

**Nursing Home Data Compendium
2000**

Acknowledgements

The following were contributors to the Data Compendium:

David Champney, West Virginia Medical Institute
Mark Champney, Champney Associates
C. McKeen Cowles, Cowles Research Group
James Forsythe, Ph.D., West Virginia Medical Institute
Yifei Hu, West Virginia Medical Institute
Jill Kelly, CMS
Bryan Mission, Champney Associates
Edward Mortimore, CMS
Jean C. Scott, Dr. P.H., CMS
Daniel Zeller, CMS

Introduction to the Data Compendium

More than 2.9 million Americans, largely vulnerable and elderly, resided in our nation's nursing homes for at least some part of 2000. The majority of these were long-term nursing home residents and some had shorter stays for rehabilitation care after an acute hospitalization. The care of this population is of high priority for Congress and for the Centers for Medicare & Medicaid Services (CMS) (formerly the Health Care Financing Administration), regardless of the reasons for their admissions to the nursing homes or the lengths of their stays.

Both legislative and regulatory reforms in recent years have been important in assuring that these residents receive a high quality of care. The Omnibus Budget Reconciliation Act of 1987 (OBRA) specified a number of reforms, and in 1995 CMS began enforcing a new set of nursing home regulations. An assessment of the effect of these regulations in 1997 and 1998 (presented in a July 1998 report to Congress) resulted in the conceptualization of the Nursing Home Oversight Improvement Program (NHOIP, formerly the Nursing Home Initiative). The NHOIP includes many ongoing provisions that were designed to address weaknesses in the Federal and State oversight of nursing homes. These include: making inspections less predictable and helping states improve inspection quality; quickly investigating complaints that allege actual harm to residents; making facilities with repeated violations the subject of greater scrutiny and immediate sanctions; preventing facilities terminated from Medicare and Medicaid from immediately re-entering the programs; preventing dehydration, malnutrition, and abuse of nursing home residents; and providing better consumer information about nursing homes.

As part of the oversight of the care given to our nation's nursing home residents, CMS monitors on a regular basis both Minimum Data Set (MDS) data, which are reported by Medicare- and Medicaid-certified nursing homes, and administrative data from the Online Survey, Certification, and Reporting System (OSCAR). Some of these data have been organized into tables in this data compendium. We believe the compendium will serve as a valuable resource for policy makers concerned with issues of aging and long term care.

The compendium contains figures and tables presenting data on all residents in Medicare- and Medicaid-certified nursing homes in the United States. To our knowledge, this is the first comprehensive aggregation of data at the level of the individual. Previous reports from CMS have relied on aggregate data calculated at the nursing home level. National survey data rely on samples of nursing homes or nursing home residents, not the total universe of nursing home residents, therefore the numbers presented may differ somewhat from estimates based on probability sampling strategies. The use of these comprehensive individual data allows a more

complex understanding of the demographic profile of nursing home residents and of how their care contributes to their health outcomes.

A series of graphs, charts, and maps highlights some of the most interesting data, while detailed data are available in accompanying tables. In some cases, we have also used measures, such as Activity of Daily Living Impairment (ADL), that may differ methodologically from other ADL measures commonly published. These are explained in more detail in the Methods Section. Data in the compendium are presented at both the national and the state level. A brief synopsis of some of the material from the compendium is presented below.

In 2000, just over 16,800 nursing homes were certified to participate in the Medicare and/or Medicaid programs, down from about 17,200 in 1997. Most of these facilities are of a medium size, having between 50 and 200 beds. There are about 2,600 small facilities (fewer than 50 beds) and fewer than 1,500 very large facilities (200 or more beds). Most certified nursing homes participate in both Medicare and Medicaid; seven percent are certified to participate in Medicare only and about 12 percent participate in Medicaid only. For-profit facilities account for about 65 percent of the certified homes and care for almost two-thirds of nursing home residents. About 28 percent of nursing homes are non-profit. The others are government-operated.

More than 20 percent of the population of large nursing homes (with 200 or more beds) consist of non-white residents. Minority groups account for less than 15 percent of the population of smaller nursing homes.

Occupancy rates for nursing homes have been decreasing slowly since 1996. In 1996, nursing homes, on average had about 85 percent of their beds occupied. This has decreased to about 82 percent occupancy in 2000.

Almost 3 million individuals had at least one completed MDS assessment in 2000. About 70 percent of these residents were female. The female to male ratio varied by state, from 1.4 to 1 in Alaska to 2.7 to 1 in Alabama. Seventy-five percent of all nursing home residents were 75 years of age or older. Alaska, Puerto Rico, and Louisiana had the highest proportions of young nursing home residents (under the age of 65 years) while South Dakota, Iowa, and North Dakota had the highest proportions of residents aged 95 years and older.

Both cognitive and functional impairments are common in nursing homes. Only about one-quarter of residents had no cognitive impairment, while more than 15 percent had severe or very severe cognitive impairment. Facilities with fewer than 50 beds reported that just over 50 percent of their residents have some degree of cognitive impairment, while about 75 percent of residents in larger homes are cognitively impaired. More than a third of nursing home residents require extensive assistance with at least four of the five Activities of Daily Living (ADL) that were examined (bed mobility, transferring, dressing, eating, or toileting). Facilities with

fewer than 50 beds report lower levels of ADL impairment in residents than do larger facilities.

Clinical problems are also common in nursing homes. Incontinence remains a severe problem. More than one-third of nursing home residents are incontinent of bowel or bladder all or most of the time. Pressure ulcer prevalence has increased slightly over the observation period from 7.1 to 7.9 percent. The incidence has remained relatively stable at about 2 percent. While the estimates of the prevalence of reported weight loss vary somewhat over time. They show a downward trend from the beginning of 1999 to 2000.

