section I: Disease Diagnoses, question 1ff (Bipolar disease) or question 1gg (Schizophrenia)). The proportion of residents receiving antipsychotics off-label was calculated at the county level.

---

pctschiz_bipol_cty

County level (MDS): Percent Schizophrenic or Bi-polar (prevalence)

```
                  type:  numeric (double)

                 range:  [0,70.83]                   units:  .01
           unique values:  2,180                    missing .:  13/32,236
        unique mv codes:  2                        missing .*:  15,193/32,236

                  mean:   7.91191
             std. dev:   6.38221

            percentiles:        10%       25%       50%       75%       90%
                              2.15      4.66      6.75      9.62        14
```

pctschiz_bipol_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April with Schizophrenia or Bi-polar Disorder.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Whether an individual had schizophrenia and/or bi-polar disorder was drawn from the most recent MDS assessment using Section I: Disease Diagnoses, question 1ff (Bipolar disease) or question 1gg (Schizophrenia). Note that the MDS instructions state 'check only those diseases that have a relationship to current ADL status, cognitive status, mood and behavior status, medical treatments, nursing monitoring, or risk of death.' The proportion of residents with hypertension was then calculated at the county level.

---

pctuti_cty County level (MDS): Percent UTI (prevalence)

---

type:	numeric (double)		
range:	[0,39.29]	units:	.01
unique values:	1,599	missing .:	13/32,236
unique mv codes:	2	missing .*:	12,101/32,236
mean:	9.05106		
std. dev:	3.53161		

percentiles:	10%	25%	50%	75%	90%
	5.47	6.94	8.72	10.87	13.29

pctuti_cty:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present in the county on the 1st Thursday in April with a urinary tract infection.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Whether an individual had a urinary tract infection (UTI) was drawn from the most recent MDS using section I: Disease Diagnoses, question 2c (Urinary tract infection in last 30 days). The proportion of residents with a UTI was calculated at the county level.

---

pctvent_cty County level (MDS): Percent Ventilator (prevalence)

---

type:	numeric (double)		
range:	[0,51.7]	units:	.01
unique values:	442	missing .:	13/32,236

```
       unique mv codes:  2                       missing .*:  4,488/32,236

                   mean:   .108196
              std. dev:    1.0509

            percentiles:        10%       25%       50%       75%       90%
                                  0         0         0         0         0
```

pctvent_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are on a ventilator.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Whether an individual was being treated with a ventilator/respirator was drawn from the most recent MDS assessment using Section P: Special treatments and procedures received during the last 14 days, question 1l: Ventilator/respirator. The proportion of residents with a ventilator was calculated at the county level.

---

pctwalking_cty

County level (MDS): Percent Walk independently in corridor (prevalence)

```
                   type:  numeric (double)

                  range:  [0,100]                      units:  .01
            unique values:  3,816                   missing .:  13/32,236
       unique mv codes:  2                       missing .*:  5,447/32,236

                   mean:   20.1726
              std. dev:   9.67759

            percentiles:        10%       25%       50%       75%       90%
                               8.67     13.22     19.49     26.24     32.53
```

pctwalking_cty:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who can walk in corridor.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. This measure was drawn from the most recent MDS and the proportion of residents able to walk independently was calculated using MDS section G, question 1A, part d ("walk in corridor", value = 0). This ADL self-performance scale ranges from 0 (independent) to 4 (total dependence). The proportion of residents with a 0 (independent) was calculated at the county level.

```
-------------------------------------------------------------------------------
agg_female_cty                  County level (MDS): Percent Female (all admits)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [25.490196,100]              units:  1.000e-09
           unique values:  14,765                  missing .:  10/32,236
       unique mv codes:  2                       missing .*:  789/32,236

                  mean:   64.4796
             std. dev:   6.66098

           percentiles:        10%       25%       50%       75%       90%
                            56.6667   61.1111   64.7059   68.0664        72
```

agg_female_cty:
  1. Variable Group : Demographics (all admissions)
  2. Short Description : Proportion of residents admitted during the calendar year who were female.
  3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Each individual's gender was drawn from the MDS assessments using Section AA: Identification Information, Question 2: Gender. The proportion of individuals admitted who were female was then calculated at the county level.

```
-------------------------------------------------------------------------------
agg_home_cty          County level (MDS): Percent Admits from home (all admits)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [0,100]                      units:  1.000e-10
           unique values:  13,975                  missing .:  10/32,236
       unique mv codes:  2                       missing .*:  5,327/32,236

                  mean:     15.25
             std. dev:   10.2536

           percentiles:        10%       25%       50%       75%       90%
                            4.74308   7.37101   12.7907   20.8531   29.0323
```

agg_home_cty:
  1. Variable Group : Demographics (all admissions)
  2. Short Description : Proportion of all admissions during the calendar year that were from home.
  3. Long Description : Nursing home admissions were identified using the

Primary Reason for Assessment variable in the MDS datasets. Information about whether an individual was admitted to the facility from home was gathered from MDS using Section AB: Demographic Information, Question 2: Admitting From at Entry, response # 1 or 2. The proportion of individuals admitted from home was then calculated at the county level.

---

agg_u65_cty County level (MDS): Percent Under 65 years old (all admits)

---

type:	numeric (double)		
range:	[0,100]	units:	1.000e-09
unique values:	13,623	missing .:	10/32,236
unique mv codes:	2	missing .*:	9,889/32,236
mean:	11.2888		
std. dev:	6.64079		

percentiles:	10%	25%	50%	75%	90%
	5.30973	7.61421	10.373	13.7615	17.9331

agg_u65_cty:

1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were below age 65.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Each individual's age at admission was calculated from the date of birth listed on the MDS assessment using Section AA: Identification Information, question 3 (birthdate). The proportion of individuals under age 65 at admission was then calculated at the county level.

---

avgage_cty County level (MDS): Average age

---

type:	numeric (double)		
range:	[52,92.19]	units:	.01
unique values:	2,047	missing .:	13/32,236
unique mv codes:	2	missing .*:	57/32,236
mean:	81.5003		
std. dev:	3.43052		

percentiles:	10%	25%	50%	75%	90%
	77.49	79.73	81.79	83.8	85.39

avgage_cty:
1. Variable Group : Demographics (prevalence)
2. Short Description : Average age of residents residents on the 1st Thursday in April.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Individual age was calculated using the date of birth from the Medicare denominator data. For individuals not covered by Medicare, age was calculated using the date of birth found on their most recent MDS assessment using Section AA: Identification Information, question 3 (birthdate). Ages of all individuals were averaged at the county level

---

agg_black_cty County level (MDS): Percent Black (all admits)

---

type:	numeric (double)		
range:	[0,100]	units:	1.000e-10
unique values:	10,695	missing .:	10/32,236
unique mv codes:	2	missing .*:	8,846/32,236
mean:	9.26677		
std. dev:	14.3829		

percentiles:	10%	25%	50%	75%	90%
	0	0	1.83508	13.4328	30.8936

agg_black_cty:
1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were Black.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Information about each individual's race was gathered from MDS Section AA 4 (race/ethnicity). The proportion of individuals admitted who were 'Black, not of Hispanic origin' (response #3) was then calculated at the county level.

---

agg_hispanic_cty County level (MDS): Percent Hispanic (all admits)

---

type:	numeric (double)		
range:	[0,100]	units:	1.000e-11
unique values:	4,883	missing .:	10/32,236
unique mv codes:	2	missing .*:	11,550/32,236

```
                mean:   2.55343
            std. dev:   10.0683

          percentiles:        10%       25%       50%       75%       90%
                                0         0         0         0   4.18754
```

agg_hispanic_cty:
1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were Hispanic.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Information about each individual's race was gathered from MDS Section AA 4 (race/ethnicity). The proportion of individuals who were 'Hispanic' (response #4) was then calculated at the county level.

---

agg_white_cty — County level (MDS): Percent White (all admits)

```
                type:  numeric (double)

               range:  [0,100]                      units:  1.000e-08
         unique values:  15,128                  missing .:  10/32,236
      unique mv codes:  2                       missing .*:  524/32,236

                mean:   89.0441
            std. dev:   14.8198

          percentiles:        10%       25%       50%       75%       90%
                           68.2353   84.5174    95.538    98.895       100
```

agg_white_cty:
1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were White.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Information about each individual's race was gathered from MDS Section AA 4 (race/ethnicity). The proportion of individuals admitted in the facility who were 'White, not of Hispanic origin' (response #5) was then calculated at the county level.

---

pctfem_cty — County level (MDS): Percent Female (prevalence)

```
                type:  numeric (double)
```

```
                range:  [20,100]                    units:  .01
          unique values:  3,253                  missing .:  13/32,236
       unique mv codes:  2                      missing .*:  127/32,236

                 mean:   71.8759
            std. dev:    6.9781

          percentiles:        10%       25%       50%       75%       90%
                            63.64     68.54     72.66     76.15     79.41
```

pctfem_cty:

1. Variable Group : Demographics (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are female.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Each individual's sex was drawn from the most recent MDS assessment using section AA: Identification Information, Question 2: Gender. The proportion of residents who are female was calculated at the county level.

---

pctunder65_cty County level (MDS): Percent under 65 years old (prevalence)

```
                 type:  numeric (double)

                range:  [0,97.87]                   units:  .01
          unique values:  2,876                  missing .:  13/32,236
       unique mv codes:  2                      missing .*:  10,999/32,236

                 mean:    12.678
            std. dev:   7.48931

          percentiles:        10%       25%       50%       75%       90%
                              5.7     8.095     11.31     15.57     21.07
```

pctunder65_cty:

1. Variable Group : Demographics (prevalence)
2. Short Description : Proportion of residents present on 1st Thursday in April who are under 65 years old.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Individual age was calculated using the date of birth from the Medicare denominator file. For individuals not covered by Medicare, age was calculated using the date of birth found on their most recent MDS assessment using Section AA: Identification Information, question 3 (birthdate). The proportion of facility residents under age 65

was then calculated at the county level.

---

pctblack_cty County level (MDS): Percent Black (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	4,514	missing .:	13/32,236
unique mv codes:	2	missing .*:	9,153/32,236
mean:	11.541		
std. dev:	16.4782		

percentiles:	10%	25%	50%	75%	90%
	0	0	3.11	18.09	37.13

pctblack_cty:

1. Variable Group : Demographics (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are Black.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Each individual's race was drawn from the most recent MDS assessment using Section AA: Identification Information, Question 4: Race/Ethnicity. If race was missing on the MDS it was drawn from the Medicare denominator file. On the MDS 'Black, not of Hispanic origin' is one of five race/ethnicity categories. The proportion of residents who are Black was calculated at the county level.

---

pcthisp_cty County level (MDS): Percent Hispanic (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	1,898	missing .:	13/32,236
unique mv codes:	2	missing .*:	11,090/32,236
mean:	2.61829		
std. dev:	10.4746		

percentiles:	10%	25%	50%	75%	90%
	0	0	0	0	4.43

pcthisp_cty:

1. Variable Group : Demographics (prevalence)

2. Short Description : Proportion of residents present on the 1st Thursday in April who are Hispanic.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Each individual's race was drawn from the most recent MDS assessment using Section AA: Identification Information, Question 4: Race/Ethnicity. If race was missing on the MDS it was drawn from the Medicare denominator file. On the MDS 'Hispanic' is one of five race/ethnicity categories. The proportion of residents who are Hispanic was calculated at the county level.

---

pctwhite_cty County level (MDS): Percent White (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	5,092	missing .:	13/32,236
unique mv codes:	2	missing .*:	227/32,236
mean:	87.8355		
std. dev:	16.2862		

percentiles:	10%	25%	50%	75%	90%
	63.64	82.43	95.31	98.96	100

pctwhite_cty:
1. Variable Group : Demographics (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are White.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. Each individual's race was drawn from the most recent MDS assessment using Section AA: Identification Information, Question 4: Race/Ethnicity. If race was missing on the MDS it was drawn from the Medicare denominator file. On the MDS 'White' is one of five race/ethnicity categories. The proportion of residents who are White was calculated at the county level.

---

alzunit_cty
County level (OSCAR): Percent of facilities with Alzheimer's special care unit

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	463	missing .:	0/32,236

```
                mean:   17.0689
            std. dev:   25.9543

          percentiles:        10%       25%       50%       75%       90%
                               0         0         0     28.57        50
```

alzunit_cty:

1. Variable Group : Facility Characteristics
2. Short Description : The proportion of facilities that have an Alzheimer's SCU in the county.
3. Long Description : Whether a facility has an Alzheimer's Disease special care unit (SCU) was derived from the annual OSCAR data. In the OSCAR data this is reported as number of beds. If a facility reported having any Alzheimer's Disease beds they were considered to have an Alzheimer's Disease SCU. At the county level, the variable is the proportion of facilities that have an Alzheimer's SCU.

---

facpoor_cty
County level (OSCAR): Percent of low resource facilities based on payer mix

---

```
                type:  numeric (double)

               range:  [0,100]                      units:  .01
        unique values:  413                      missing .:  0/32,236

                mean:     8.766
            std. dev:   21.4406

          percentiles:        10%       25%       50%       75%       90%
                               0         0         0         0     33.33
```

facpoor_cty:

1. Variable Group : Facility Characteristics
2. Short Description : Proportion of facilities in the county considered low-resource based on resident payer mix.
3. Long Description : Proportion of facilities in the county considered low-resource based on resident payer mix. The annual OSCAR data was used to determine if a facility was considered low-resource based on the breakdown of the primary payer of residents during the two weeks prior to their annual survey. This facility measure was aggregated to the county level to show the proportion of nursing homes in the state that meet the criteria for low-resource.

---

multifac_cty County level (OSCAR): Percent of facilities part of chain

---

```
                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
         unique values:  543                      missing .:  0/32,236

                  mean:   53.5489
             std. dev:   35.8615

           percentiles:        10%       25%       50%       75%       90%
                                 0        25        50      87.5       100
```

multifac_cty:

1. Variable Group : Facility Characteristics
2. Short Description : The proportion of facilities within the county that are part of chains.
3. Long Description : Whether a facility was owned or leased by a multi-facility (chain) organization was derived from the annual OSCAR data. The county level measure is the proportion of facilities that are part of chains within the county.

---

profit_cty County level (OSCAR): Percent of facilities for-profit

---

```
                  type:  numeric (double)

                 range:  [0,100]                      units:  .01
         unique values:  526                      missing .:  1/32,236

                  mean:    62.214
             std. dev:    35.817

           percentiles:        10%       25%       50%       75%       90%
                                 0        40     66.67       100       100
```

profit_cty:

1. Variable Group : Facility Characteristics
2. Short Description : The proportion of for-profit facilities within the county.
3. Long Description : Each facility's profit status was drawn from the annual OSCAR data, specifically the ownership variable. Ownership is a 12 category variable with 3 for-profit categories (individual, partnership, or corporation). The county level measure is the proportion of facilities that are for-profit with the county.

---

restrain_cty County level (MDS): Percent Restrained (prevalence)

```
                  type:  numeric (double)

                 range:  [0,87.18]                   units:  .01
         unique values:  2,885                    missing .:  0/32,236

                  mean:   7.08347
             std. dev:    7.1383

           percentiles:        10%       25%       50%       75%       90%
                                 0      2.23      5.15      9.68        16
```

restrain_cty:

1. Variable Group : Facility Characteristics
2. Short Description : Average proportion of facility residents who were restrained across facilities in the county.
3. Long Description : The number of facility residents who were restrained (at the time of the annual survey) was drawn from the annual OSCAR data, as was the total number of facility residents. For county, this is the proportion of all residents in all facilities who were restrained.

---

totbeds_cty — County level (OSCAR): Number of beds

```
                  type:  numeric (long)

                 range:  [8,40916]                   units:  1
         unique values:  2,971                    missing .:  0/32,236

                  mean:   577.822
             std. dev:   1497.54

           percentiles:        10%       25%       50%       75%       90%
                                62       119       234       485      1104
```

totbeds_cty:

1. Variable Group : Facility Characteristics
2. Short Description : Number of beds as reported on the annual OSCAR (imputed from previous year if missing or implausible)
3. Long Description : A two step process is used to create the total number of beds. Some facilities report the number of available beds instead of the number of Medicare/Medicaid certified beds. Therefore, if the number of residents is less than or equal to the number of certified beds, we use the number of certified beds as the total beds. If, however, the number of residents is greater than the number of certified beds we use the number of available beds for total beds. This is done to keep the number of beds and all staffing related variables consistent because if a facility is reporting available beds they are also most likely reporting

staffing related to available beds. We further clean the total beds data by determining if the number of beds in a facility is consistent over time. If the number of beds is missing in the current survey, or implausible based on previous years' data, we impute totbeds based on previous values. Totals are generated at the county level.

---

nresid_cty
County level (MDS): Number of MDS-assessed residents in county on 1st Thurs in April

---

type:	numeric (int)		
range:	[11,29974]	units:	1
unique values:	2,702	missing .:	0/32,236
unique mv codes:	1	missing .*:	57/32,236
mean:	421.238		
std. dev:	1094.13		

percentiles:	10%	25%	50%	75%	90%
	48	86	169	347	805

nresid_cty:
1. Variable Group : General
2. Short Description : Number of nursing home residents.
3. Long Description : The Residential History File (RHF) was used to establish the number of nursing facility residents present in the county on the 1st Thursday in April. This value is used as the denominator in the prevalence measures.

---

paymcaid_cty County level (OSCAR): Percent Medicaid (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	5,191	missing .:	0/32,236
mean:	66.679		
std. dev:	12.7075		

percentiles:	10%	25%	50%	75%	90%
	50.1	58.495	67.19	75.56	82.71

paymcaid_cty:
1. Variable Group : Insurance coverage

2. Short Description : Proportion of facility residents whose primary support is Medicaid averaged across all facilities in the county.
3. Long Description : The number of facility residents whose primary support was Medicaid (at the time of the annual survey) was drawn from the annual OSCAR data, as was the total number of facility residents. The proportion of residents whose primary support was Medicaid was then calculated. The county level measure is the average proportion among all facilities in the county.

---

paymcare_cty County level (OSCAR): Percent Medicare (prevalence)

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	2,732	missing .:	0/32,236
mean:	10.1958		
std. dev:	6.47405		

percentiles:	10%	25%	50%	75%	90%
	1.89	5.79	9.99	14.02	17.86

paymcare_cty:
1. Variable Group : Insurance coverage
2. Short Description : Proportion of facility residents whose primary support is Medicare averaged across all facilities in the county.
3. Long Description : The number of facility residents whose primary support was Medicare (at the time of the annual survey) was drawn from the annual OSCAR data, as was the total number of facility residents. The proportion of residents whose primary support was Medicare was then calculated. The county level measure is the average proportion among all facilities in the county.

---

pctHMO_cty County level (RHF): Percent with HMO (prevalence)

---

type:	numeric (double)		
range:	[0,87.5]	units:	.01
unique values:	3,299	missing .:	13/32,236
unique mv codes:	2	missing .*:	12,485/32,236
mean:	6.688		
std. dev:	13.0114		

percentiles:	10%	25%	50%	75%	90%

```
                                0         0         0      8.02     20.34
```

pctHMO_cty:
1. Variable Group : Insurance coverage
2. Short Description : Proportion of residents present on the 1st Thursday in April who were covered by a Medicare HMO (Health Maintenance Organization).
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the county on the 1st Thursday in April. The proportion of residents covered by a Medicare Health Maintenance Organization (HMO) in a county was then determined based on Medicare enrollment records.

---

la_hbedstot_000e_cty County level (ARF): Number of hospital beds/1000 pop 65+

```
                  type:  numeric (double)

                 range:  [0,697.389]                  units:  .001
         unique values:  17,520                   missing .:  2/32,236

                  mean:    25.116
             std. dev:   30.6105

           percentiles:        10%       25%       50%       75%       90%
                                 0     8.719    17.805    31.549    53.969
```

la_hbedstot_000e_cty:
1. Variable Group : Market Availability
2. Short Description : Number of hospital beds in the county for every 1000 persons age 65 or older.
3. Long Description : The number of hospital beds in the county for every 1000 persons age 65 and older is derived from the Area Resource File (ARF). We use the number of short-term general hospital beds in the county divided by the number of persons age 65 and multiply the result by 1000. The number of persons age 65 and over reported in the ARF is based on annual census estimates for each year, except in census years when actual numbers are reported.

---

la_hha000e_cty County level (ARF): Number of Home Health Agencies/1000 pop 65+

```
                  type:  numeric (double)

                 range:  [0,4.717]                    units:  .001
         unique values:  1,760                    missing .:  2/32,236
```

```
                mean:   .310831
            std. dev:   .393358

          percentiles:        10%       25%       50%       75%       90%
                               0         0        .2      .421      .771
```

la_hha000e_cty:
1. Variable Group : Market Availability
2. Short Description : Number of home health agencies in the county for every 1000 persons age 65 or older.
3. Long Description : The number of home health agencies in the county for every 1000 persons age 65 and older is derived from the Area Resource File (ARF). We use the number of home health agencies in the county divided by the number of persons age 65 and multiply the result by 1000. The number of persons age 65 and over reported in the ARF is based on annual census estimates for each year, except in census years when actual numbers are reported.

---

la_medmcpen_cty County level (ARF): Medicare managed care penetration

---

```
                type:  numeric (double)

               range:  [0,64.81]                    units:  .01
        unique values:  3,613                    missing .:  2/32,236

                mean:   8.20849
            std. dev:   10.7597

          percentiles:        10%       25%       50%       75%       90%
                               0       .29      3.43     12.49     24.16
```

la_medmcpen_cty:
1. Variable Group : Market Availability
2. Short Description : Medicare managed care organization penetration rate.
3. Long Description : The Medicare managed care organization (MCO) penetration rate is drawn from the Area Resource File as reported by the Centers for Medicare and Medicaid Services. It is the proportion of all Medicare beneficiaries in the county who are enrolled in a Medicare MCO.

---

la_nursall_000e_cty
County level (ARF): Total full/part time RN/LPNs in NH/ST/LT hospitals/1000 pop 65+

```
                type:  numeric (double)

               range:  [0,1738.095]                 units:  .001
```

```
         unique values:  18,255                   missing .:  2/32,236

                  mean:   30.7388
             std. dev:    33.728

           percentiles:        10%       25%       50%       75%       90%
                                 0    12.987    24.796    39.931    62.312
```

la_nursall_000e_cty:

1. Variable Group : Market Availability
2. Short Description : Number of nurses (RNs & LPNs) in the county for every 1000 persons age 65 or older.
3. Long Description : The number of nurses in the county for every 1000 persons age 65 and older is derived from the Area Resource File (ARF). We use the number of nurses in the county divided by the number of persons age 65 and multiply the result by 1000. The number of nurses includes both RNs and LPNs who are working either full-time or part-time in nursing homes, short-term hospitals, and long-term hospitals. The number of persons age 65 and over reported in the ARF is based on annual census estimates for each year, except in census years when actual numbers are reported.

---

occpct_cty County level (OSCAR): Average percent occupancy

```
                  type:  numeric (double)

                 range:  [1.67,100]                   units:  .01
         unique values:  4,699                    missing .:  8/32,236

                  mean:    83.117
             std. dev:   12.0581

           percentiles:        10%       25%       50%       75%       90%
                             66.58     76.56     85.68     92.16     96.21
```

occpct_cty:

1. Variable Group : Saturation
2. Short Description : Number of occupied beds in facility divided by the total number of beds and aggregated to the county level.
3. Long Description : Occupancy rate is the number of residents divided by total number of beds. The numerator comes directly from the OSCAR . The denominator is a cleaned estimated number of beds in the facility - (see the description of totbeds for more information). The county level measure is the average among all facilities in the county.

---

agg_adm_cty County level (MDS): Number of NH admissions in year

```
-------------------------------------------------------------------------------

                  type:  numeric (long)

                 range:  [11,79432]                   units:  1
         unique values:  4,279                    missing .:  10/32,236
       unique mv codes:  2                       missing .*:  296/32,236

                  mean:   910.722
             std. dev:   2750.72

           percentiles:        10%       25%       50%       75%       90%
                                44        94       232       663    1909.5

agg_adm_cty:
  1.  Variable Group :  Saturation (all admissions)
  2.  Short Description :  Total number of nursing home admissions in the year.
  3.  Long Description :  All MDS admission records were aggregated to the
      facility using the Federal Facility Provider number found on the MDS.
      Admissions were counted using the Primary Reason for Assessment variable
      in the MDS dataset. This was then aggregated to the county level.

-------------------------------------------------------------------------------
la_avgempbed_cty
   County level (OSCAR): Average number of empty nursing home beds per facility
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [0,201]                      units:  1.000e-08
         unique values:  3,014                    missing .:  14/32,236

                  mean:   15.0867
             std. dev:   12.8283

           percentiles:        10%       25%       50%       75%       90%
                                 3   6.11111        12      20.5        31

la_avgempbed_cty:
  1.  Variable Group :  Saturation (county only)
  2.  Short Description :  Number of empty nursing home beds in the county
      divided by the number of nursing homes in the county.
  3.  Long Description :  The average number of empty beds in the county is
      calculated using OSCAR data.  For each facility, the total number of
      residents is subtracted from the total number of beds (see description of
      'totbeds') to determine the number of empty beds in the facility, then
      the average of all facilities in the county is calculated.

-------------------------------------------------------------------------------
```

```
la_herfbeds_cty      County level (ARF): Herfindahl index for Nursing Home beds
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [.00312026,1]                units:  1.000e-12
         unique values:  9,222                    missing .:  6/32,236

                  mean:   .502029
             std. dev:   .335326

           percentiles:        10%       25%       50%       75%       90%
                            .115451     .2226   .408395         1         1
```

la_herfbeds_cty:

1. Variable Group : Saturation (county only)
2. Short Description : Measure of nursing home concentration/competition in the county ranging from 0 to 1. The closer to 1, the closer the county is to having a monopoly in nursing home beds.
3. Long Description : The Herfinadahl index is calculated using data from the annual OSCAR for all facilities in a county. Each facility's total beds (see description of variable 'totbeds') is squared and the sum for all facilities in the county is calculated, this sum is then divided by the sum of all county beds squared.

```
-------------------------------------------------------------------------------
hosppty_cty   County level (RHF): Number of hospitalizations per resident year
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [0,4.1499611]                units:  1.000e-12
         unique values:  31,984                   missing .:  3/32,236

                  mean:   .793294
             std. dev:   .339905

           percentiles:        10%       25%       50%       75%       90%
                             .41097   .554072   .753797   .975324   1.20935
```

hosppty_cty:

1. Variable Group : Service Utilization
2. Short Description : Number of hospitalizations during the calendar year for every 365 nursing home resident days in a facility aggregated to the county level.
3. Long Description : The Residential History File (RHF) was used to determine the number of nursing home days for all residents in each facility in the county during the calendar year. (Facilities with fewer than 4500 nursing home days were set to LNE.) This number of nursing

homes days was then divided by 365 to establish the number of resident years. The RHF was then used to count the number of hospitalizations of Medicare fee-for-service residents that occurred directly from the nursing home during the calendar year.

---

pctlshosp_cty
County level (RHF): Percent of quarter 2 long-stay residents hospitalized in 6 months

---

type:	numeric (double)		
range:	[0,100]	units:	.01
unique values:	3,694	missing .:	2,227/32,236
mean:	20.6303		
std. dev:	9.21946		

percentiles:	10%	25%	50%	75%	90%
	10	14.18	19.61	25.93	32.61

pctlshosp_cty:
1. Variable Group : Service Utilization
2. Short Description : Percent quarter 2 long-stay residents that were hospitalized in 6 months.
3. Long Description : The Residential History File (RHF) was used to the number of nursing facility residents in the county during the 2nd quarter of the given year who are judged to be long-stay residents at the time of the assessment. This served as the denominator of the measure. The numerator is the number of the above residents who subsequently had a fee-for-service Medicare hospital admission within 6 months (183 days) of the date of the MDS assessment.

---

pctnhdayshospice_cty
County level (RHF): Percent of total nursing home days with hospice

---

type:	numeric (double)		
range:	[0,51.863727]	units:	1.000e-12
unique values:	29,136	missing .:	3/32,236
mean:	2.82248		
std. dev:	3.49436		

percentiles:	10%	25%	50%	75%	90%
	.001969	.364582	1.6324	4.11343	7.07097

pctnhdayshospice_cty:
1. Variable Group : Service Utilization
2. Short Description : Proportion of all nursing home days during the calendar year that were hospice.
3. Long Description : The Residential History File (RHF) was used to establish the number of nursing home days for all residents in each facility in the county in the calendar year. The RHF was also used to determine the number of those days that were hospice days. The proportion of days that were hospice was then calculated at the county level using these two counts.

---

pctNHdaysSNF_cty County level (RHF): Percent NH days Medicare Reimbursed SNF

---

type: numeric (double)

range: [0,100] units: 1.000e-11
unique values: 30,497 missing .: 3/32,236

mean: 11.0035
std. dev: 6.41304

percentiles:	10%	25%	50%	75%	90%
	2.71493	6.50366	10.8255	15.0438	18.9606

pctNHdaysSNF_cty:
1. Variable Group : Service Utilization
2. Short Description : Proportion of all nursing home days during the calendar year that were SNF (skilled nursing facility) Medicare covered days.
3. Long Description : The Residential History File (RHF) was used to establish the number of nursing home days for all residents in each facility in the county in the calendar year. The RHF was also used to determine the number of those days that were skilled nursing facility (SNF) Medicare covered days. The proportion of days that were SNF was then calculated at the county level using these two counts.

---

rehosp_cty County level (RHF): Average 30-day rehospitalization rate

---

type: numeric (double)

range: [0,.52173913] units: 1.000e-11
unique values: 8,868 missing .: 12/32,236

mean: .152249

```
              std. dev:   .061304

           percentiles:        10%       25%       50%       75%       90%
                            .076923   .116172   .153846   .189189   .223938
```

---

cnahrppd_cty County level (OSCAR): Average of averages CNA hours/resident/day

---

```
                  type:  numeric (double)

                 range:  [.11,23.37]                 units:  .01
         unique values:  600                      missing .:  7/32,236

                  mean:   2.22322
              std. dev:    .68583

           percentiles:        10%       25%       50%       75%       90%
                              1.59      1.85      2.13      2.46      2.88
```

cnahrppd_cty:

1. Variable Group : Staffing
2. Short Description : The average CNA hours per resident day among all facilities in the county.
3. Long Description : Facilities report the number of Certified Nursing Assistant (CNA) hours during the two weeks prior to their annual survey. CMS converts the number of hours into full-time equivalents (based on a 35 hour work week) and this is what is reported on the annual OSCAR data. We convert the FTEs back into hours, by multiplying by 35, and divide the total number of CNA hours by the number of residents in the facility (also drawn from the OSCAR) to arrive at the CNA hours per resident day (HPRD). We also clean this variable when the FTEs reported are implausible. We set to missing when total FTEs are 995 or higher or if there are more 3 times the number of CNAs reported than the number of beds in a facility. We also verify staffing variables based on a facility's data from previous years and impute based on previous data if staffing levels are less than 1/3 the median of previous years or greater than 3 times the median, for example. This county measure is the average CNA HPRD among all facilities.

---

dchrppd_cty
County level (OSCAR): Average of averages Direct Care staff hours/resident/day

---

```
                  type:  numeric (double)

                 range:  [.97,23.19]                 units:  .01
         unique values:  714                      missing .:  16/32,236
```

```
                mean:   3.32235
           std. dev:   .868115

      percentiles:        10%       25%       50%       75%       90%
                         2.46       2.8       3.2      3.68      4.25
```

dchrppd_cty:

1. Variable Group : Staffing
2. Short Description : The number of direct-care staff hours per resident day within facility averaged across facilities in the county.
3. Long Description : Facilities report the number of Registered Nurse (RN), Licensed Practical Nurse (LPN), and Certified Nursing Assistant (CNA) hours during the two weeks prior to their annual survey. CMS converts the number of hours into full-time equivalents (based on a 35 hour work week) and this is what is reported on the annual OSCAR data. We convert the FTEs back into hours, by multiplying by 35, and divide the total number of RN plus LPN plus CNA hours by the number of residents in the facility (also drawn from the OSCAR) to arrive at the direct-care hours per resident day (DC HPRD). Because this variable is created using the previous cleaned RN, LPN, and CNA hours (as described in RN HPRD, LPN HPRD, and CNA HPRD) we do not do any additional cleaning of this variable. This county measure is the average DC HPRD among all facilities.