The use of restraints appears to be decreasing, from 7.5 percent in 1998 to 6.3 percent in 2000, while the incidence of new use of restraints has remained steady at about 1 percent. Data on reported involuntary weight loss also appears to support a downward trend from the beginning of 1999 through 2000. Since the beginning of 1999 the prevalence of tube feeding has been fairly steady, at 4.2 to 4.4 percent.

Results from the on-site surveys of nursing homes have also changed somewhat over time. The compendium presents data from 1996 through 2000. The average number of health deficiencies cited during the survey has increased from 5.1 per facility in 1996 to 6.1 per facility in 2000. The percentage of nursing homes that did not receive any citations for health deficiencies during the survey has decreased substantially; while 22 percent of nursing homes were not cited for health deficiencies in 1996, fewer than 13 percent were not cited in 2000. Fewer facilities are being cited for the improper use of physical and chemical restraints. In 1996, 14.4 percent of nursing homes were cited. Fewer than 10 percent were cited in 2000. Citations for failure to treat or prevent pressure ulcers increased from 15.3 percent in 1996 to 18.6 percent in 1999, then decreased to 17.8 percent in 2000.

The percentage of nursing homes cited for substandard quality of care has fluctuated somewhat from year to year, but has never been above 5.8 percent during the four-year period. The lowest citation rate for this type of deficiency was 4.4 percent (in 2000). In 2000, only 3 states: Alaska, South Dakota, and Vermont had no instances of citations for substandard quality of care. During the four-year observation period, fewer than 2.5 percent of facilities per year were cited for abuse. In 2000, 13 states cited no instances of abuse in nursing homes, while four states cited 5 percent or more of their facilities for abuse. The percentage of nursing homes cited for deficiencies at the highest level of severity, immediate jeopardy, has increased every year since 1996. However, only a small proportion of facilities are cited for this type of deficiency. In 2000, the citation rate was 1.9 percent. In fact, more facilities were cited for isolated problems that caused minimal harm to residents than for any other level of deficiency.

Additional information about the material highlighted above is available at the state level in the figures, maps, and tables that follow.

Methods Used in the Data Compendium

Notes on Data Quality

In self-reported databases such as the Minimum Data Set (MDS), there are likely to be significant variations in the quality of record keeping and reporting at the facility level (for example, errors in coding date of birth, race, sex and facility). Additionally, we have found some instances where states may have assigned the same resident identifier to multiple nursing home residents. Based on an examination of data from about 5 states, we estimate that between 1 percent and 7 percent of the assessment records have a miscoded resident identifier code, meaning that the same code was assigned to two different individuals, or that the same individual may have more than one code. We are currently exploring this variation and believe that much of the inaccuracy appeared in the earliest weeks of MDS data collection. An important change in the algorithm that assigns resident identifiers was made in November 1999. As the data are refined in the future we anticipate an improvement in accuracy.

Notes on Measures of Resident Clinical Characteristics

It is important to note that the measures used throughout this report were derived using standard epidemiological and demographic methods. Although many of the measures use descriptions similar to those used in quality indicators (for example, the prevalence of pressure ulcers) they were often calculated in different ways. We describe the calculations in more detail below.

Calculation of Resident-Specific Measures

Annual Measures

Gender, age, race, Cognitive Performance Scale (CPS) Score, and number of ADL impairments were calculated for each resident from the MDS assessment closest to July 1 of the year of interest. All of these measures are reported by the nursing home.

CPS

The Cognitive Performance Scale (Morris, 1994) is one method for estimating the cognitive ability of nursing home residents based on items reported in the MDS assessment. Based on the scoring algorithm a resident is classified as having very severe, severe, moderately severe, moderate, mild, very mild, or no impairment.

Activities of Daily Living

There are many ways of estimating the amount of impairment in ADLs. For this analysis the ADLs evaluated were: bed mobility, dressing, eating, transferring, and toileting. In addition, dependency was considered to exist only when a resident required extensive assistance with one or more of these activities. The data presented are summary counts of the number of ADLs with which a resident requires extensive assistance.

Incidence and Prevalence Measures: A General Note

It is important to examine both incidence and prevalence rates in assessing many aspects of quality of care provided to nursing home residents. The two measures give different information. Prevalence quantifies the proportion of individuals in a population who have a given condition at a specific point in time. Incidence quantifies the number of new events or occurrences of a condition that develop in a population of individuals at risk during a time interval (Hennekens, 1987). For example, prevalence of pressure ulcers in a nursing home would give the proportion of the residents who had a pressure ulcer during a time interval. These could be newly occurring ulcers or ulcers that had been present for some period of time. Incidence of pressure ulcers in a nursing home would be the proportion of residents who have newly occurring ulcers during a time interval. If we exclude pressure ulcers noted on admission or readmission MDS assessments, we can infer that incident ulcers occurred while the residents were under the care of the nursing home.

Since MDS assessments are collected on a schedule that differs for every resident, there are methodological challenges in the calculation of incidence and prevalence measures. For these figures and tables, prevalence was assessed using the midpoint of each calendar quarter as a starting point (baseline). Cases of interest occurred 60 days before or after the midpoint and were unique. That is, if a resident had two assessments collected during the observation period, only the one closest in time to the starting point was retained. Prevalence was calculated as the number of identified cases divided by the number of eligible residents at baseline (the midpoint estimate of the nursing home population). Prevalence calculations include admission and readmission assessments.

Incidence calculations were slightly more complicated. To illustrate, incidence of pressure ulcers was calculated by identifying all pressure ulcer cases that are not noted on admission or readmission assessments during a quarter of interest (for example, January 1 to March 31). Each assessment indicating presence of a pressure ulcer (index assessment) is then compared with the resident's immediately preceding assessment. If the preceding comparison assessment indicates that no pressure ulcer is present, then the index assessment is considered an incident pressure ulcer. Incident pressure ulcers constitute the numerator of the quarter. The denominator consists of all eligible assessments closest to the midpoint of the quarter (but not more than 60 days from the midpoint) that indicate presence of no pressure ulcers.