---

lpnhrppd_cty County level (OSCAR): Average of averages LPN hours/resident/day

---

```
                type:  numeric (double)

               range:  [0,21.4]                    units:  .01
        unique values:  428                      missing .:  4/32,236

                mean:   .802785
           std. dev:   .485488

      percentiles:        10%       25%       50%       75%       90%
                          .44       .59       .76       .93      1.12
```

lpnhrppd_cty:

1. Variable Group : Staffing
2. Short Description : The number of LPN hours per resident day within facility averaged across facilities in the county.
3. Long Description : Facilities report the number of Licensed Practical Nurse (LPN) hours during the two weeks prior to their annual survey. CMS converts the number of hours into full-time equivalents (based on a 35 hour work week) and this is what is reported on the annual OSCAR data. We convert the FTEs back into hours, by multiplying by 35, and divide the

total number of LPN hours by the number of residents in the facility (also drawn from the OSCAR) to arrive at the LPN hours per resident day (HPRD). We also clean this variable when the FTEs reported are implausible. We set to missing when total FTEs are 995 or higher or if there are more RN and LPNs reported than the number of beds in a facility. We also verify staffing variables based on a facility's data from previous years and impute based on previous data if staffing levels are less than 1/3 the median of previous years or greater than 3 times the median, for example. The county level measure is the average LPN HPRD among all facilities in the county.

---

rnhrppd_cty County level (OSCAR): Average of averages RN hours/resident/day

---

type:	numeric (double)		
range:	[0,12]	units:	.01
unique values:	353	missing .:	2/32,236

mean:	.37835
std. dev:	.395445

percentiles:	10%	25%	50%	75%	90%
	.09	.16	.29	.47	.72

rnhrppd_cty:

1. Variable Group : Staffing
2. Short Description : RN hours per resident day.
3. Long Description : Facilities report the number of Registered Nurse (RN) hours during the two weeks prior to their annual survey. CMS converts the number of hours into full-time equivalents (based on a 35 hour work week) and this is what is reported on the annual OSCAR data. We convert the FTEs back into hours, by multiplying by 35, and divide the total number of RN hours by the number of residents in the facility (also drawn from the OSCAR) to arrive at the RN hours per resident day (HPRD). We also clean this variable when the FTEs reported are implausible. We set to missing when total FTEs are 995 or higher or if there are more RN and LPNs reported than the number of beds in a facility. We also verify staffing variables based on a facility's data from previous years and impute based on previous data if staffing levels are less than 1/3 the median of previous years or greater than 3 times the median, for example. The county level measure is the average RN HPRD among all facilities in the county.

---

nhdays_cty County level (RHF): Total nursing home days in year

---

```
         type:  numeric (long)

        range:  [0,8622449]                  units:  1
unique values:  29,360                missing .:  2/32,236

         mean:    138361
     std. dev:    330484

  percentiles:        10%       25%       50%       75%       90%
                    15610     27884     57565    123196    282620
```

Appendix 3. State Level Codebook

```
-------------------------------------------------------------------------------
Number of variables:  64
Number of observations:  539

-------------------------------------------------------------------------------
state                                                        State Abbreviation
-------------------------------------------------------------------------------

                  type:  string (str2)

         unique values:  49                       missing "":  0/539

              examples:  "HI"
                         "ME"
                         "NJ"
                         "SD"

-------------------------------------------------------------------------------
year                                                                Year of data
-------------------------------------------------------------------------------

                  type:  numeric (int)

                 range:  [2000,2010]                 units:  1
         unique values:  11                       missing .:  0/539

                  mean:      2005
             std. dev:   3.16522

           percentiles:        10%       25%       50%       75%       90%
                              2001      2002      2005      2008      2009

year:
  1.  Variable Group :  Identification
  2.  Short Description :  Calendar year
  3.  Long Description :  Calendar year

-------------------------------------------------------------------------------
agg_cmi_sta                    State level (MDS): Average RUGS NCMI (all admits)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [.96263118,1.1281471]       units:  1.000e-11
         unique values:  539                      missing .:  0/539

                  mean:   1.05797
             std. dev:   .032646

           percentiles:        10%       25%       50%       75%       90%
                           1.01415   1.03773   1.05997   1.08316   1.09809

agg_cmi_sta:
  1.  Variable Group :  Acuity (all admissions)
  2.  Short Description :  The average Resource Utilization Group Nursing Case
```

Mix Index (a measure of the relative intensity of care of different nursing home populations) for all residents admitted during the calendar year.

3. Long Description : The average Nursing Case Mix Index (NCMI) was calculated by applying the Resource Utilization Groups version III (RUG-III) resident classification system currently used by CMS to adjust Medicare payments in recognition of resident acuity. This system classifies residents into homogeneous categories based on their estimated resource utilization. Associated with each of these categories is a case-mix index or weight, which approximates the relative staff time associated with caring for the average resident in each group. Thus, the higher the NCMI score, the more severe the average acuity profile of the residents in a facility. The resident-level NCMI was calculated in two steps. First, the RUG-III 5.12 code (44 categories in total) was used to generate a RUG classification for each resident. Second, the RUG code was converted into a NCMI value following the CMS proposed rule regarding fiscal year 2004 Skilled Nursing Facility (SNF) payment policies (Centers for Medicare & Medicaid Services 2003).

---

agg_low_care_sta State level (MDS): Percent low care (all admits)

---

type:	numeric (double)		
range:	[.5926812,10.773024]	units:	1.000e-09
unique values:	539	missing .:	0/539
mean:	3.8851		
std. dev:	2.2455		

percentiles:	10%	25%	50%	75%	90%
	1.46625	2.12503	3.21131	5.36369	7.38369

agg_low_care_sta:

1. Variable Group : Acuity (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were low care, according to the broad definition.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. The 'broad' definition of low-care status is met if a resident does not require physical assistance in any of the four late-loss ADLs—bed mobility, transferring, using the toilet, and eating—and is not classified in either the 'Special Rehab' or 'Clinically Complex' Resource Utilization Group (RUG-III). This was then averaged to the state level.

---

avgadl_sta State level (MDS): Long ADL (prevalence)

---

type:	numeric (double)		
range:	[11.55,20.18]	units:	.01
unique values:	364	missing .:	0/539
mean:	15.6988		
std. dev:	1.68739		

```
          percentiles:        10%       25%       50%       75%       90%
                            13.56      14.5     15.62     16.93      17.7
```

avgadl_sta:

1. Variable Group : Acuity (prevalence)
2. Short Description : The average Activities of Daily Living (ADL) score for all residents present on the 1st Thursday in April.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Individual scores were calculated from the Physical Functioning Self performance section of the MDS using Section G: Physical Functioning and Structural Problems, Question A: ADL self-performance. This score measures an individual's independence on 7 ADLs - bed mobility, transfer, locomotion on unit, dressing, eating, toilet use, and personal hygiene. If personal hygiene was missing on the MDS assessment, the score for dressing was used twice. Each ADL is scored from 0-4, with 0 indicating total independence in that ADL and 4 indicating total dependence in that ADL. The ADL score range is from 0 to 28, where 0 indicates completely independent and 28 completely dependent. All individuals' scores were then averaged and aggregated to the state level.

---

avgrugcmi_sta State level (MDS): Average RUGS NCMI (prevalence)

```
                  type:  numeric (double)

                 range:  [.7015,.9185]                units:  .0001
         unique values:  465                      missing .:  0/539

                  mean:   .790263
             std. dev:   .043495

          percentiles:        10%       25%       50%       75%       90%
                             .7363     .7564      .788     .8198       .85
```

avgrugcmi_sta:

1. Variable Group : Acuity (prevalence)
2. Short Description : The average Resource Utilization Group Nursing Case Mix Index (a measure of the relative intensity of care of different nursing home populations) for all residents present on the 1st Thursday in April.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. the average Nursing Case Mix Index (NCMI) was calculated by applying the Resource Utilization Groups version III (RUG-III) resident classification system currently used by CMS to adjust Medicare payments in recognition of resident acuity. This system classifies residents into homogeneous categories based on their estimated resource utilization. Associated with each of these categories is a case-mix index or weight, which approximates the relative staff time associated with caring for the average resident in each group. Thus, the higher the NCMI score, the more severe the average acuity profile of the residents in a facility. The resident-level NCMI was calculated in two steps. First, the RUG-III 5.12 code (44 categories in total) was used to generate a RUG classification for each resident. Second, the RUG code was

converted into an NCMI value following the CMS proposed rule regarding fiscal year 2004 Skilled Nursing Facility (SNF) payment policies (Centers for Medicare & Medicaid Services 2003).

---

avgrxnum_sta
State level (MDS): Mean number of medications in past 7 days per resident (prevalence)

---

type:	numeric (double)		
range:	[6.34,12.68]	units:	.01
unique values:	332	missing .:	0/539

mean:	9.81666
std. dev:	1.27063

percentiles:	10%	25%	50%	75%	90%
	8.04	8.79	9.94	10.81	11.47

avgrxnum_sta:
1. Variable Group : Acuity (prevalence)
2. Short Description : Average number of medications in the past 7 days per resident present on the 1st Thursday in April.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. The number of different medications each individual received in the past 7 days was drawn from the most recent MDS assessment using Section O: Medications, Question 1: Number of Medications used in last seven days. This measure was averaged to the state level.

---

pctbedft_sta State level (MDS): Percent Bed fast (prevalence)

---

type:	numeric (double)		
range:	[.89,13.25]	units:	.01
unique values:	398	missing .:	0/539

mean:	4.48505
std. dev:	2.7013

percentiles:	10%	25%	50%	75%	90%
	1.51	2.08	3.95	6.44	8.62

pctbedft_sta:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are bedfast.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Whether or not an individual was bedfast was drawn from the most recent MDS using Section G: Physical Functioning and Structural Problems, Question 6: Modes of Transfer, Bedfast all or most of the time. The proportion of residents with a 'yes' (indicating the

resident is bedfast) was calculated at the state level.

---
pctcath_sta State level (MDS): Percent Catheter (prevalence)
---

type:	numeric (double)		
range:	[3.89,12.77]	units:	.01
unique values:	337	missing .:	0/539
mean:	6.78275		
std. dev:	1.6731		

percentiles:	10%	25%	50%	75%	90%
	4.99	5.58	6.46	7.57	8.85

pctcath_sta:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who have a catheter.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Whether an individual had an indwelling catheter was drawn from the most recent MDS assessment using Section H: Continence in last 14 days, Question 3d: Appliances and Programs, Indwelling Catheter. The proportion of residents who have a catheter was then calculated at the state level.

---
pctchf_sta State level (MDS): Percent CHF (prevalence)
---

type:	numeric (double)		
range:	[9.12,33.96]	units:	.01
unique values:	443	missing .:	0/539
mean:	19.5816		
std. dev:	4.68478		

percentiles:	10%	25%	50%	75%	90%
	14.13	16.4	18.73	22.06	26.22

pctchf_sta:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who have congestive heart failure.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Whether an individual had congestive heart failure was drawn from the most recent MDS assessment using Section I: Disease Diagnoses, Question 1f. Note that the MDS instructions state to check only those diseases that have a relationship to current ADL status, cognitive status, mood and behavior status, medical treatments, nursing monitoring, or risk of death. The proportion of residents with CHF was then calculated and aggregated to the state level.

```
-------------------------------------------------------------------------------
pctdnh_sta
          State level (MDS): Percent with Do-Not-Hospitalize order (prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [.23,15.82]                 units:  .01
         unique values:  401                      missing .:  0/539

                  mean:   4.20566
             std. dev:   3.64694

           percentiles:        10%       25%       50%       75%       90%
                                 1      1.49      2.97      5.65     10.47
```

pctdnh_sta:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are Do Not Hospitalize.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Each individual's Do Not Hospitalize (DNH) status was drawn from the most recent MDS admission or annual assessment using Section A: Identification and Background Information, Question 10c: Advanced directives, DNH. The proportion of residents with a 'yes' (indicating the resident has a filed DNH order) was calculated at the state level.

```
-------------------------------------------------------------------------------
pctdnr_sta           State level (MDS): Percent Do-Not-Resuscitate (prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [20.92,83.9]                units:  .01
         unique values:  507                      missing .:  0/539

                  mean:   60.6927
             std. dev:   13.2072

           percentiles:        10%       25%       50%       75%       90%
                              44.5     51.94     61.41     72.91     77.05
```

pctdnr_sta:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are Do Not Resuscitate.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Each individual's Do Not Resuscitate (DNR) status was drawn from the most recent MDS admission or annual assessment using Section A: Identification and Background Information, Question 10b: Advanced directives, DNR. The proportion of residents with a 'yes' (indicating the resident has a filed DNR order) was calculated at the state level.

```
-------------------------------------------------------------------------------
pcthighcps_sta                  State level (MDS): Percent CPS=5,6 (prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [9.18,32.55]                 units:  .01
         unique values:  460                      missing .:  0/539

                  mean:   20.1268
             std. dev:   4.12456

           percentiles:        10%       25%       50%       75%       90%
                             15.02     17.42     19.97     22.75     25.53
```

pcthighcps_sta:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April with a Cognitive Performance Scale (CPS) score of 5 or 6 (severe cognitive impairment).
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Each individual's Cognitive Performance Score (CPS) was calculated from the most recent MDS assessment and the proportion of residents with a CPS score of 5 or 6 was then calculated at the state level.

```
-------------------------------------------------------------------------------
pctlowcps_sta                  State level (MDS): Percent CPS=0,1,2 (prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [22.13,51.54]                 units:  .01
         unique values:  460                      missing .:  0/539

                  mean:   38.0424
             std. dev:   5.07006

           percentiles:        10%       25%       50%       75%       90%
                                31     35.05     38.26     41.19     44.47
```

pctlowcps_sta:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April with a Cognitive Performance Scale (CPS) score of 0, 1, or 2 (low cognitive impairment).
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Each individual's Cognitive Performance Score (CPS) was calculated from the most recent MDS assessment and the proportion of residents with a CPS score of 0, 1, or 2 was then calculated at the state level.

```
-------------------------------------------------------------------------------
pcthyper_sta                State level (MDS): Percent Hypertension (prevalence)
```

---

type:	numeric (double)		
range:	[31.3,73.15]	units:	.01
unique values:	499	missing .:	0/539
mean:	52.1463		
std. dev:	9.0979		

percentiles:	10%	25%	50%	75%	90%
	40.44	45.26	51.71	58.72	65.62

pcthyper_sta:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April with hypertension.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Whether an individual had hypertension was drawn from the most recent MDS assessment using Section I: Disease Diagnoses, Question 1h. Note that the MDS instructions state 'check only those diseases that have a relationship to current ADL status, cognitive status, mood and behavior status, medical treatments, nursing monitoring, or risk of death.' The proportion of residents with hypertension was then calculated at the state level.