Use of Descriptive Statistics: A General Note

A number of the conditions and characteristics assessed for this report are not normally distributed in the nursing home population; sometimes the distribution is quite skewed. For example, in 2000 the prevalence of dehydration is zero percent for more than half the nursing homes in the nation. For conditions like dehydration, the use of a mean (or average) value will not characterize how the data are distributed (or spread out). Therefore, in the tables for those conditions and characteristics we have presented the median (or middle value) as well as the 90th and 10th percentile values. The 90th percentile is the value below which 90 percent of the values in the distribution fall, and the 10th

percentile is the value below which 10 percent of the values fall. These two pieces of information help one understand how values are clustered at the ends of the distribution.

Prevalence of Dehydration

To estimate the prevalence of dehydration, we identified all individuals for whom the nursing home indicated that fluid output exceeded fluid input. It is important to note that we excluded individuals who were reported by the nursing home to be in end-stage disease or who were receiving hospice care.

Pressure Ulcer Incidence and Prevalence

To estimate the incidence and prevalence of pressure ulcers, we identified individuals with a pressure ulcer of stage 2 or greater. We then calculated incidence and prevalence rates as detailed in "Incidence and Prevalence Measures: A General Note" above.

Restraints Incidence and Prevalence

To estimate the incidence and prevalence of physical restraint use, we adopted a conservative approach, considering only individuals whom the nursing home reported were in a trunk restraint, limb restraint, or some sort of restraining chair at least once during the 7 days prior to the assessment. It is important to note that we did not report the use of bed rails for this measure, because of our concern about biases in the measurement of this item.

Prevalence of Weight Loss

To estimate the prevalence of weight loss, we identified all individuals whom the nursing home indicated had experienced weight loss of more than 5 percent in the 30 days prior to the assessment or more than 10 percent in the last 180 days. It is important to note that we excluded individuals who were reported by the nursing home to be in end-stage disease or who were receiving hospice care.

Prevalence of Tube Feeding

To estimate the prevalence of feeding tube use in nursing homes we identified all individuals whom the nursing home reported had a feeding tube, defined as "any tube that can deliver food/nutritional substances/fluids/medications directly into the gastrointestinal system." We excluded individuals admitted to the nursing home with feeding tubes because we wanted to separate the use of feeding tubes by nursing homes from the use of feeding tubes by hospitals.

Prevalence of Incontinence

For this measure, we identified persons who were incontinent of bladder or of bowel on almost all occasions. This is a measure of severe incontinence. It is important to note that this differs from the Quality Indicator on incontinence that is used in the survey process.

OSCAR Measures

Number of Nursing Homes

We have derived counts of the number of nursing homes from an Online Survey Certification and Report (OSCAR) file created in March of each year. The counts may differ slightly from other estimates of the number of providers. This may occur because other counts were made at different points in the year, or because different assumptions were made about eliminating potential duplicate records, or because the number of providers was derived from the master provider table in OSCAR, rather than from records of surveys.

Average Number of Deficiencies

The figures and tables report the mean number of health deficiencies cited during an on-site survey by state and for the nation by calendar year. Health deficiency citations are based on the Interpretive Guidelines from the "State Operations Manual for Provider Certification." Note that for all of the calendar year tables the weighting scheme is unique. Any facility that was not surveyed during the particular calendar year is not counted and any facility that was surveyed twice during the year is doubly counted, giving it a weight of 2. Facilities are surveyed once a year on average.

Percentage of Surveys Resulting in No Deficiencies

This measure is defined as the number of surveys that resulted in zero citations for deficiencies during a calendar year, divided by the number of surveys conducted.

Percentage of Surveys Resulting in Citation for Substandard Quality of Care

The table reports the percentage of surveys resulting in citations for substandard quality of care (SSQC) nationally and by state by calendar year. SSQC is defined as any deficiency in the Code of Federal Regulations (42 CFR 483.13 Resident Behavior and Facility Practices, 42 CFR 483.15 Quality of Life, or 42CFR 483.25 Quality of Care), at a scope and severity level of 'F', 'H', 'I', 'J', 'K', or 'L'. A grid that details the scope and severity levels is included as the last page of this Methods Section.

Percentage of Surveys Resulting in Citation for Abuse

The table reports the percentage of on-site nursing home surveys resulting in citations for abuse of residents. Abuse citations are those deficiencies cited under tag F223 of the Interpretive Guidelines from the "State Operations Manual for Provider Certification".

Percentage of Surveys Resulting in Citation for Improper Restraint Use

The table reports the percentage of nursing home surveys resulting in a citation for improper restraint use (tags F221-F222 of the Interpretive Guidelines from the "State Operations Manual for Provider Certification").

Percentage of Surveys Resulting in Citation for Pressure Ulcers

This table reports the percentage of nursing home surveys resulting in a citation for pressure ulcers (tag F314 of the Interpretive Guidelines from the "State Operations Manual for Provider Certification").

Percentage of Surveys Resulting in Citation for Actual Harm or Worse

This table reports the percentage of surveys resulting in a citation for actual harm, defined as a deficiency citation that is rated at scope and severity 'G' or more severe. (See grid at the end of the Methods Section.)

Percentage of Surveys Resulting in Citation for Immediate Jeopardy

This table reports the percentage of surveys resulting in a citation for immediate jeopardy. Immediate jeopardy is a deficiency that constitutes an immediate threat to the health or life of one or more nursing home residents. It is recorded by the state survey agency at scope and severity of 'J' or higher. (See grid at the end of the Methods Section.)

Scope and Severity Distribution by Year

It should be noted that for this table the denominator is the number of deficiency citations, not nursing homes or surveys. (See grid at the end of the Methods Section.)

References

Hennekens CH, Buring JE. *Epidemiology in Medicine*. Boston: Little, Brown and Company, 1987.

Morris JN, Fries BE, Mehr DR, Hawes C, Phillips C, Mor V, Lipsitz LA. MDS Cognitive Performance Scale. *J Gerontol*. 1994 Jul;49(4):M174-82.

Scope and Severity Grid

Severity	Immediate Jeopardy to resident health or safety	J	K	L
	Actual Harm that is not Immediate Jeopardy	G	H	I
	No Actual Harm with Potential for More than Minimal Harm that is not Immediate Jeopardy	D	E	F
	No Actual Harm with Potential for Minimal Harm	A	B	C
		Isolated	Pattern	Widespread
		Scope		

List of Highlights

Characteristics of Nursing Homes	1
Characteristics of Nursing Home Residents	10
Nursing Home Resident Clinical Characteristics	
Pressure Ulcers	19
Restraint Use	24
Tube Feeding, Weight Loss, and Dehydration	27
Incontinence	33
Nursing Home Survey Results	
Mean Number of Health Deficiencies	37
Health Deficiencies – Scope and Severity	44
Health Deficiencies – Substandard Quality of Care	53
Health Deficiencies – Abuse, Restraint Use and Pressure Ulcer Citations	57

List of Figures

Figure 1	Number of Nursing Homes by Year: United States, 1996-2000	2
Figure 2	Number of Nursing Homes by State: United States, 2000	3
Figure 3	Number of Nursing Homes by Bed Size by Year: United States, 1996-2000	4
Figure 4	Number of Nursing Homes by Ownership by Year: United States, 1996-2000	5
Figure 5	Percent of Nursing Homes that are For Profit by State: United States, 2000	6
Figure 6	Number of Nursing Homes by Certification by Year: United States, 1996-2000	7
Figure 7	Nursing Home Occupancy Rates by Year: United States, 1996-2000	8
Figure 8	Nursing Home Occupancy Rates by State: United States, 2000	9
Figure 9	Nursing Home Residents by Gender by Year: United States, 1998-2000	12
Figure 10	Nursing Home Residents by Age Group by Year: United States, 1998-2000	13
Figure 11	Percent of Nursing Home Residents Aged 65 Years and Older by State: United States, 2000	14
Figure 12	Percent of Nursing Home Residents Aged 85 Years and Older by State: United States, 2000	15
Figure 13	Nursing Home Residents by Race by Year: United States, 1998-2000	16
Figure 14	Distribution of Number of ADL Impairments in Nursing Home Residents by Year: United States, 1998-2000	17
Figure 15	Distribution of Cognitive Impairments in Nursing Home Residents by Year: United States, 1998-2000	18
Figure 16	Median Pressure Ulcer Prevalence in Nursing Home Residents by Year: United States, Third Quarter 1998-2000	20
Figure 17	Median Pressure Ulcer Prevalence in Nursing Home Residents by State: United States, Third Quarter 2000	21

Figure 18	Prevalence of Pressure Ulcers in Nursing Home Residents by State: United States, Third Quarter 2000	22
Figure 19	Incidence of Pressure Ulcers in Nursing Home Residents by Quarter: United States, 1998-2000	23
Figure 20	Median Prevalence of Use of Restraints in Nursing Home Residents by State: United States, Third Quarter 2000	25
Figure 21	Prevalence of Physical Restraints in Nursing Home Residents by State: United States, Third Quarter 2000	26
Figure 22	Median Prevalence of Tube Feeding in Nursing Home Residents by State: United States, Third Quarter 2000	28
Figure 23	Prevalence of Tube Feeding in Nursing Home Residents by State: United States, Third Quarter 2000	29
Figure 24	Median Prevalence of Weight Loss in Nursing Home Residents by State: United States, Third Quarter 2000	30
Figure 25	90 th Percentile Level of Prevalence of Dehydration in Nursing Home Residents by Year: United States, Third Quarter 1998-2000	31
Figure 26	90 th Percentile Level of Prevalence of Dehydration in Nursing Home Residents by State: United States, Third Quarter 2000	32
Figure 27	Prevalence of Severe Bowel or Bladder Incontinence in Nursing Home Residents by Quarter: United States, Quarterly 1998-2000	34
Figure 28	Median Prevalence of Severe Bowel or Bladder Incontinence in Nursing Home Residents by State: United States, Third Quarter 2000	35
Figure 29	Prevalence of Severe Bowel or Bladder Incontinence in Nursing Home Residents by State: United States, 2000	36
Figure 30	Mean Number of Health Deficiencies Cited in Nursing Home Surveys by Year: United States, 1996-2000	38
Figure 31	Mean Number of Health Deficiencies Cited in Nursing Home Surveys by State: United States, 2000	39
Figure 32	Mean Number of Health Deficiencies Cited in Nursing Home Surveys by State: United States, 2000	40