---

pctincont_bladr_sta State level (MDS): Percent Bladder incontinent (prevalence)

---

type:	numeric (double)		
range:	[48.18,78.41]	units:	.01
unique values:	472	missing .:	0/539
mean:	62.146		
std. dev:	5.72648		

percentiles:	10%	25%	50%	75%	90%
	55.79	58.57	61.77	65.5	70.44

pctincont_bladr_sta:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are bladder incontinent.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Whether or not an individual was bowel incontinent was drawn from the most recent MDS using Section H: Continence in last 14 days, Question 1b, values 2, 3, or 4 (indicating 'occasionally,' 'frequently,' or 'always' incontinent in the past 14 days). The proportion of residents who are bladder incontinent was then calculated at the state level.

```
pctincont_bowel_sta   State level (MDS): Percent Bowel incontinent (prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [30.55,67.79]                units:  .01
         unique values:  507                      missing .:  0/539

                  mean:   48.9782
             std. dev:   9.31334

           percentiles:        10%       25%       50%       75%       90%
                             35.13     42.07     50.77     55.49      60.8
```

pctincont_bowel_sta:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are bowel incontinent.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Whether or not an individual was bowel incontinent was drawn from the most recent MDS using Section H: Continence in last 14 days, Question 1a, values 2, 3, or 4 (indicating 'occasionally,' 'frequently,' or 'always' incontinent in the past 14 days). The proportion of residents who are bowel incontinent was then calculated at the state level.

```
-------------------------------------------------------------------------------
pctlocare_sta                  State level (MDS): Percent low care (prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [1.08,33.1]                  units:  .01
         unique values:  486                      missing .:  0/539

                  mean:   15.4285
             std. dev:   5.97079

           percentiles:        10%       25%       50%       75%       90%
                             8.35     10.91     15.08     19.62     22.98
```

pctlocare_sta:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who were low care, according to the broad definition.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. This measure was calculated from the most recent MDS assessment. The 'broad' definition of low-care status is met if a resident does not require physical assistance in any of the four late-loss ADLs—bed mobility, transferring, using the toilet, and eating—and is not classified in either the 'Special Rehab' or 'Clinically Complex' Resource Utilization Group (RUG-III). This measure is then averaged at the state level.

```
-------------------------------------------------------------------------------
```

```
pctobese_sta                    State level (MDS): Percent Obese (prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [4.6,25.89]                 units:  .01
         unique values:  450                      missing .:  0/539

                  mean:   17.1299
             std. dev:   4.02432

           percentiles:        10%       25%       50%       75%       90%
                             12.07     14.18     17.32     19.96     22.45
```

pctobese_sta:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who had a body mass index (BMI) of 35 or higher.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. The proportion of residents in the state with a body mass index (BMI) of 35 or greater was then calculated using the height and weight data from the most recent MDS assessment using Section K: Oral/Nutritional Status, questions 1a (height in inches) and 1b (weight in lbs.). Calculations resulting in highly improbable BMI (<10 or >60) were set to missing.

```
-------------------------------------------------------------------------------
pctrxdep_sta              State level (MDS): Percent receiving antidepressants
(prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [18.51,64.7]                units:  .01
         unique values:  487                      missing .:  0/539

                  mean:   49.2349
             std. dev:   7.67175

           percentiles:        10%       25%       50%       75%       90%
                             38.78      43.4     50.69     55.14     58.13
```

pctrxdep_sta:

1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents in the facility on the 1st Thursday in April receiving antidepressants.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Whether an individual was receiving antidepressants was drawn from the most recent MDS assessment using Section O: Medications, question 4c: Number of days during the last 7 days the resident received antidepressant medication (if this value is greater than 0 then the resident was counted as receiving antidepressant medication). The proportion of residents receiving antidepressants was calculated at the state level.

```
-------------------------------------------------------------------------------
pctrxpsych_sta              State level (MDS): Percent receiving antipsychotics
(prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [10.22,36.21]                units:  .01
         unique values:  450                      missing .:  0/539

                  mean:   26.1346
             std. dev:   4.38172

           percentiles:        10%       25%       50%       75%       90%
                             20.91     23.57     25.98     29.22     31.74

pctrxpsych_sta:
  1.  Variable Group :  Acuity (prevalence)
  2.  Short Description :  Proportion of residents in the facility on the 1st
      Thursday in April receiving antipsychotics.
  3.  Long Description :  The Residential History File was used to establish
      the population of residents in each facility in the state on the 1st
      Thursday in April.  Whether an individual was receiving antipsychotics
      was drawn from the most recent MDS assessment using Section O:
      Medications, question 4a: Number of days during the last 7 days the
      resident received antipsychotic medication (if this value is greater than
      0 then the resident was counted as receiving antipsychotic medication).
      The proportion of residents receiving antipsychotics was calculated at
      the state level.

-------------------------------------------------------------------------------
pctrxpsyoff_sta
 State level (MDS): Percent of non-psychotic residents receiving antipsychotics
off-label (prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [8.38,28.62]                 units:  .01
         unique values:  446                      missing .:  0/539

                  mean:   20.5012
             std. dev:   3.40428

           percentiles:        10%       25%       50%       75%       90%
                             16.26      18.4     20.49     22.98        25

pctrxpsyoff_sta:
  1.  Variable Group :  Acuity (prevalence)
  2.  Short Description :  Proportion of residents in the facility on the 1st
      Thursday in April receiving antipsychotics off-label.
  3.  Long Description :  The Residential History File was used to establish
      the population of residents in each facility in the state on the 1st
      Thursday in April. Whether an individual was receiving antipsychotics
      off-label was drawn from the most recent MDS assessment using Section O:
      Medications, question 4a: Number of days during the last 7 days the
      resident received antipsychotic medication (if this value is greater than
```

0 then the resident was counted as receiving antipsychotic medication). Use was considered off label if the resident does not have schizophrenia and/or bi-polar disorder (MDS Section I: Disease Diagnoses, question 1ff (Bipolar disease) or question 1gg (Schizophrenia)). The proportion of residents receiving antipsychotics off-label was calculated at the state level.

---

pctschiz_bipol_sta
State level (MDS): Percent Schizophrenic or Bi-polar (prevalence)

---

type:	numeric (double)		
range:	[2.83,21.06]	units:	.01
unique values:	382	missing .:	0/539
mean:	7.21987		
std. dev:	2.45673		

percentiles:	10%	25%	50%	75%	90%
	4.92	5.66	6.75	8.22	10.11

pctschiz_bipol_sta:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April with Schizophrenia or Bi-polar Disorder.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Whether an individual had schizophrenia and/or bi-polar disorder was drawn from the most recent MDS assessment using Section I: Disease Diagnoses, question 1ff (Bipolar disease) or question 1gg (Schizophrenia). Note that the MDS instructions state 'check only those diseases that have a relationship to current ADL status, cognitive status, mood and behavior status, medical treatments, nursing monitoring, or risk of death.' The proportion of residents with hypertension was then calculated at the state level.

---

pctuti_sta State level (MDS): Percent UTI (prevalence)

---

type:	numeric (double)		
range:	[4.86,13.33]	units:	.01
unique values:	343	missing .:	0/539
mean:	8.46571		
std. dev:	1.48535		

percentiles:	10%	25%	50%	75%	90%
	6.78	7.35	8.28	9.48	10.57

pctuti_sta:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present in the state on the 1st Thursday in April with a urinary tract infection.

3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Whether an individual had a urinary tract infection (UTI) was drawn from the most recent MDS using section I: Disease Diagnoses, question 2c (Urinary tract infection in last 30 days). The proportion of residents with a UTI was calculated at the state level.

---

pctvent_sta State level (MDS): Percent Ventilator (prevalence)

---

type:	numeric (double)		
range:	[0,2.38]	units:	.01
unique values:	108	missing .:	0/539
unique mv codes:	1	missing .*:	117/539
mean:	.402867		
std. dev:	.362856		

percentiles:	10%	25%	50%	75%	90%
	.08	.15	.28	.56	.83

pctvent_sta:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are on a ventilator.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Whether an individual was being treated with a ventilator/respirator was drawn from the most recent MDS assessment using Section P: Special treatments and procedures received during the last 14 days, question 1l: Ventilator/respirator. The proportion of residents with a ventilator was calculated at the state level.

---

pctwalking_sta
State level (MDS): Percent Walk independently in corridor (prevalence)

---

type:	numeric (double)		
range:	[3.82,34.99]	units:	.01
unique values:	478	missing .:	0/539
mean:	17.2575		
std. dev:	6.67816		

percentiles:	10%	25%	50%	75%	90%
	8.82	11.63	16.74	23.03	25.53

pctwalking_sta:
1. Variable Group : Acuity (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who can walk in corridor.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st

Thursday in April. This measure was drawn from the most recent MDS and the proportion of residents able to walk independently was calculated using MDS section G, question 1A, part d ("walk in corridor", value = 0). This ADL self-performance scale ranges from 0 (independent) to 4 (total dependence). The proportion of residents with a 0 (independent) was calculated at the state level.

---

agg_female_sta State level (MDS): Percent Female (all admits)

---

type:	numeric (double)		
range:	[55.695696,69.449504]	units:	1.000e-09
unique values:	539	missing .:	0/539
mean:	64.0275		
std. dev:	2.261		

percentiles:	10%	25%	50%	75%	90%
	60.9293	62.7519	64.3561	65.618	66.6084

agg_female_sta:
1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were female.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Each individual's gender was drawn from the MDS assessments using Section AA: Identification Information, Question 2: Gender. The proportion of individuals admitted to the facility who were female was then calculated at the state level.

---

agg_home_sta State level (MDS): Percent admissions from home (all admits)

---

type:	numeric (double)		
range:	[3.175336,19.079356]	units:	1.000e-09
unique values:	539	missing .:	0/539
mean:	8.71081		
std. dev:	3.54578		

percentiles:	10%	25%	50%	75%	90%
	4.63609	5.82022	7.83358	11.105	14.1399

agg_home_sta:
1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of all admissions during the calendar year that were from home.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Information about whether an individual was admitted to the facility from home was gathered from MDS using Section AB: Demographic Information, Question 2: Admitting From at Entry, response # 1 or 2. The proportion of individuals

admitted from home was then calculated at the state level.

---

agg_u65_sta State level (MDS): Percent under 65 years old (all admits)

---

type:	numeric (double)		
range:	[6.0093705,17.994455]	units:	1.000e-09
unique values:	539	missing .:	0/539
mean:	11.4057		
std. dev:	2.35438		

percentiles:	10%	25%	50%	75%	90%
	8.54312	9.7968	11.158	12.687	14.8525

agg_u65_sta:

1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were below age 65.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Each individual's age at admission was calculated from the date of birth listed on the MDS assessment using Section AA: Identification Information, question 3 (birthdate). The proportion of individuals under age 65 at admission was then calculated at the state level.

---

avgage_sta State level (MDS): Average age

---

type:	numeric (double)		
range:	[75.02,84.5]	units:	.01
unique values:	380	missing .:	0/539
mean:	80.739		
std. dev:	1.89541		

percentiles:	10%	25%	50%	75%	90%
	78.44	79.53	80.61	82.08	83.38

avgage_sta:

1. Variable Group : Demographics (prevalence)
2. Short Description : Average age of residents present on the 1st Thursday in April.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Individual age was calculated using the date of birth from the Medicare denominator data. For individuals not covered by Medicare, age was calculated using the date of birth found on their most recent MDS assessment using Section AA: Identification Information, question 3 (birthdate). Ages of all individuals were averaged at the state level

---

```
agg_black_sta                    State level (MDS): Percent Black (all admits)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [.11424002,29.216687]       units:  1.000e-10
           unique values:  513                    missing .:  0/539
        unique mv codes:  1                      missing .*:  26/539

                  mean:   8.45845
             std. dev:   7.98007

          percentiles:        10%       25%       50%       75%       90%
                           .351252   2.14507   5.96198   12.0057   22.0651
```

agg_black_sta:
1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were Black.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Information about each individual's race was gathered from MDS Section AA 4 (race/ethnicity). The proportion of individuals admitted to each facility who were 'Black, not of Hispanic origin' (response #3) was then calculated at the state level.

```
-------------------------------------------------------------------------------
agg_hispanic_sta                State level (MDS): Percent Hispanic (all admits)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [.06255687,24.728445]       units:  1.000e-10
           unique values:  527                    missing .:  0/539
        unique mv codes:  1                      missing .*:  12/539

                  mean:   2.44939
             std. dev:   4.32107

          percentiles:        10%       25%       50%       75%       90%
                           .203544   .373734   .771162   2.27084    7.5581
```

agg_hispanic_sta:
1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were Hispanic.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Information about each individual's race was gathered from MDS Section AA 4 (race/ethnicity). The proportion of individuals at the facility who were 'Hispanic' (response #4) was then calculated at the state level.

```
-------------------------------------------------------------------------------
agg_white_sta                    State level (MDS): Percent White (all admits)
-------------------------------------------------------------------------------

                  type:  numeric (double)
```

```
                range:  [23.266609,99.623008]       units:  1.000e-09
        unique values:  539                      missing .:  0/539

                 mean:   86.0912
            std. dev:    12.344

          percentiles:        10%       25%       50%       75%       90%
                           72.5876   79.6088   89.2017   94.8762   96.8127
```

agg_white_sta:
1. Variable Group : Demographics (all admissions)
2. Short Description : Proportion of residents admitted during the calendar year who were White.
3. Long Description : Nursing home admissions were identified using the Primary Reason for Assessment variable in the MDS datasets. Information about each individual's race was gathered from MDS Section AA 4 (race/ethnicity). The proportion of individuals admitted in the facility who were 'White, not of Hispanic origin' (response #5) was then calculated at the state level.

---

pctfem_sta — State level (MDS): Percent Female (prevalence)

```
                 type:  numeric (double)

                range:  [61.63,78.89]               units:  .01
        unique values:  416                      missing .:  0/539

                 mean:   70.8885
            std. dev:   3.11982

          percentiles:        10%       25%       50%       75%       90%
                            66.24     68.84     71.47     73.08     74.21
```

pctfem_sta:
1. Variable Group : Demographics (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are female.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Each individual's sex was drawn from the most recent MDS assessment using section AA: Identification Information, Question 2: Gender. The proportion of residents who are female was calculated at the state level.

---

pctunder65_sta — State level (MDS): Percent under 65 years old (prevalence)

```
                 type:  numeric (double)

                range:  [5.02,25.85]                units:  .01
        unique values:  448                      missing .:  0/539

                 mean:   12.3438
```

```
              std. dev:   3.88051

           percentiles:        10%       25%       50%       75%       90%
                              7.73      9.43     12.02     14.52     17.39
```

pctunder65_sta:

1. Variable Group : Demographics (prevalence)
2. Short Description : Proportion of residents present on 1st Thursday in April who are under 65 years old.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Individual age was calculated using the date of birth from the Medicare denominator file. For individuals not covered by Medicare, age was calculated using the date of birth found on their most recent MDS assessment using Section AA: Identification Information, question 3 (birthdate). The proportion of facility residents under age 65 was then calculated at the state level.

---

pctblack_sta — State level (MDS): Percent Black (prevalence)

```
                  type:  numeric (double)

                 range:  [0,35.79]                   units:  .01
           unique values:  424                    missing .:  0/539
        unique mv codes:  1                      missing .*:  46/539

                  mean:   10.9991
              std. dev:   9.96359

           percentiles:        10%       25%       50%       75%       90%
                               .62      2.72      8.29     16.12     28.38
```

pctblack_sta:

1. Variable Group : Demographics (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are Black.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Each individual's race was drawn from the most recent MDS assessment using Section AA: Identification Information, Question 4: Race/Ethnicity. If race was missing on the MDS it was drawn from the Medicare denominator file. On the MDS 'Black, not of Hispanic origin' is one of five race/ethnicity categories. The proportion of residents who are Black was calculated at the state level.

---

pcthisp_sta — State level (MDS): Percent Hispanic (prevalence)

```
                  type:  numeric (double)

                 range:  [.09,28.48]                 units:  .01
           unique values:  278                    missing .:  0/539
        unique mv codes:  1                      missing .*:  37/539
```

```
                mean:   2.94873
           std. dev:   5.02972

      percentiles:        10%       25%       50%       75%       90%
                          .19       .38       .88      2.83      8.94
```

pcthisp_sta:

1. Variable Group : Demographics (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are Hispanic.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Each individual's race was drawn from the most recent MDS assessment using Section AA: Identification Information, Question 4: Race/Ethnicity. If race was missing on the MDS it was drawn from the Medicare denominator file. On the MDS 'Hispanic' is one of five race/ethnicity categories. The proportion of residents who are Hispanic was calculated at the state level.

---

pctwhite_sta — State level (MDS): Percent White (prevalence)

```
                type:  numeric (double)

               range:  [19.37,99.54]               units:  .01
      unique values:  486                      missing .:  0/539

                mean:   83.9838
           std. dev:   14.1628

      percentiles:        10%       25%       50%       75%       90%
                        67.97     74.43     87.64     95.06     97.57
```

pctwhite_sta:

1. Variable Group : Demographics (prevalence)
2. Short Description : Proportion of residents present on the 1st Thursday in April who are White.
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. Each individual's race was drawn from the most recent MDS assessment using Section AA: Identification Information, Question 4: Race/Ethnicity. If race was missing on the MDS it was drawn from the Medicare denominator file. On the MDS 'White' is one of five race/ethnicity categories. The proportion of residents who are White was calculated at the state level.

---

alzunit_sta
State level (OSCAR): Percent of facilities with Alzheimer's special care unit

---

```
                type:  numeric (double)

               range:  [0,44.74]                   units:  .01
      unique values:  460                      missing .:  0/539
```

```
                  mean:   19.2119
             std. dev:   9.57991

          percentiles:        10%       25%       50%       75%       90%
                             6.35     11.55        20     26.36     31.86
```

alzunit_sta:
1. Variable Group : Facility Characteristics
2. Short Description : The proportion of facilities that have an Alzheimer's SCU in the state.
3. Long Description : Whether a facility has an Alzheimer's Disease special care unit (SCU) was derived from the annual OSCAR data. In the OSCAR data this is reported as number of beds. If a facility reported having any Alzheimer's Disease beds they were considered to have an Alzheimer's Disease SCU. At the state level, the variable is the proportion of facilities that have an Alzheimer's SCU.

---

facpoor_sta State level (OSCAR): Percent resource-poor homes based on payer mix

---

```
                  type:  numeric (double)

                 range:  [0,34.09]                   units:  .01
         unique values:  416                      missing .:  0/539

                  mean:   8.63551
             std. dev:   6.28048

          percentiles:        10%       25%       50%       75%       90%
                             2.29       4.5      7.18     11.06     16.67
```

facpoor_sta:
1. Variable Group : Facility Characteristics
2. Short Description : Proportion of facilities in the state considered low-resource based on resident payer mix.
3. Long Description : Proportion of facilities in the state considered low-resource based on resident payer mix. The annual OSCAR data was used to determine if a facility was considered low-resource based on the breakdown of the primary payer of residents during the two weeks prior to their annual survey. This facility measure was aggregated to the state level to show the proportion of nursing homes in the state that meet the criteria for low-resource.

---

multifac_sta State level (OSCAR): Percent of facilities part of chain

---

```
                  type:  numeric (double)

                 range:  [12.39,76.6]                units:  .01
         unique values:  467                      missing .:  0/539

                  mean:   53.5253
             std. dev:   11.8108

          percentiles:        10%       25%       50%       75%       90%
```

```
                          39.02     47.93     53.54     61.78     68.25

multifac_sta:
  1.  Variable Group :  Facility Characteristics
  2.  Short Description :  The proportion of facilities within the state that
      are part of chains.
  3.  Long Description :  Whether a facility was owned or leased by a
      multi-facility (chain) organization was derived from the annual OSCAR
      data. The state level measure is the proportion of facilities that are
      part of chains within the state.

-------------------------------------------------------------------------------
restrain_sta                State level (MDS): Percent Restrained (prevalence)
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [.6,23.59]                   units:  .01
         unique values:  427                      missing .:  0/539

                  mean:   6.54017
             std. dev:   4.09795

           percentiles:        10%       25%       50%       75%       90%
                              2.26      3.51      5.68      8.66      12.4

restrain_sta:
  1.  Variable Group :  Facility Characteristics
  2.  Short Description :  Average proportion of facility residents who were
      restrained across facilities in the state.
  3.  Long Description :  The number of facility residents who were restrained
      (at the time of the annual survey) was drawn from the annual OSCAR data,
      as was the total number of facility residents. For state, this is the
      proportion of all residents in all facilities who were restrained.

-------------------------------------------------------------------------------
totbeds_sta           State level  (OSCAR): Average number of beds per facility
-------------------------------------------------------------------------------

                  type:  numeric (long)

                 range:  [2965,127721]                units:  1
         unique values:  529                      missing .:  0/539

                  mean:   34571.1
             std. dev:   32432.8

           percentiles:        10%       25%       50%       75%       90%
                              5679      7822     25563     43844     92856

totbeds_sta:
  1.  Variable Group :  Facility Characteristics
  2.  Short Description :  Number of beds as reported on the annual OSCAR
      (imputed from previous year if missing or implausible).
  3.  Long Description :  A two step process is used to create the total number
      of beds.  Some facilities report the number of available beds instead of
      the number of Medicare/Medicaid certified beds.  Therefore, if the number
```

of residents is less than or equal to the number of certified beds, we use the number of certified beds as the total beds. If, however, the number of residents is greater than the number of certified beds we use the number of available beds for total beds. This is done to keep the number of beds and all staffing related variables consistent because if a facility is reporting available beds they are also most likely reporting staffing related to available beds. We further clean the total beds data by determining if the number of beds in a facility is consistent over time. If the number of beds is missing in the current survey, or implausible based on previous years' data, we impute totbeds based on previous values. Totals are generated at the state level.

---

nresid_sta
State level (MDS): Number of MDS-assessed residents in facilities on 1st Thurs in April

---

type:	numeric (long)		
range:	[2112,98980]	units:	1
unique values:	533	missing .:	0/539
mean:	25158.7		
std. dev:	23515.5		

percentiles:	10%	25%	50%	75%	90%
	3839	6251	19299	32594	69533

nresid_sta:
1. Variable Group : General
2. Short Description : Number of nursing home residents.
3. Long Description : The Residential History File (RHF) was used to establish the number of nursing facility residents present in the state on the 1st Thursday in April. This value is used as the denominator in the prevalence measures.

---

paymcaid_sta State level (OSCAR): Percent Medicaid (prevalence)

---

type:	numeric (double)		
range:	[47.02,81.07]	units:	.01
unique values:	470	missing .:	0/539
mean:	64.264		
std. dev:	6.33943		

percentiles:	10%	25%	50%	75%	90%
	55.93	60.21	64.02	68.25	72.79

paymcaid_sta:
1. Variable Group : Insurance coverage
2. Short Description : Proportion of facility residents whose primary support is Medicaid averaged across all facilities in the state.
3. Long Description : The number of facility residents whose primary

support was Medicaid (at the time of the annual survey) was drawn from the annual OSCAR data, as was the total number of facility residents. The proportion of residents whose primary support was Medicaid was then calculated. The state level measure in the average proportion among all facilities in the state.

---

paymcare_sta State level (OSCAR): Percent Medicare (prevalence)

---

type:	numeric (double)		
range:	[3.78,20.84]	units:	.01
unique values:	430	missing .:	0/539
mean:	12.0547		
std. dev:	3.24721		

percentiles:	10%	25%	50%	75%	90%
	7.68	9.73	11.95	14.42	16.32

paymcare_sta:
1. Variable Group : Insurance coverage
2. Short Description : Proportion of facility residents whose primary support is Medicare averaged across all facilities in the state.
3. Long Description : The number of facility residents whose primary support was Medicare (at the time of the annual survey) was drawn from the annual OSCAR data, as was the total number of facility residents. The proportion of residents whose primary support was Medicare was then calculated. The state level measure is the average proportion among all facilities in the state.

---

pctHMO_sta State level (RHF): Percent with HMO (prevalence)

---

type:	numeric (double)		
range:	[0,61.93]	units:	.01
unique values:	438	missing .:	0/539
unique mv codes:	1	missing .*:	20/539
mean:	10.8562		
std. dev:	12.2348		

percentiles:	10%	25%	50%	75%	90%
	.96	2.43	6.06	16.27	27.34

pctHMO_sta:
1. Variable Group : Insurance coverage
2. Short Description : Proportion of residents present on the 1st Thursday in April who were covered by a Medicare HMO (Health Maintenance Organization).
3. Long Description : The Residential History File was used to establish the population of residents in each facility in the state on the 1st Thursday in April. The proportion of residents covered by a Medicare Health Maintenance Organization (HMO) in a state was then determined

based on Medicare enrollment records.

---

occpct_sta State level (OSCAR): Average percent occupancy

---

type:	numeric (double)		
range:	[63.3,100]	units:	.01
unique values:	485	missing .:	0/539
mean:	84.4271		
std. dev:	6.88113		

percentiles:	10%	25%	50%	75%	90%
	73.62	80.39	86.42	89.47	91.64

occpct_sta:
1. Variable Group : Saturation
2. Short Description : Number of occupied beds in facility divided by the total number of beds and aggregated to the state level.
3. Long Description : Occupancy rate is the number of residents divided by total number of beds. The numerator comes directly from the OSCAR . The denominator is a cleaned estimated number of beds in the facility - (see the description of totbeds for more information). The state level measure is the average among all facilities in the state.

---

agg_adm_sta State level (MDS): Number of admissions in year

---

type:	numeric (long)		
range:	[1816,265768]	units:	1
unique values:	535	missing .:	0/539
mean:	54259.6		
std. dev:	56862.4		

percentiles:	10%	25%	50%	75%	90%
	7093	14433	32966	64402	149454

agg_adm_sta:
1. Variable Group : Saturation (all admissions)
2. Short Description : Total number of nursing home admissions in the year.
3. Long Description : All MDS admission records were aggregated to the facility using the Federal Facility Provider number found on the MDS. Admissions were counted using the Primary Reason for Assessment variable in the MDS dataset. This was then aggregated to the state level.

---

hosppty r_sta State level (RHF): Number of hospitalizations per resident year

---

type:	numeric (double)		
range:	[.33667109,1.3496505]	units:	1.000e-09

```
        unique values:  539                      missing .:  0/539

                  mean:   .797732
             std. dev:   .210288

           percentiles:        10%       25%       50%       75%       90%
                            .528688   .609187   .820434    .94002   1.06011
```

hosppтyr_sta:
1. Variable Group : Service Utilization
2. Short Description : Number of hospitalizations during the calendar year for every 365 nursing home resident days in a facility aggregated to the state level.
3. Long Description : The Residential History File (RHF) was used to determine the number of nursing home days for all residents in the facility during the calendar year. (Facilities with fewer than 4500 nursing home days were set to LNE.) This number of nursing homes days was then divided by 365 to establish the number of resident years. The RHF was then used to count the number of hospitalizations of Medicare fee-for-service residents that occurred directly from the nursing home during the calendar year. This was then aggregated to the state level.

---

nhdays_sta — State level (RHF): Total nursing home days

```
                  type:  numeric (long)

                 range:  [367238,33431761]           units:  1
        unique values:  539                      missing .:  0/539

                  mean:   8.3e+06
             std. dev:   7.8e+06

           percentiles:        10%       25%       50%       75%       90%
                            1.2e+06   2.2e+06   5.9e+06   1.2e+07   2.3e+07
```

nhdays_sta:
1. Variable Group : Service Utilization
2. Short Description : Total Nursing Home days for the state.
3. Long Description : Total nursing home days for the year in the state. The Residential History File (RHF) was used to establish the number of nursing home days for all residents in the state during the calendar year.

---

pctlshosp_sta
State level (RHF): Percent quarter 2 long-stay residents hospitalized in 6 months

---

```
                  type:  numeric (double)

                 range:  [6.49,27.71]                units:  .01
        unique values:  45                       missing .:  492/539

                  mean:   15.1602
             std. dev:   3.99413
```

```
          percentiles:        10%       25%       50%       75%       90%
                            11.14     13.53     14.61     15.91     19.95

pctlshosp_sta:
  1.  Variable Group :  Service Utilization
  2.  Short Description :  Percent quarter 2 long-stay residents that were
      hospitalized in 6 months.
  3.  Long Description :  The Residential History File (RHF) was used to the
      number of nursing facility residents in the state during the 2nd quarter
      of the given year who are judged to be long-stay residents at the time of
      the assessment.  This served as the denominator of the measure.  The
      numerator is the number of the above residents who subsequently had a
      fee-for-service Medicare hospital admission within 6 months (183 days) of
      the date of the MDS assessment.

-------------------------------------------------------------------------------
pctnhdayshospice_sta
            State level (RHF): Percent of total nursing home days with hospice
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [.09659068,14.045787]        units:  1.000e-10
         unique values:  539                       missing .:  0/539

                  mean:   3.10782
             std. dev:   2.27417

          percentiles:        10%       25%       50%       75%       90%
                           .701014   1.38835   2.60424   4.37601   6.03154

pctnhdayshospice_sta:
  1.  Variable Group :  Service Utilization
  2.  Short Description :  Proportion of all nursing home days during the
      calendar year that were hospice.
  3.  Long Description :  The Residential History File (RHF) was used to
      establish the number of nursing home days for all residents in the
      facility in the calendar year.  The RHF was also used to determine the
      number of those days that were hospice days.  The proportion of days that
      were hospice was then calculated at the state level.

-------------------------------------------------------------------------------
pctNHdaysSNF_sta     State level (RHF): Percent NH days Medicare Reimbursed SNF
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [4.0077386,31.540749]        units:  1.000e-11
         unique values:  539                       missing .:  0/539

                  mean:   13.6376
             std. dev:   4.34232

          percentiles:        10%       25%       50%       75%       90%
                           8.00291   10.6663   13.5341   16.6233   19.1202
```

pctNHdaysSNF_sta:
1. Variable Group : Service Utilization
2. Short Description : Proportion of all nursing home days during the calendar year that were SNF (skilled nursing facility) Medicare covered days.
3. Long Description : The Residential History File (RHF) was used to establish the number of nursing home days for all residents in the facility in the calendar year. The RHF was also used to determine the number of those days that were skilled nursing facility (SNF) Medicare covered days. The proportion of days that were SNF was then calculated at the state level using these two counts.

---

rehosp_sta State level (RHF): Average 30-day rehospitalization rate

---

type:	numeric (double)		
range:	[.08324206,.25260777]	units:	1.000e-10
unique values:	539	missing .:	0/539
mean:	.164848		
std. dev:	.029844		

percentiles:	10%	25%	50%	75%	90%
	.123173	.142563	.168854	.184856	.200663

rehosp_sta:
1. Variable Group : Service Utilization
2. Short Description : 30-day rehospitalization rate.
3. Long Description : The Residential History File was used to determine how many nursing facility admissions from the hospital were rehospitalized within 30 days of entry. This was aggregated to the state level and divided by the total number of admissions to the nursing facilities in the state to get the rehospitalization rate.

---

cnahrppd_sta State level (OSCAR): Average of averages CNA hours/resident/day

---

type:	numeric (double)		
range:	[1.7,3.75]	units:	.01
unique values:	117	missing .:	0/539
mean:	2.33234		
std. dev:	.272497		

percentiles:	10%	25%	50%	75%	90%
	2.03	2.16	2.29	2.48	2.69

cnahrppd_sta:
1. Variable Group : Staffing
2. Short Description : The average CNA hours per resident day among all facilities in the state.
3. Long Description : Facilities report the number of Certified Nursing Assistant (CNA) hours during the two weeks prior to their annual survey.

CMS converts the number of hours into full-time equivalents (based on a 35 hour work week) and this is what is reported on the annual OSCAR data. We convert the FTEs back into hours, by multiplying by 35, and divide the total number of CNA hours by the number of residents in the facility (also drawn from the OSCAR) to arrive at the CNA hours per resident day (HPRD). We also clean this variable when the FTEs reported are implausible. We set to missing when total FTEs are 995 or higher or if there are more 3 times the number of CNAs reported than the number of beds in a facility. We also verify staffing variables based on a facility's data from previous years and impute based on previous data if staffing levels are less than 1/3 the median of previous years or greater than 3 times the median, for example. This state measure is the average CNA HPRD among all facilities.

---

dchrppd_sta
State level (OSCAR): Average of averages Direct Care staff hours/resident/day

---

type:	numeric (double)			
range:	[2.69,4.9]		units:	.01
unique values:	152		missing .:	0/539
mean:	3.54996			
std. dev:	.378392			

percentiles:	10%	25%	50%	75%	90%
	3.08	3.3	3.53	3.79	3.96

dchrppd_sta:
1. Variable Group : Staffing
2. Short Description : The number of direct-care staff hours per resident day within facility averaged across facilities in the state.
3. Long Description : Facilities report the number of Registered Nurse (RN), Licensed Practical Nurse (LPN), and Certified Nursing Assistant (CNA) hours during the two weeks prior to their annual survey. CMS converts the number of hours into full-time equivalents (based on a 35 hour work week) and this is what is reported on the annual OSCAR data. We convert the FTEs back into hours, by multiplying by 35, and divide the total number of RN plus LPN plus CNA hours by the number of residents in the facility (also drawn from the OSCAR) to arrive at the direct-care hours per resident day (DC HPRD). Because this variable is created using the previous cleaned RN, LPN, and CNA hours (as described in RN HPRD, LPN HPRD, and CNA HPRD) we do not do any additional cleaning of this variable. This state measure is the average DC HPRD among all facilities.