Figure 33	Percent of Nursing Home Surveys Resulting in Zero Health Deficiency Citations by Year: United States, 1996-2000	41
Figure 34	Percent of Nursing Home Surveys Resulting in Zero Health Deficiency Citations by State: United States, 2000	42
Figure 35	Percent of Nursing Home Surveys Resulting in Zero Health Deficiency Citations by State: United States, 2000	43
Figure 36	Percent Distribution of Scope & Severity of Health Deficiency Citations by Year: United States, 1996-2000 (Grid)	45
Figure 37	Percent Distribution of Scope and Severity of Health Deficiency Citations by Year: United States, 1996-2000	47
Figure 38	Percent of Nursing Home Surveys Resulting in a Health Deficiency of Actual Harm or Immediate Jeopardy to Nursing Home Residents by Year: United States, 1996-2000	48
Figure 39	Percent of Nursing Home Surveys Resulting in a Health Deficiency of Actual Harm or Immediate Jeopardy to Nursing Home Residents by State: United States, 2000	49
Figure 40	Percent of Nursing Home Surveys Resulting in a Health Deficiency of Actual Harm or Immediate Jeopardy to Nursing Home Residents by State: United States, 2000	50
Figure 41	Percent of Nursing Home Surveys Resulting in a Health Deficiency of Immediate Jeopardy to Nursing Home Residents by Year: United States, 1996-2000	51
Figure 42	Percent of Nursing Home Surveys Resulting in a Health Deficiency of Immediate Jeopardy to Nursing Home Residents by State: United States, 2000	52
Figure 43	Percent of Nursing Home Surveys Resulting in Citation for Substandard Quality of Care by Year: United States, 1996-2000	54
Figure 44	Percent of Nursing Homes Surveys Resulting in Citation for Substandard Quality of Care by State: United States, 2000	55
Figure 45	Percent of Nursing Home Surveys Resulting in a Citation for Substandard Quality of Care by State: United States, 2000	56
Figure 46	Percent of Nursing Home Surveys Resulting in a Citation for Abuse of Residents by Year: United States, 1996-2000	58

Figure 47	Percent of Nursing Home Surveys Resulting in a Citation for Abuse of Residents by State: United States, 2000	59
Figure 48	Percent of Nursing Home Surveys Resulting in a Citation for Abuse of Residents by State: United States, 2000	60
Figure 49	Percent of Nursing Home Surveys Resulting in a Citation for Use of Restraints by Year: United States, 1996-2000	61
Figure 50	Percent of Nursing Home Surveys Resulting in a Citation for Use of Restraints by State: United States, 2000	62
Figure 51	Percent of Nursing Home Surveys Resulting in a Citation for Failure to Treat or Prevent Pressure Ulcers by Year: United States, 1996-2000	63
Figure 52	Percent of Nursing Home Surveys Resulting in a Citation for Failure to Treat or Prevent Pressure Ulcers by State: United States, 2000	64

List of Tables

Nursing Homes

Table 1	Number of Nursing Homes by Bed Size Category and State: United States, 1996-2000 _____	65
Table 2	Number of Nursing Homes by Ownership and State: United States, 1996-2000 _____	70
Table 3	Number of Nursing Homes by Type of Certification and State: United States, 1996-2000 _____	75
Table 4	Nursing Home Occupancy Rates by State: United States, 1996-2000 _____	80

Nursing Home Residents

Table 5	Summary of Characteristics of Nursing Home Residents: United States, 2000 _____	81
Table 6	Summary of Incidence and Prevalence of Clinical Measures in Nursing Home Residents: United States, Quarterly 1998-2000 _____	82
Table 7	Nursing Home Residents by Gender and Type of Nursing Home: United States, 1998-2000 _____	83
Table 8	Nursing Home Residents by Gender and State: United States, 1998-2000 _____	84
Table 9	Nursing Home Residents by Age Group and Type of Nursing Home: United States, 1998-2000 _____	85
Table 10	Nursing Home Residents by Age Group and State: United States, 1998-2000 _____	86
Table 11	Nursing Home Residents by Race and Type of Nursing Home: United States, 1998-2000 _____	89
Table 12	Nursing Home Residents by Race and State: United States, 1998-2000 _____	90
Table 13	Distribution of Activity of Daily Living (ADL) Impairments in Nursing Home Residents by Type of Nursing Home: United States, 1998-2000 _____	93
Table 14	Distribution of Activity of Daily Living (ADL) Impairments in Nursing Home Residents by State: United States, 1998-2000 _____	94
Table 15	Distribution of Cognitive Impairments in Nursing Home Residents by Type of Nursing Home: United States, 1998-2000 _____	97

Table 16	Distribution of Cognitive Impairments in Nursing Home Residents by State: United States, 1998-2000 _____	98
Table 17	90 th Percentile, Median, and 10 th Percentile of Prevalence of Pressure Ulcers in Nursing Home Residents by Type of Nursing Home: United States, Quarterly 1998-2000 _____	101
Table 18	90 th Percentile, Median, and 10 th Percentile of Prevalence of Pressure Ulcers in Nursing Home Residents by State: United States, Third Quarter 1998-2000 _____	102
Table 19	90 th Percentile, Median, and 10 th Percentile of Incidence of Pressure Ulcers in Nursing Home Residents by Type of Nursing Home: United States, Quarterly 1999-2000 _____	103
Table 20	90 th Percentile, Median, and 10 th Percentile of Incidence of Pressure Ulcers in Nursing Home Residents by State: United States, Third Quarter 1999-2000 _____	104
Table 21	90 th Percentile, Median, and 10 th Percentile of Prevalence of Physical Restraint Use in Nursing Homes by Type of Nursing Home: United States, Quarterly 1998-2000 _____	105
Table 22	90 th Percentile, Median, and 10 th Percentile of Prevalence of Physical Restraint Use in Nursing Homes by State: United States, Third Quarter 1998-2000 _____	106
Table 23	90 th Percentile, Median, and 10 th Percentile of Incidence of Physical Restraint Use in Nursing Homes by Type of Nursing Home: United States, Quarterly 1999-2000 _____	107
Table 24	90 th Percentile, Median, and 10 th Percentile of Incidence of Physical Restraint Use in Nursing Homes by State: United States, Third Quarter 1999-2000 _____	108
Table 25	90 th Percentile, Median, and 10 th Percentile of Prevalence of Tube Feeding in Nursing Homes by Type of Nursing Home: United States, Quarterly 1998-2000 _____	109
Table 26	90 th Percentile, Median, and 10 th Percentile of Prevalence of Tube Feeding in Nursing Homes by State: United States, Third Quarter 1998-2000 _____	110
Table 27	90 th Percentile, Median, and 10 th Percentile of Prevalence of Weight Loss in Nursing Homes by Type of Nursing Home: United States, Quarterly 1998-2000 _____	111

Table 28	90 th Percentile, Median, and 10 th Percentile of Prevalence of Weight Loss in Nursing Homes by State: United States, Third Quarter 1998-2000	112
Table 29	90 th Percentile, Median, and 10 th Percentile of Prevalence of Dehydration in Nursing Homes by Type of Nursing Home: United States, Quarterly 1998-2000	113
Table 30	90 th Percentile, Median, and 10 th Percentile Prevalence of Dehydration in Nursing Homes by State: United States, Third Quarter 1998-2000	114
Table 31	90 th Percentile, Median, and 10 th Percentile of Prevalence of Severe Bowel or Bladder Incontinence by Type of Nursing Home: United States, Quarterly 1998-2000	115
Table 32	90 th Percentile, Median, and 10 th Percentile of Prevalence of Severe Bowel or Bladder Incontinence by State: United States, Third Quarter 1998-2000	116

Nursing Home Survey Results

Table 33	Mean Number of Health Deficiencies Cited in Nursing Home Surveys by Bed Size Category and State: United States, 1996-2000	117
Table 34	Mean Number of Health Deficiencies Cited in Nursing Home Surveys by Type of Ownership and State: United States, 1996-2000	122
Table 35	Percent of Nursing Home Surveys Resulting in Zero Health Deficiency Citations, by Bed Size Category and State: United States, 1996-2000	127
Table 36	Percent of Nursing Home Surveys Resulting in Zero Health Deficiency Citations, by Type of Ownership and State: United States, 1996-2000	132
Table 37	Percent Distribution of Scope and Severity of Health Deficiency Citations by State: United States, 1996-2000	137
Table 38	Percent of Nursing Home Surveys Resulting in a Health Deficiency of Actual Harm or Immediate Jeopardy to Nursing Home Residents by Bed Size Category and State: United States, 1996-2000	142
Table 39	Percent of Nursing Home Surveys Resulting in a Health Deficiency of Actual Harm or Immediate Jeopardy to Nursing Home Residents by Type of Ownership and State: United States, 1996-2000	147
Table 40	Percent of Nursing Home Surveys Resulting in a Health Deficiency of Immediate Jeopardy to Nursing Home Residents by Bed Size Category and State: United States, 1996-2000	152

Table 41	Percent of Nursing Home Surveys Resulting in a Health Deficiency of Immediate Jeopardy to Nursing Home Residents by Type of Ownership and State: United States, 1996-2000	157
Table 42	Percent of Nursing Home Surveys Resulting in a Citation for Substandard Quality of Care by Bed Size Category and State: United States, 1996-2000	162
Table 43	Percent of Nursing Home Surveys Resulting in a Citation for Substandard Quality of Care by Type of Ownership and State: United States, 1996-2000	167
Table 44	Percent of Nursing Home Surveys Resulting in a Citation for Abuse of Residents by Bed Size Category and State: United States, 1996-2000	172
Table 45	Percent of Nursing Home Surveys Resulting in a Citation for Abuse of Residents by Type of Ownership and State: United States, 1996-2000	177
Table 46	Percent of Nursing Home Surveys Resulting in a Citation for Use of Physical Restraints by Bed Size Category and State: United States, 1996-2000	182
Table 47	Percent of Nursing Home Surveys Resulting in a Citation for Use of Physical Restraints by Type of Ownership and State: United States, 1996-2000	187
Table 48	Percent of Nursing Home Surveys Resulting in a Citation for Failure to Treat or Prevent Pressure Ulcers by Bed Size Category and State: United States, 1996-2000	192
Table 49	Percent of Nursing Home Surveys Resulting in a Citation for Failure to Treat or Prevent Pressure Ulcers by Type of Ownership and State: United States, 1996-2000	197

Characteristics of Nursing Homes

- About 17,000 nursing homes are certified to participate in the Medicare and/or Medicaid programs. The number of participating nursing homes has decreased from 17,253 (in 1997) to 16,847 (in 2000).

Figure 1; Tables 1, 2, 3 and 4

- California, Ohio and Texas each have more than 1,000 nursing homes in their states (2000 data). There are fewer than 50 nursing homes in Alaska, Delaware, the District of Columbia, Hawaii, Vermont, and Wyoming.

Figure 2; Tables 1, 2, 3 and 4

- In 2000, most facilities had 50 to 199 beds. Fewer than 1,500 nursing homes had 200 beds or more. About 2,600 facilities had fewer than 50 beds.

Figure 3, Table 1

- In 2000, approximately 65 percent (10,999) of nursing homes were for-profit, and about 28 percent (4,764) were non-profit. The government controlled the remainder (1,084).

Figures 4 and 5, Table 2

- Most certified nursing homes participate in both Medicare and Medicaid. In 2000, 1,159 (7 percent) of nursing homes were certified to participate in Medicare only and 2,054 (12 percent) participated in Medicaid only.

Figure 6, Table 3

- Nursing home occupancy rates have been decreasing since 1996. In 1996, the occupancy rate was about 85 percent. The occupancy rate in 2000 was about 82 percent.

Figure 7 and 8, Table 4

- Technical Note:

These data are from CMS's Online Survey Certification and Reporting (OSCAR) System, an administrative database that captures data about the survey and certification process. Data from OSCAR are a combination of self-reported data from nursing facilities and compliance data gathered by survey teams.

Figures and supporting tables are italicized.

Puerto Rico and the Virgin Islands have been excluded from the discussion due to the small number (fewer than 10) of nursing homes in those entities.