---

lpnhrppd_sta State level (OSCAR): Average of averages LPN hours/resident/day

---

type:	numeric (double)			
range:	[.31,1.63]		units:	.01
unique values:	92		missing .:	0/539
mean:	.81731			

```
              std. dev:   .211479

           percentiles:        10%       25%       50%       75%       90%
                               .55       .67       .82       .99      1.06
```

lpnhrppd_sta:
1. Variable Group : Staffing
2. Short Description : The number of LPN hours per resident day within facility averaged across facilities in the state.
3. Long Description : Facilities report the number of Licensed Practical Nurse (LPN) hours during the two weeks prior to their annual survey. CMS converts the number of hours into full-time equivalents (based on a 35 hour work week) and this is what is reported on the annual OSCAR data. We convert the FTEs back into hours, by multiplying by 35, and divide the total number of LPN hours by the number of residents in the facility (also drawn from the OSCAR) to arrive at the LPN hours per resident day (HPRD). We also clean this variable when the FTEs reported are implausible. We set to missing when total FTEs are 995 or higher or if there are more RN and LPNs reported than the number of beds in a facility. We also verify staffing variables based on a facility's data from previous years and impute based on previous data if staffing levels are less than 1/3 the median of previous years or greater than 3 times the median, for example. The state level measure is the average LPN HPRD among all facilities in the state.

```
rnhrppd_sta                       State level (OSCAR): RN hours per resident day
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [.17,1.58]                   units:  .01
           unique values:  93                       missing .:  0/539

                  mean:   .525566
              std. dev:   .204574

            percentiles:        10%       25%       50%       75%       90%
                                 .3        .4        .5       .61       .73
```

rnhrppd_sta:
1. Variable Group : Staffing
2. Short Description : RN hours per resident day.
3. Long Description : Facilities report the number of Registered Nurse (RN) hours during the two weeks prior to their annual survey. CMS converts the number of hours into full-time equivalents (based on a 35 hour work week) and this is what is reported on the annual OSCAR data. We convert the FTEs back into hours, by multiplying by 35, and divide the total number of RN hours by the number of residents in the facility (also drawn from the OSCAR) to arrive at the RN hours per resident day (HPRD). We also clean this variable when the FTEs reported are implausible. We set to missing when total FTEs are 995 or higher or if there are more RN and LPNs reported than the number of beds in a facility. We also verify staffing variables based on a facility's data from previous years and impute based on previous data if staffing levels are less than 1/3 the median of previous years or greater than 3 times the median, for example. The state level measure is the average RN HPRD among all facilities in

```
      the state.

-------------------------------------------------------------------------------
adj_mrate_sta                State level (SP survey): Average Medicaid Per Diem
-------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [82.922561,230.4007]         units:  1.000e-08
        unique values:  479                      missing .:  59/539

                  mean:   148.356
             std. dev:   29.2556

           percentiles:        10%       25%       50%       75%       90%
                            111.519   124.033   147.435   166.944   188.301

adj_mrate_sta:
  1.  Variable Group :  State Policy
  2.  Short Description :  Rate of Medicaid spending to total Medicaid days in
      nursing homes for the state.
  3.  Long Description :  This rate is the total Medicaid nursing home spending
      in the state divided by the total number of Medicaid days in nursing
      homes. CPI-adjusted average daily Medicaid rate (2004 $) The consumer
      price index (U.S. city average of all items for all urban consumers,
      obtained from the Bureau of Labor Statistics, U.S. Department of Labor)
      was used to adjust the nominal rates to constant dollars.

-------------------------------------------------------------------------------
bedhold_sta           State level (SP survey): Has a Medicaid Bed Hold  Payment
-------------------------------------------------------------------------------

                  type:  numeric (byte)

                 range:  [0,1]                        units:  1
        unique values:  2                        missing .:  64/539

            tabulation:  Freq.  Value
                           104  0
                           371  1
                            64  .

bedhold_sta:
  1.  Variable Group :  State Policy
  2.  Short Description :  Indicates whether or not state has a Medicaid Bed
      Hold payment.
  3.  Long Description :  Indicator for whether or not the state has a Medicaid
      Bed Hold payment. Bedhold refers to a policy whereby a state pays the
      nursing home to hold a Medicaid resident’s bed if the resident requires a
      hospital admission.

-------------------------------------------------------------------------------
casemix_sta        State level (SP survey): Has Medicaid Case Mix Reimbursement
-------------------------------------------------------------------------------

                  type:  numeric (byte)
```

```
                range:  [0,1]                       units:  1
        unique values:  2                        missing .:  59/539

           tabulation:  Freq.  Value
                          142  0
                          338  1
                           59  .
```

```
casemix_sta:
  1.  Variable Group :  State Policy
  2.  Short Description :  Indicates whether or not state has a case mix
      reimbursement system.
  3.  Long Description :  Indicator for whether or not state has a case mix
      reimbursement system. Case-mix reimbursement systems are used to adjust
      payments to nursing homes based on resident acuity level.  The payment
      may vary by year and state.
```

```
-------------------------------------------------------------------------------
pthru_sta          State level (SP survey): Has Medicaid Wage Pass-Thru Policy
-------------------------------------------------------------------------------

                  type:  numeric (byte)

                range:  [0,1]                       units:  1
        unique values:  2                        missing .:  104/539

           tabulation:  Freq.  Value
                          326  0
                          109  1
                          104  .
```

```
pthru_sta:
  1.  Variable Group :  State Policy
  2.  Short Description :  Indicates whether or not state has a Medicaid wage
      pass-through policy.
  3.  Long Description :  Wage pass-throughs are additional Medicaid payments
      to nursing homes that are earmarked for direct-care staff to increase
      wages or staffing levels.
```

```
-------------------------------------------------------------------------------
tax_sta          State level (SP Survey): Collects a daily bed or resident tax
-------------------------------------------------------------------------------

                  type:  numeric (byte)

                range:  [0,1]                       units:  1
        unique values:  2                        missing .:  94/539

           tabulation:  Freq.  Value
                          202  0
                          243  1
                           94  .
```

```
tax_sta:
  1.  Variable Group :  State Policy
  2.  Short Description :  Indicates whether or not the state collects a daily
      bed or resident tax.
```

3. Long Description : Indicates whether or not the state collects a daily bed or resident tax. The amount may vary by year and by state.

Appendix 4. Variable Missingness

Table A4.1 Facility Level – Type of Missingness Per Variable Across All Available Years of Data

		Non-missing		Missing: Cell Suppression		Missing: Other	
		N	%	N	%	N	%
county	FIPS County code	177915	99.96			72	0.04
nhlat	Nursing home latitude	177963	99.99			24	0.01
nhlong	Nursing home longitude	177963	99.99			24	0.01
prov0475	OSCAR: Facility Name	177987	100.00				
prov1680	OSCAR: Nursing Facility Number	177987	100.00				
prov2720	OSCAR: Street Address	177986	100.00			1	0.00
prov2905	OSCAR: Zip Code	177987	100.00				
prov3225	OSCAR: City	177987	100.00				
state	State Abbreviation	177987	100.00				
year	Year of data	177987	100.00				
agg_adl_fac	Long ADL (all admits)	173379	97.41	3658	2.06	950	0.53
agg_cmi_fac	Average RUGS NCMI (all admits)	173308	97.37	3658	2.06	1021	0.57
agg_cps_fac	Percent CPS=5,6 (all admits)	86818	48.78	90219	50.69	950	0.53
agg_dnr_fac	Percent with Do-Not-Resuscitate order (all admits)	153053	85.99	23984	13.48	950	0.53
agg_low_care_fac	Percent low care (all admits)	50473	28.36	126564	71.11	950	0.53
agg_nh_fac	Percent any prior NH stay (all admits)	153309	86.13	23715	13.32	963	0.54
avgadl_fac	Long ADL (prevalence)	167148	93.91	8692	4.88	2147	1.21
avgrugcmi_fac	Average RUGS NCMI (prevalence)	167148	93.91	8692	4.88	2147	1.21
avgrxnum_fac	Average number of medications (prevalence)	167148	93.91	8692	4.88	2147	1.21
pctbedft_fac	Percent Bed fast (prevalence)	61726	34.68	114114	64.11	2147	1.21
pctcath_fac	Percent Catheter (prevalence)	35863	20.15	139977	78.64	2147	1.21
pctchf_fac	Percent CHF (prevalence)	110309	61.98	65531	36.82	2147	1.21
pctdnh_fac	Percent with a Do-Not-Hospitalize order (prevalence)	101390	56.96	74450	41.83	2147	1.21
pctdnr_fac	Percent with Do-Not-Resuscitate order (prevalence)	154578	86.85	21262	11.95	2147	1.21
pcthighcps_fac	Percent CPS=5,6 (prevalence)	102285	57.47	73555	41.33	2147	1.21
pctlowcps_fac	Percent CPS=0,1,2 (prevalence)	149268	83.86	26572	14.93	2147	1.21
pcthyper_fac	Percent Hypertension (prevalence)	158645	89.13	17195	9.66	2147	1.21
pctincont_bladr_fac	Percent Bladder incontinent (prevalence)	162064	91.05	13776	7.74	2147	1.21
pctincont_bowel_fac	Percent Bowel incontinent (prevalence)	154643	86.88	21197	11.91	2147	1.21
pctlocare_fac	Percent low care (prevalence)	88323	49.62	87517	49.17	2147	1.21

pctobese_fac	Percent Obese (prevalence)	100260	56.33	75579	42.46	2148	1.21
pctrxdep_fac	Percent receiving antidepressants (prevalence)	158101	88.83	17739	9.97	2147	1.21
pctrxpsych_fac	Percent receiving antipsychotics (prevalence)	126833	71.26	49007	27.53	2147	1.21
pctrxpsyoff_fac	Percent of non-psychotic residents receiving antipsychotics off-label	111937	62.89	63903	35.90	2147	1.21
pctschiz_bipol_fac	Percent Schizophrenic or Bi-polar (prevalence)	49248	27.67	126592	71.12	2147	1.21
pctuti_fac	Percent UTI (prevalence)	42832	24.06	133008	74.73	2147	1.21
pctvent_fac	Percent Ventilator (prevalence)	157300	88.38	18540	10.42	2147	1.21
pctwalking_fac	Percent Walk independently in corridor (prevalence)	96005	53.94	79835	44.85	2147	1.21
agg_female_fac	Percent Female (all admits)	167980	94.38	9057	5.09	950	0.53
agg_home_fac	Percent of admissions from home (all admits)	92206	51.80	84803	47.65	978	0.55
agg_u65_fac	Percent under 65 years old (all admits)	99787	56.06	77250	43.40	950	0.53
avgage_fac	Average age	167148	93.91	8692	4.88	2147	1.21
agg_hosp_fac	Percent of admissions from acute care (all admits)	161428	90.70	15581	8.75	978	0.55
agg_black_fac	Percent Black (all admits)	112188	63.03	64849	36.43	950	0.53
agg_hispanic_fac	Percent Hispanic (all admits)	112238	63.06	64799	36.41	950	0.53
agg_white_fac	Percent White (all admits)	169772	95.38	7265	4.08	950	0.53
pctfem_fac	Percent Female (prevalence)	164332	92.33	11508	6.47	2147	1.21
pctunder65_fac	Percent under 65 years old (prevalence)	68512	38.49	107328	60.30	2147	1.21
pctblack_fac	Percent Black (prevalence)	102050	57.34	73790	41.46	2147	1.21
pcthisp_fac	Percent Hispanic (prevalence)	111245	62.50	64595	36.29	2147	1.21
pctwhite_fac	Percent White (prevalence)	163338	91.77	12502	7.02	2147	1.21
adefscore_fac	Weighted deficiency score, all deficiencies,	170647	95.88			7340	4.12
alzunit_fac	Alzheimer's special care unit	177987	100.00				
anyunit_fac	Any special care unit (excluding ventilator unit)	177987	100.00				
facpoor_fac	Low resource facility based on payer mix	177983	100.00			4	0.00
hospbase_fac	Facility is hospital-based	177987	100.00				
multifac_fac	Facility is part of a chain	177987	100.00				
profit_fac	Facility is for-profit	177936	99.97			51	0.03
restrain_fac	Percent Restrained (prevalence)	177983	100.00			4	0.00
totbeds_fac	Number of beds	177987	100.00				
nresid_fac	Number of MDS-assessed residents in facility	167148	93.91	8692	4.88	2147	1.21
srvydate	Survey date (copy of PROV2740)	177987	100.00				

paymcaid_fac	Percent Medicaid (prevalence)	177983	100.00			4	0.00
paymcare_fac	Percent Medicare (prevalence)	177983	100.00			4	0.00
pctHMO_fac	Percent with HMO (prevalence)	96714	54.34	78917	44.34	2356	1.32
occpct_fac	Occupancy rate	177848	99.92			139	0.08
adm_bed_fac	Number of admissions per bed	21334	11.99	155703	87.48	950	0.53
agg_adm_fac	Number of admissions to facility in year	173379	97.41	3658	2.06	950	0.53
hospptyr_fac	Number of hospitalizations per resident year	177581	99.77			406	0.23
nhdays_fac	Total nursing home days in year	177589	99.78			398	0.22
pctlshosp_fac	Percent quarter 2 long-stay residents hospitalized	174910	98.27			3077	1.73
pctnhdayshospice_fac	Percent of total nursing home days with hospice	177581	99.77			406	0.23
pctNHdaysSNF_fac	Percent NH days Medicare Reimbursed SNF	177581	99.77			406	0.23
rehosp_fac	Facility 30-day rehospitalization rate	176925	99.40			1062	0.60
anymdex_fac	Facility has an NP or PA	177987	100.00				
cnahrppd_fac	CNA hours per resident day	177222	99.57			765	0.43
dchrppd_fac	Direct care staff hours per resident day	176661	99.26			1326	0.74
lpnhrppd_fac	LPN hours per resident day	177657	99.81			330	0.19
rn2nrs_fac	Ratio of RNs to RNs + LPNs	177954	99.98			33	0.02
rnhrppd_fac	RN hours per resident day	177873	99.94			114	0.06

Table A4.2 Facility Level – Overall Missingness Per Variable by Year

Facility level		Year (2000-2010)										
		'00 %	'01 %	'02 %	'03 %	'04 %	'05 %	'06 %	'07 %	'08 %	'09 %	'10 %
county	FIPS County code	0.01	0.02	0.06	0.05	0.05	0.06	0.05	0.05	0.04	0.03	0.03
nhlat	Nursing home latitude	0.06	0.04	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01
nhlong	Nursing home longitude	0.06	0.04	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01
prov0475	OSCAR: Facility Name	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
prov1680	OSCAR: Nursing Facility Number	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
prov2720	OSCAR: Street Address	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
prov2905	OSCAR: Zip Code	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
prov3225	OSCAR: City	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
state	State Abbreviation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
year	Year of data	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agg_adl_fac	Long ADL (all admits)	2.77	2.76	2.37	2.42	2.23	2.19	1.89	1.87	2.16	2.20	5.63
agg_cmi_fac	Average RUGS NCMI (all admits)	2.78	2.77	2.38	2.43	2.27	2.24	1.93	1.90	2.21	2.29	5.76
agg_cps_fac	Percent CPS=5,6 (all admits)	45.89	46.05	46.03	47.13	49.63	49.87	51.01	52.42	53.16	54.01	69.50
agg_dnr_fac	Percent with Do-Not-Resuscitate order (all admits)	17.21	15.63	14.12	13.50	12.98	12.13	11.54	10.96	11.08	11.02	23.73
agg_low_care_fac	Percent low care (all admits)	73.73	73.38	74.09	74.08	73.65	72.56	72.89	72.54	71.15	69.95	59.44
agg_nh_fac	Percent any prior NH stay (all admits)	17.23	16.06	14.74	13.70	12.96	11.39	10.76	10.73	10.50	10.05	24.11
avgadl_fac	Long ADL (prevalence)	8.49	7.40	7.29	6.64	6.17	5.62	5.38	5.13	5.16	4.72	4.65
avgrugcmi_fac	Average RUGS NCMI (prevalence)	8.49	7.40	7.29	6.64	6.17	5.62	5.38	5.13	5.16	4.72	4.65
avgrxnum_fac	Average number of medications (prevalence)	8.49	7.40	7.29	6.64	6.17	5.62	5.38	5.13	5.16	4.72	4.65
pctbedft_fac	Percent Bed fast (prevalence)	68.95	68.03	67.47	66.11	64.70	63.91	64.42	64.65	64.29	63.19	62.26
pctcath_fac	Percent Catheter (prevalence)	79.31	78.86	79.52	79.77	80.16	79.75	80.05	79.96	80.07	80.30	80.73
pctchf_fac	Percent CHF (prevalence)	38.62	38.09	38.48	37.80	36.65	36.74	36.49	36.51	37.49	37.66	43.77
pctdnh_fac	Percent with a Do-Not-Hospitalize order (prevalence)	43.06	42.97	42.85	43.15	43.59	43.41	42.98	43.01	43.33	42.75	42.27