Figure 1. Number of Nursing Homes by Year: United States, 1996-2000

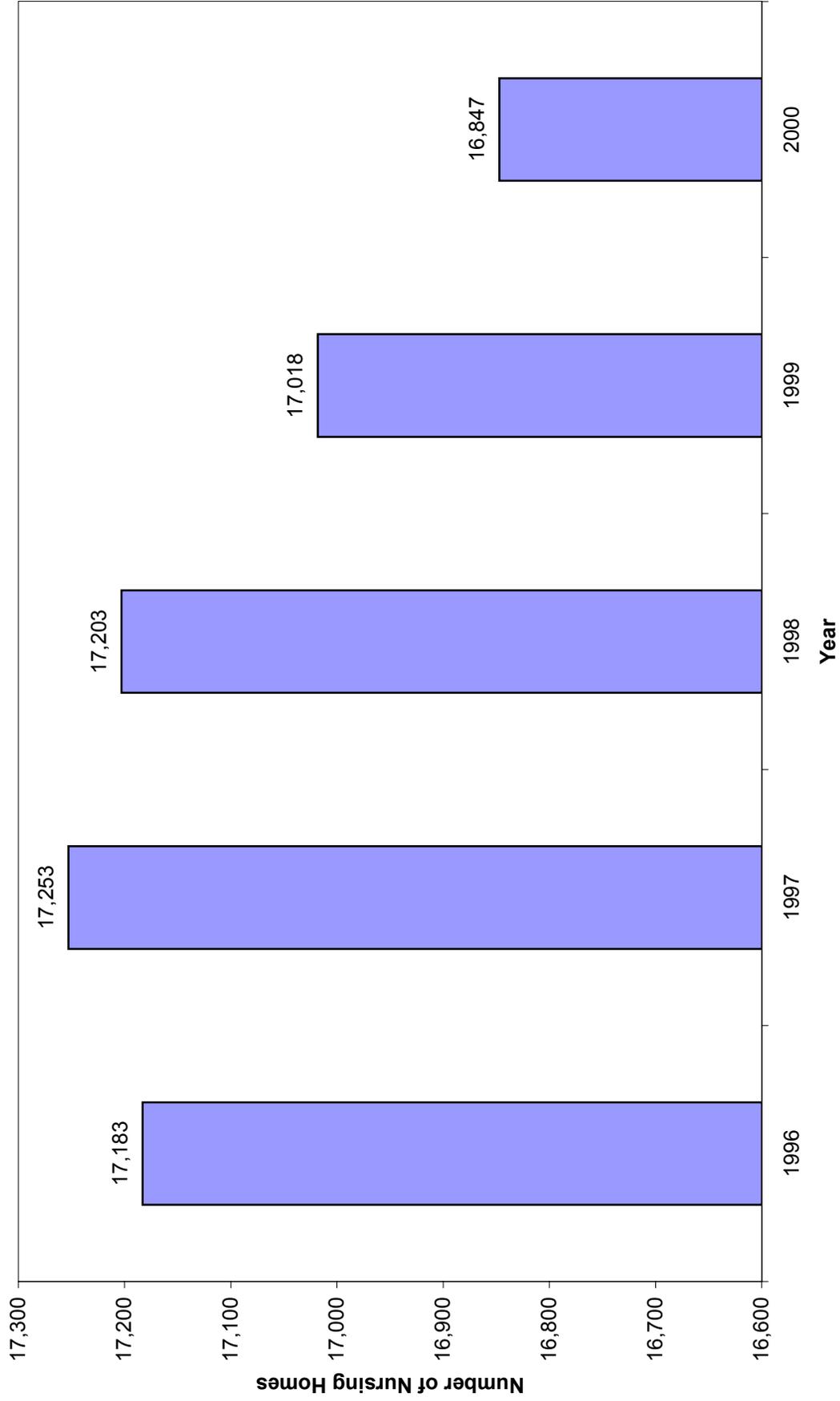
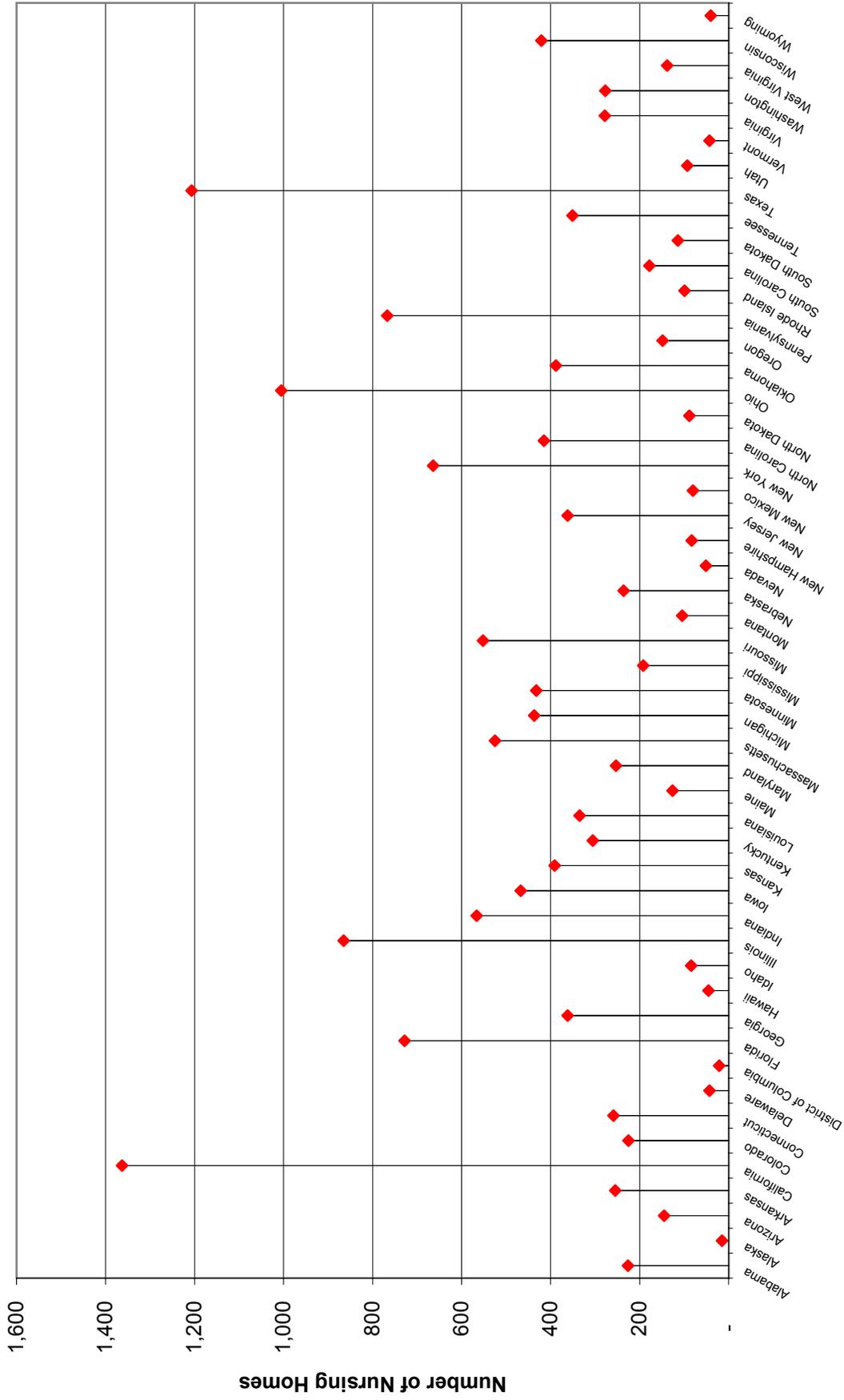