pctdnr_fac	Percent with Do-Not-Resuscitate order (prevalence)	18.20	15.83	14.77	13.50	12.67	12.06	11.91	11.40	11.47	11.06	11.21
pcthighcps_fac	Percent CPS=5,6 (prevalence)	35.34	35.29	35.96	38.11	41.00	43.53	45.09	46.99	48.97	48.58	50.50
pctlowcps_fac	Percent CPS=0,1,2 (prevalence)	18.46	16.57	16.73	16.17	16.06	15.98	15.58	15.09	15.44	15.56	15.64
pcthyper_fac	Percent Hypertension (prevalence)	16.41	14.15	13.12	11.88	10.95	9.80	9.15	8.57	8.34	7.61	8.83
pctincont_bladr_fac	Percent Bladder incontinent (prevalence)	12.28	10.69	10.51	9.38	8.79	8.27	8.06	7.73	7.68	7.44	7.13
pctincont_bowel_fac	Percent Bowel incontinent (prevalence)	15.62	14.16	14.06	13.20	12.83	12.70	12.58	12.47	12.34	11.96	12.05
pctlocare_fac	Percent low care (prevalence)	42.95	42.96	44.37	45.92	48.12	50.54	52.22	53.87	56.45	58.20	60.09
pctobese_fac	Percent Obese (prevalence)	62.36	56.89	51.80	47.58	43.83	41.01	38.71	36.64	35.15	32.61	31.09
pctrxdep_fac	Percent receiving antidepressants (prevalence)	18.46	15.09	13.49	11.83	10.53	9.63	9.11	8.65	8.82	8.32	8.10
pctrxpsych_fac	Percent receiving antipsychotics (prevalence)	38.43	32.95	29.37	26.41	24.97	24.84	26.20	27.13	28.14	28.18	28.77
pctrxpsyoff_fac	Percent of non-psychotic residents receiving antipsychotics off-label	46.53	40.57	36.39	33.19	32.24	32.54	34.52	36.09	37.94	38.81	38.87
pctschiz_bipol_fac	Percent Schizophrenic or Bi-polar (prevalence)	73.77	73.09	73.27	73.03	72.93	72.51	72.42	71.98	71.65	70.48	70.26
pctuti_fac	Percent UTI (prevalence)	77.88	77.69	77.12	76.79	76.46	75.89	74.81	74.15	74.74	74.81	74.60
pctvent_fac	Percent Ventilator (prevalence)	14.69	13.76	13.59	12.15	11.27	10.77	10.63	10.34	10.34	10.14	9.74
pctwalking_fac	Percent Walk independently in corridor (prevalence)	41.30	41.12	42.71	43.39	45.44	46.60	47.12	48.73	49.58	50.43	51.18
agg_female_fac	Percent Female (all admits)	6.28	6.16	5.41	5.24	5.01	4.69	4.44	4.11	4.57	4.53	11.44
agg_home_fac	Percent of admissions from home (all admits)	43.96	43.14	43.70	43.59	44.74	44.55	46.61	48.26	49.11	50.36	73.43
agg_u65_fac	Percent under 65 years old (all admits)	51.62	49.88	47.07	44.88	43.66	41.64	40.66	38.99	37.73	36.70	49.44
avgage_fac	Average age	8.49	7.40	7.29	6.64	6.17	5.62	5.38	5.13	5.16	4.72	4.65
agg_hosp_fac	Percent of admissions from acute care (all admits)	12.16	11.94	10.54	9.65	8.71	7.91	7.44	6.93	6.96	6.96	12.78
agg_black_fac	Percent Black (all admits)	37.47	37.17	37.02	36.51	36.59	36.30	35.86	36.04	35.60	35.56	42.55

agg_hispanic_fac	Percent Hispanic (all admits)	33.12	33.94	34.72	36.09	36.87	38.30	37.88	38.47	39.04	39.15	39.36
agg_white_fac	Percent White (all admits)	5.09	4.76	4.36	4.25	4.15	3.99	3.64	3.68	3.96	3.99	8.93
pctfem_fac	Percent Female (prevalence)	10.45	9.06	8.89	8.16	7.77	7.13	6.88	6.61	6.68	6.20	6.20
pctunder65_fac	Percent under 65 years old (prevalence)	69.21	67.02	65.20	63.07	61.81	60.42	59.21	58.88	58.32	56.44	55.86
pctblack_fac	Percent Black (prevalence)	44.59	43.36	43.35	42.74	42.70	42.48	42.00	41.70	42.29	41.92	41.96
pcthisp_fac	Percent Hispanic (prevalence)	36.19	36.09	36.79	37.26	37.41	37.26	37.85	38.13	38.47	38.44	38.83
pctwhite_fac	Percent White (prevalence)	10.66	9.46	9.31	8.74	8.31	7.77	7.55	7.33	7.39	6.91	6.77
adefscore_fac	Weighted deficiency score, all deficiencies,	6.24	5.45	6.03	5.20	4.62	3.37	2.80	2.90	2.52	2.77	3.11
alzunit_fac	Alzheimer's special care unit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
anyunit_fac	Any special care unit (excluding ventilator unit)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
facpoor_fac	Low resource facility based on payer mix	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
hospbase_fac	Facility is hospital-based	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
multifac_fac	Facility is part of a chain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
profit_fac	Facility is for-profit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.11	0.00	0.00
restrain_fac	Percent Restrained (prevalence)	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
totbeds_fac	Number of beds	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
nresid_fac	Number of MDS-assessed residents in facility	8.49	7.40	7.29	6.64	6.17	5.62	5.38	5.13	5.16	4.72	4.65
srvydate	Survey date (copy of PROV2740)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
paymcaid_fac	Percent Medicaid (prevalence)	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
paymcare_fac	Percent Medicare (prevalence)	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctHMO_fac	Percent with HMO (prevalence)	43.30	40.91	38.87	37.61	37.14	39.11	44.44	53.53	56.35	56.70	55.76
occpct_fac	Occupancy rate	0.13	0.14	0.03	0.10	0.09	0.06	0.04	0.06	0.03	0.11	0.06
adm_bed_fac	Number of admissions per bed	89.14	89.05	88.76	88.65	88.39	87.47	87.06	86.64	85.56	85.24	92.01
agg_adm_fac	Number of admissions to facility in year	2.77	2.76	2.37	2.42	2.23	2.19	1.89	1.87	2.16	2.20	5.63
hospptyr_fac	Number of hospitalizations per resident year	0.25	0.21	0.21	0.16	0.16	0.14	0.16	0.18	0.19	0.22	0.63
nhdays_fac	Total nursing home days in year	0.25	0.20	0.20	0.16	0.16	0.14	0.16	0.18	0.18	0.22	0.62

pctlshosp_fac	Percent quarter 2 long-stay residents hospitalized	2.38	1.81	1.67	1.55	1.54	1.53	1.51	1.44	1.82	1.73	2.02
pctnhdayshospice_fac	Percent of total nursing home days with hospice	0.25	0.21	0.21	0.16	0.16	0.14	0.16	0.18	0.19	0.22	0.63
pctNHdaysSNF_fac	Percent NH days Medicare Reimbursed SNF	0.25	0.21	0.21	0.16	0.16	0.14	0.16	0.18	0.19	0.22	0.63
rehosp_fac	Facility 30-day rehospitalization rate	0.65	0.58	0.55	0.50	0.49	0.51	0.47	0.47	0.55	0.52	1.27
anymdex_fac	Facility has an NP or PA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
cnahrppd_fac	CNA hours per resident day	0.58	0.47	0.36	0.40	0.38	0.35	0.38	0.39	0.47	0.55	0.39
dchrppd_fac	Direct care staff hours per resident day	1.04	0.77	0.72	0.64	0.70	0.59	0.63	0.77	0.73	0.84	0.72
lpnhrppd_fac	LPN hours per resident day	0.18	0.18	0.13	0.14	0.19	0.13	0.22	0.25	0.18	0.22	0.22
rn2nrs_fac	Ratio of RNs to RNs + LPNs	0.03	0.01	0.02	0.04	0.04	0.03	0.00	0.01	0.02	0.00	0.01
rnhrppd_fac	RN hours per resident day	0.09	0.09	0.05	0.08	0.06	0.07	0.04	0.04	0.06	0.06	0.05

Table A4.3 County Level – Type of Missingness Per Variable Across All Available Years of Data

		Non-missing		Missing: Cell Suppression		Missing: Other	
		N	%	N	%	N	%
county	FIPS County code	32236	100.00				
state	State Abbreviation	32236	100.00				
year	Year of data	32236	100.00				
agg_cmi_cty	Average RUGS NCMI (all admits)	31927	99.04	296	0.92	13	0.04
agg_low_care_~y	Percent Low care (all admits)	18031	55.93	14195	44.03	10	0.03
avgadl_cty	Long ADL (prevalence)	32166	99.78	57	0.18	13	0.04
avgrugcmi_cty	Average RUGS NCMI (prevalence)	32166	99.78	57	0.18	13	0.04
avgrxnum_cty	Average number of medications in past 7 days per resident (prevalence)	32166	99.78	57	0.18	13	0.04
pctbedft_cty	Percent Bed fast (prevalence)	16846	52.26	15377	47.70	13	0.04
pctcath_cty	Percent Catheter (prevalence)	16879	52.36	15344	47.60	13	0.04
pctchf_cty	Percent CHF (prevalence)	28633	88.82	3590	11.14	13	0.04
pctdnh_cty	Percent Do-Not-Resuscitate order (prevalence)	19557	60.67	12666	39.29	13	0.04
pctdnr_cty	Percent Do-Not-Resuscitate order (prevalence)	31716	98.39	507	1.57	13	0.04
pcthighcps_cty	Percent CPS=5,6 (prevalence)	27285	84.64	4938	15.32	13	0.04
pctlowcps_cty	Percent CPS=0,1,2 (prevalence)	30900	95.86	1323	4.10	13	0.04
pcthyper_cty	Percent Hypertension (prevalence)	31604	98.04	619	1.92	13	0.04
pctincont_bla~y	Percent Bladder incontinent (prevalence)	31911	98.99	312	0.97	13	0.04
pctincont_bow~y	Percent Bowel incontinent (prevalence)	31098	96.47	1125	3.49	13	0.04
pctlocare_cty	Percent low care (prevalence)	26341	81.71	5882	18.25	13	0.04
pctobese_cty	Percent Obese (prevalence)	27207	84.40	5016	15.56	13	0.04
pctrxdep_cty	Percent receiving antidepressants	31616	98.08	607	1.88	13	0.04
pctrxpsych_cty	Percent receiving antipsychotics	29081	90.21	3142	9.75	13	0.04
pctrxpsyoff_cty	Percent of non-psychotic residents receiving antipsychotics off-label	28118	87.23	4105	12.73	13	0.04
pctschiz_bipo~y	Percent Schizophrenic or Bi-polar (prevalence)	17030	52.83	15193	47.13	13	0.04
pctuti_cty	Percent UTI (prevalence)	20122	62.42	12101	37.54	13	0.04
pctvent_cty	Percent Ventilator (prevalence)	27735	86.04	4488	13.92	13	0.04
pctwalking_cty	Percent Walk independently in corridor (prevalence)	26776	83.06	5447	16.90	13	0.04
agg_female_cty	Percent Female (all admits)	31437	97.52	789	2.45	10	0.03
agg_home_cty	Percent Admits from home (all admits)	26899	83.44	5327	16.53	10	0.03
agg_u65_cty	Percent Under 65 years old (all	22337	69.29	9889	30.68	10	0.03

	admits)						
avgage_cty	Average age	32166	99.78	57	0.18	13	0.04
agg_black_cty	Percent Black (all admits)	23380	72.53	8846	27.44	10	0.03
agg_hispanic_~y	Percent Hispanic (all admits)	20676	64.14	11550	35.83	10	0.03
agg_white_cty	Percent White (all admits)	31702	98.34	524	1.63	10	0.03
pctfem_cty	Percent Female (prevalence)	32096	99.57	127	0.39	13	0.04
pctunder65_cty	Percent under 65 years old (prevalence)	21224	65.84	10999	34.12	13	0.04
pctblack_cty	Percent Black (prevalence)	23070	71.57	9153	28.39	13	0.04
pcthisp_cty	Percent Hispanic (prevalence)	21133	65.56	11090	34.40	13	0.04
pctwhite_cty	Percent White (prevalence)	31996	99.26	227	0.70	13	0.04
alzunit_cty	Percent of facilities with Alzheimer's special care unit	32236	100.00				
facpoor_cty	Percent of low resource facilities based on payer mix	32236	100.00				
multifac_cty	Percent of facilities part of chain	32236	100.00				
profit_cty	Percent of facilities for-profit	32235	100.00			1	0.00
restrain_cty	Percent Restrained (prevalence)	32236	100.00				
totbeds_cty	Number of beds	32236	100.00				
nresid_cty	Number of MDS-assessed residents in county on 1st Thurs in April	32179	99.82	57	0.18		
paymcaid_cty	Percent Medicaid (prevalence)	32236	100.00				
paymcare_cty	Percent Medicare (prevalence)	32236	100.00				
pctHMO_cty	Percent with HMO (prevalence)	19738	61.23	12485	38.73	13	0.04
la_hbedstot_0~y	Number of hospital beds/1000 pop 65+	32234	99.99			2	0.01
la_hha000e_cty	Number of Home Health Agencies/1000 pop 65+	32234	99.99			2	0.01
la_medmcpen_cty	Medicare managed care penetration	32234	99.99			2	0.01
la_nursall_00~y	Total full/part time RN/LPNs in NH/ST/LT hospitals/1000 pop 65+	32234	99.99			2	0.01
occpct_cty	Average percent occupancy	32228	99.98			8	0.02
agg_adm_cty	Number of NH admissions in year	31930	99.05	296	0.92	10	0.03
la_avgempbed_~y	Average number of empty nursing home beds per facility	32222	99.96			14	0.04
la_herfbeds_cty	Herfindahl index for Nursing Home beds	32230	99.98			6	0.02
hospptyr_cty	Number of hospitalizations per resident year	32233	99.99			3	0.01
pctlshosp_cty	Percent of quarter 2 long-stay residents hospitalized in 6 months	30009	93.09			2227	6.91
pctnhdayshosp~y	Percent of total nursing home days with hospice	32233	99.99			3	0.01
pctNHdaysSNF_~y	Percent NH days Medicare	32233	99.99			3	0.01

	Reimbursed SNF				
rehosp_cty	Average 30-day rehospitalization rate	32224	99.96	12	0.04
cnahrppd_cty	Average of averages CNA hours/resident/day	32229	99.98	7	0.02
dchrppd_cty	Average of averages Direct Care staff hours/resident/day	32220	99.95	16	0.05
lpnhrppd_cty	Average of averages LPN hours/resident/day	32232	99.99	4	0.01
rnhrppd_cty	Average of averages RN hours/resident/day	32234	99.99	2	0.01
nhdays_cty	Total nursing home days in year	32234	99.99	2	0.01

Table A4.4 County Level – Overall Missingness Per Variable by Year

County Level		Year (2000-2010) '00 %	'01 %	'02 %	'03 %	'04 %	'05 %	'06 %	'07 %	'08 %	'09 %	'10 %
county	FIPS County code	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
state	State Abbreviation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
year	Year of data	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agg_cmi_cty	Average RUGS NCMI (all admits)	0.82	0.92	0.75	0.82	0.61	0.82	0.55	0.79	0.75	0.82	2.91
agg_low_care_~y	Percent Low care (all admits)	35.39	35.86	38.64	39.56	40.16	39.77	42.71	46.50	48.61	52.26	65.50
avgadl_cty	Long ADL (prevalence)	0.71	0.24	0.24	0.07	0.24	0.14	0.07	0.10	0.21	0.10	0.27
avgrugcmi_cty	Average RUGS NCMI (prevalence)	0.71	0.24	0.24	0.07	0.24	0.14	0.07	0.10	0.21	0.10	0.27
avgrxnum_cty	Average number of medications in past 7 days per resident (prevalence)	0.71	0.24	0.24	0.07	0.24	0.14	0.07	0.10	0.21	0.10	0.27
pctbedft_cty	Percent Bed fast (prevalence)	44.19	45.51	47.12	47.16	47.56	48.47	49.13	48.45	49.74	48.18	49.69
pctcath_cty	Percent Catheter (prevalence)	45.69	46.67	46.51	46.85	47.29	47.78	47.93	47.69	48.10	49.35	50.21
pctchf_cty	Percent CHF (prevalence)	9.48	10.03	10.79	10.25	10.67	10.57	10.82	11.51	11.22	11.56	16.08
pctdnh_cty	Percent Do-Not-Resuscitate order (prevalence)	37.98	38.24	39.16	39.73	39.62	40.04	39.47	39.32	39.65	39.81	39.64
pctdnr_cty	Percent Do-Not-Resuscitate order (prevalence)	3.09	2.31	2.04	1.46	1.16	1.50	1.19	1.30	1.03	1.13	1.51
pcthighcps_cty	Percent CPS=5,6 (prevalence)	10.77	10.33	11.88	12.33	14.39	15.89	16.46	17.87	18.68	19.24	21.23
pctlowcps_cty	Percent CPS=0,1,2 (prevalence)	4.28	3.40	3.44	3.51	4.09	4.23	4.30	4.30	4.52	4.32	5.21
pcthyper_cty	Percent Hypertension (prevalence)	3.13	2.62	2.59	2.01	2.01	1.91	1.57	1.50	1.30	0.96	1.95
pctincont_bla~y	Percent Bladder incontinent (prevalence)	1.77	1.12	1.09	0.89	0.72	1.02	0.75	0.89	1.06	0.86	0.93
pctincont_bow~y	Percent Bowel incontinent (prevalence)	3.70	2.92	3.30	3.23	3.20	3.51	3.41	4.13	3.83	3.67	3.91
pctlocare_cty	Percent low care (prevalence)	13.62	13.53	14.54	15.02	16.50	17.74	19.29	20.12	22.17	24.25	24.52
pctobese_cty	Percent Obese (prevalence)	22.89	20.19	18.22	16.72	15.38	14.70	13.49	13.50	13.27	11.73	11.42
pctrxdep_cty	Percent receiving antidepressants	4.11	2.69	2.21	1.94	1.60	1.74	1.57	1.40	1.37	1.17	1.34

pctrxpsych_cty	Percent receiving antipsychotics	12.91	11.22	10.35	8.51	8.42	8.36	8.84	9.09	9.68	9.98	10.29
pctrxpsyoff_cty	Percent of non-psychotic residents receiving antipsychotics off-label	15.90	13.63	12.43	10.86	11.01	11.22	11.88	12.40	13.51	13.79	13.89
pctschiz_bipo~y	Percent Schizophrenic or Bi-polar (prevalence)	51.70	49.97	49.91	48.55	47.46	46.66	45.89	45.61	44.95	43.31	44.79
pctuti_cty	Percent UTI (prevalence)	37.74	37.76	37.42	38.37	37.61	37.76	38.00	37.44	37.77	37.04	36.45
pctvent_cty	Percent Ventilator (prevalence)	17.56	15.77	15.80	13.65	13.33	12.41	13.11	13.29	13.03	13.03	12.55
pctwalking_cty	Percent Walk independently in corridor (prevalence)	13.38	13.22	14.27	14.47	16.30	16.64	16.97	18.93	20.39	20.68	21.16
agg_female_cty	Percent Female (all admits)	2.48	1.94	2.11	1.97	1.91	1.94	1.91	1.78	2.09	2.37	6.79
agg_home_cty	Percent Admits from home (all admits)	13.79	13.46	13.52	13.96	14.52	14.39	14.58	15.99	16.11	16.98	34.95
agg_u65_cty	Percent Under 65 years old (all admits)	37.02	34.57	32.69	31.80	30.99	28.89	27.48	26.82	26.48	23.94	37.04
avgage_cty	Average age	0.71	0.24	0.24	0.07	0.24	0.14	0.07	0.10	0.21	0.10	0.27
agg_black_cty	Percent Black (all admits)	25.95	28.21	26.49	28.12	26.32	27.59	26.56	27.47	26.58	27.16	31.76
agg_hispanic_~y	Percent Hispanic (all admits)	30.64	33.38	34.12	34.66	36.17	37.59	37.25	38.09	38.15	38.20	36.28
agg_white_cty	Percent White (all admits)	1.39	1.50	1.23	1.33	1.19	1.60	1.33	1.43	1.40	1.54	4.29
pctfem_cty	Percent Female (prevalence)	1.02	0.41	0.37	0.31	0.38	0.44	0.17	0.31	0.48	0.38	0.51
pctunder65_cty	Percent under 65 years old (prevalence)	39.10	37.46	36.26	35.10	33.89	33.66	32.67	32.70	32.50	31.52	30.83
pctblack_cty	Percent Black (prevalence)	28.94	28.35	28.09	28.46	28.78	28.04	27.69	28.63	28.33	28.19	29.29
pcthisp_cty	Percent Hispanic (prevalence)	31.69	31.31	32.58	33.23	34.50	35.10	35.98	35.53	36.40	35.73	36.87
pctwhite_cty	Percent White (prevalence)	1.05	0.68	0.75	0.48	0.75	0.65	0.61	0.79	0.89	0.75	0.79
alzunit_cty	Percent of facilities with Alzheimer's special care unit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
facpoor_cty	Percent of low resource facilities based on payer mix	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
multifac_cty	Percent of facilities part of chain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
profit_cty	Percent of facilities for-profit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
restrain_cty	Percent Restrained (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
totbeds_cty	Number of beds	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

nresid_cty	Number of MDS-assessed residents in county on 1st Thurs in April	0.68	0.20	0.20	0.07	0.24	0.14	0.03	0.07	0.14	0.00	0.17
paymcaid_cty	Percent Medicaid (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
paymcare_cty	Percent Medicare (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctHMO_cty	Percent with HMO (prevalence)	34.41	33.21	32.04	31.60	31.20	33.12	41.75	50.73	47.49	45.75	45.37
la_hbedstot_0~y	Number of hospital beds/1000 pop 65+	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
la_hha000e_cty	Number of Home Health Agencies/1000 pop 65+	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
la_medmcpen_cty	Medicare managed care penetration	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
la_nursall_00~y	Total full/part time RN/LPNs in NH/ST/LT hospitals/1000 pop 65+	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
occpct_cty	Average percent occupancy	0.03	0.10	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.03	0.03
agg_adm_cty	Number of NH admissions in year	0.82	0.92	0.75	0.82	0.61	0.82	0.55	0.79	0.75	0.79	2.85
la_avgempbed_~y	Average number of empty nursing home beds per facility	0.07	0.14	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.03	0.17
la_herfbeds_cty	Herfindahl index for Nursing Home beds	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
hospptyr_cty	Number of hospitalizations per resident year	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.07
pctlshosp_cty	Percent of quarter 2 long-stay residents hospitalized in 6 months	9.27	7.78	6.95	6.37	6.41	6.21	5.97	5.67	6.94	6.45	7.96
pctnhdayshosp~y	Percent of total nursing home days with hospice	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.07
pctNHdaysSNF_~y	Percent NH days Medicare Reimbursed SNF	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.07
rehosp_cty	Average 30-day rehospitalization rate	0.07	0.00	0.03	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.27
cnahrppd_cty	Average of averages CNA hours/resident/day	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.00	0.00	0.00	0.03
dchrppd_cty	Average of averages Direct Care staff hours/resident/day	0.07	0.07	0.07	0.10	0.07	0.03	0.03	0.00	0.03	0.03	0.03

lpnhrppd_cty	Average of averages LPN hours/resident/day	0.00	0.03	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00
rnhrppd_cty	Average of averages RN hours/resident/day	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.03	0.00	0.00
nhdays_cty	Total nursing home days in year	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07

Table A4.5 State Level – Type of Missingness Per Variable Across All Available Years of Data

		Non-missing		Missing: Cell Suppression		Missing: Other	
		N	%	N	%	N	%
state	State Abbreviation	539	100.00				
year	Year of data	539	100.00				
agg_cmi_sta	Average RUGS NCMI (all admits)	539	100.00				
agg_low_care_~a	Percent low care (all admits)	539	100.00				
avgadl_sta	Long ADL (prevalence)	539	100.00				
avgrugcmi_sta	Average RUGS NCMI (prevalence)	539	100.00				
avgrxnum_sta	Mean number of medications in past 7 days per resident (prevalence)	539	100.00				
pctbedft_sta	Percent Bed fast (prevalence)	539	100.00				
pctcath_sta	Percent Catheter (prevalence)	539	100.00				
pctchf_sta	Percent CHF (prevalence)	539	100.00				
pctdnh_sta	Percent with Do-Not-Hospitalize order (prevalence)	539	100.00				
pctdnr_sta	Percent Do-Not-Resuscitate (prevalence)	539	100.00				
pcthighcps_sta	Percent CPS=5,6 (prevalence)	539	100.00				
pctlowcps_sta	Percent CPS=0,1,2 (prevalence)	539	100.00				
pcthyper_sta	Percent Hypertension (prevalence)	539	100.00				
pctincont_bla~a	Percent Bladder incontinent (prevalence)	539	100.00				
pctincont_bow~a	Percent Bowel incontinent (prevalence)	539	100.00				
pctlocare_sta	Percent low care (prevalence)	539	100.00				
pctobese_sta	Percent Obese (prevalence)	539	100.00				
pctrxdep_sta	Percent receiving antidepressants	539	100.00				
pctrxpsych_sta	Percent receiving antipsychotics	539	100.00				
pctrxpsyoff_sta	Percent of non-psychotic residents receiving antipsychotics off-label	539	100.00				
pctschiz_bipo~a	Percent Schizophrenic or Bi-polar (prevalence)	539	100.00				
pctuti_sta	Percent UTI (prevalence)	539	100.00				
pctvent_sta	Percent Ventilator (prevalence)	422	78.29	117	21.71		

pctwalking_sta	Percent Walk independently in corridor (prevalence)	539	100.00				
agg_female_sta	Percent Female (all admits)	539	100.00				
agg_home_sta	Percent admissions from home (all admits)	539	100.00				
agg_u65_sta	Percent under 65 years old (all admits)	539	100.00				
avgage_sta	Average age	539	100.00				
agg_black_sta	Percent Black (all admits)	513	95.18	26	4.82		
agg_hispanic_~a	Percent Hispanic (all admits)	527	97.77	12	2.23		
agg_white_sta	Percent White (all admits)	539	100.00				
pctfem_sta	Percent Female (prevalence)	539	100.00				
pctunder65_sta	Percent under 65 years old (prevalence)	539	100.00				
pctblack_sta	Percent Black (prevalence)	493	91.47	46	8.53		
pcthisp_sta	Percent Hispanic (prevalence)	502	93.14	37	6.86		
pctwhite_sta	Percent White (prevalence)	539	100.00				
alzunit_sta	Percent of facilities with Alzheimer's special care unit	539	100.00				
facpoor_sta	Percent resource-poor homes based on payer mix	539	100.00				
multifac_sta	Percent of facilities part of chain	539	100.00				
restrain_sta	Percent Restrained (prevalence)	539	100.00				
totbeds_sta	Average number of beds per facility	539	100.00				
nresid_sta	Number of MDS-assessed residents in facilities on 1st Thurs in April	539	100.00				
paymcaid_sta	Percent Medicaid (prevalence)	539	100.00				
paymcare_sta	Percent Medicare (prevalence)	539	100.00				
pctHMO_sta	Percent with HMO (prevalence)	519	96.29	20	3.71		
occpct_sta	Average percent occupancy	539	100.00				
agg_adm_sta	Number of admissions in year	539	100.00				
hospptyr_sta	Number of hospitalizations per resident year	539	100.00				
nhdays_sta	Total nursing home days	539	100.00				
pctlshosp_sta	Percent quarter 2 long-stay residents hospitalized in 6 months	47	8.72			492	91.28
pctnhdayshosp~a	Percent of total nursing home days with hospice	539	100.00				
pctNHdaysSNF_~a	Percent NH days Medicare Reimbursed SNF	539	100.00				

rehosp_sta	Average 30-day rehospitalization rate	539	100.00		
cnahrppd_sta	Average of averages CNA hours/resident/day	539	100.00		
dchrppd_sta	Average of averages Direct Care staff hours/resident/day	539	100.00		
lpnhrppd_sta	Average of averages LPN hours/resident/day	539	100.00		
rnhrppd_sta	RN hours per resident day	539	100.00		
adj_mrate_sta	Average Medicaid Per Diem	480	89.05	59	10.95
bedhold_sta	Has a Medicaid Bed Hold Payment	475	88.13	64	11.87
casemix_sta	Has Medicaid Case Mix Reimbursement	480	89.05	59	10.95
pthru_sta	Has Medicaid Wage Pass-Thru Policy	435	80.71	104	19.29
tax_sta	Collects a daily bed or resident tax	445	82.56	94	17.44

Table A4.6 State Level – Overall Missingness Per Variable by Year

State Level		Year (2000-2010) '00 %	'01 %	'02 %	'03 %	'04 %	'05 %	'06 %	'07 %	'08 %	'09 %	'10 %
state	State Abbreviation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
year	Year of data	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agg_cmi_sta	Average RUGS NCMI (all admits)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agg_low_care_~a	Percent low care (all admits)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
avgadl_sta	Long ADL (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
avgrugcmi_sta	Average RUGS NCMI (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
avgrxnum_sta	Mean number of medications in past 7 days per resident (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctbedft_sta	Percent Bed fast (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctcath_sta	Percent Catheter (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctchf_sta	Percent CHF (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctdnh_sta	Percent with Do-Not-Hospitalize order (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctdnr_sta	Percent Do-Not-Resuscitate (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pcthighcps_sta	Percent CPS=5,6 (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctlowcps_sta	Percent CPS=0,1,2 (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pcthyper_sta	Percent Hypertension (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctincont_bla~a	Percent Bladder incontinent (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctincont_bow~a	Percent Bowel incontinent (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctlocare_sta	Percent low care (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctobese_sta	Percent Obese (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctrxdep_sta	Percent receiving antidepressants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctrxpsych_sta	Percent receiving antipsychotics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

pctrxpsyoff_sta	Percent of non-psychotic residents receiving antipsychotics off-label	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctschiz_bipo~a	Percent Schizophrenic or Bi-polar (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctuti_sta	Percent UTI (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctvent_sta	Percent Ventilator (prevalence)	22.45	18.37	22.45	22.45	22.45	26.53	24.49	20.41	18.37	20.41	20.41
pctwalking_sta	Percent Walk independently in corridor (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agg_female_sta	Percent Female (all admits)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agg_home_sta	Percent admissions from home (all admits)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agg_u65_sta	Percent under 65 years old (all admits)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
avgage_sta	Average age	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agg_black_sta	Percent Black (all admits)	8.16	4.08	6.12	6.12	6.12	2.04	6.12	4.08	4.08	2.04	4.08
agg_hispanic_~a	Percent Hispanic (all admits)	4.08	2.04	2.04	2.04	2.04	2.04	2.04	0.00	2.04	2.04	4.08
agg_white_sta	Percent White (all admits)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctfem_sta	Percent Female (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctunder65_sta	Percent under 65 years old (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctblack_sta	Percent Black (prevalence)	8.16	8.16	6.12	10.20	8.16	6.12	6.12	8.16	10.20	12.24	10.20
pcthisp_sta	Percent Hispanic (prevalence)	12.24	12.24	10.20	4.08	6.12	6.12	8.16	4.08	4.08	4.08	4.08
pctwhite_sta	Percent White (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
alzunit_sta	Percent of facilities with Alzheimer's special care unit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
facpoor_sta	Percent resource-poor homes based on payer mix	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
multifac_sta	Percent of facilities part of chain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
restrain_sta	Percent Restrained (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
totbeds_sta	Average number of beds per facility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

nresid_sta	Number of MDS-assessed residents in facilities on 1st Thurs in April	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
paymcaid_sta	Percent Medicaid (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
paymcare_sta	Percent Medicare (prevalence)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctHMO_sta	Percent with HMO (prevalence)	8.16	6.12	2.04	8.16	8.16	6.12	2.04	0.00	0.00	0.00	0.00
occpct_sta	Average percent occupancy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
agg_adm_sta	Number of admissions in year	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
hospptyr_sta	Number of hospitalizations per resident year	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
nhdays_sta	Total nursing home days	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctlshosp_sta	Percent quarter 2 long-stay residents hospitalized in 6 months	97.96	91.84	95.92	89.80	87.76	89.80	87.76	85.71	91.84	87.76	97.96
pctnhdayshosp~a	Percent of total nursing home days with hospice	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pctNHdaysSNF_~a	Percent NH days Medicare Reimbursed SNF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rehosp_sta	Average 30-day rehospitalization rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
cnahrppd_sta	Average of averages CNA hours/resident/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
dchrppd_sta	Average of averages Direct Care staff hours/resident/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lpnhrppd_sta	Average of averages LPN hours/resident/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rnhrppd_sta	RN hours per resident day	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
adj_mrate_sta	Average Medicaid Per Diem	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	100.00
bedhold_sta	Has a Medicaid Bed Hold Payment	2.04	2.04	2.04	2.04	2.04	4.08	4.08	4.08	4.08	4.08	100.00
casemix_sta	Has Medicaid Case Mix Reimbursement	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	100.00
pthru_sta	Has Medicaid Wage Pass-Thru Policy	2.04	2.04	2.04	2.04	2.04	20.41	20.41	20.41	20.41	20.41	100.00
tax_sta	Collects a daily bed or resident	2.04	2.04	2.04	2.04	2.04	16.33	16.33	16.33	16.33	16.33	100.00