Figure 2. Number of Nursing Homes by State: United States, 2000



Source: OSCAR

Figure 3. Number of Nursing Homes by Bed Size by Year: United States, 1996-2000

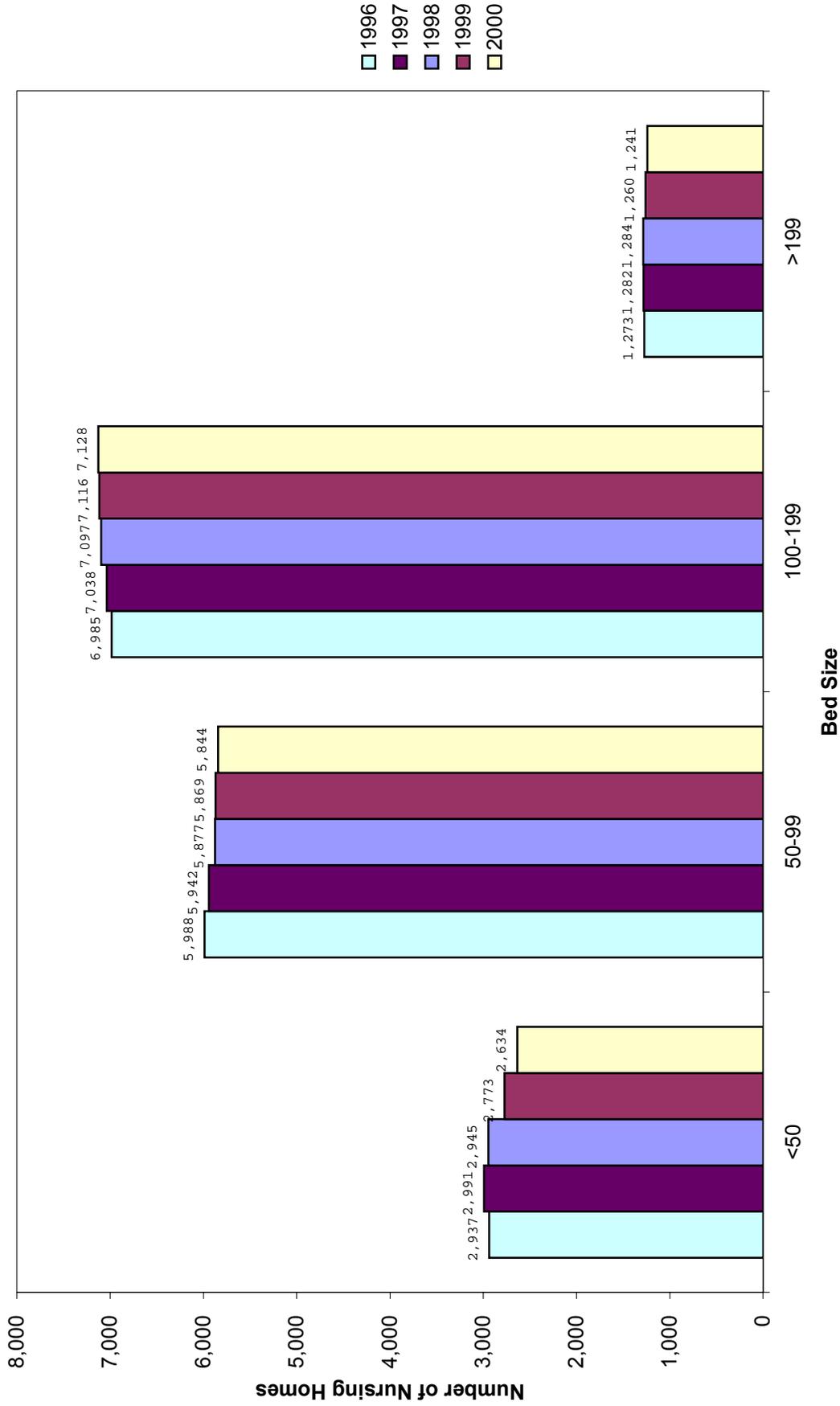


Figure 4. Number of Nursing Homes by Ownership by Year: United States, 1996-2000

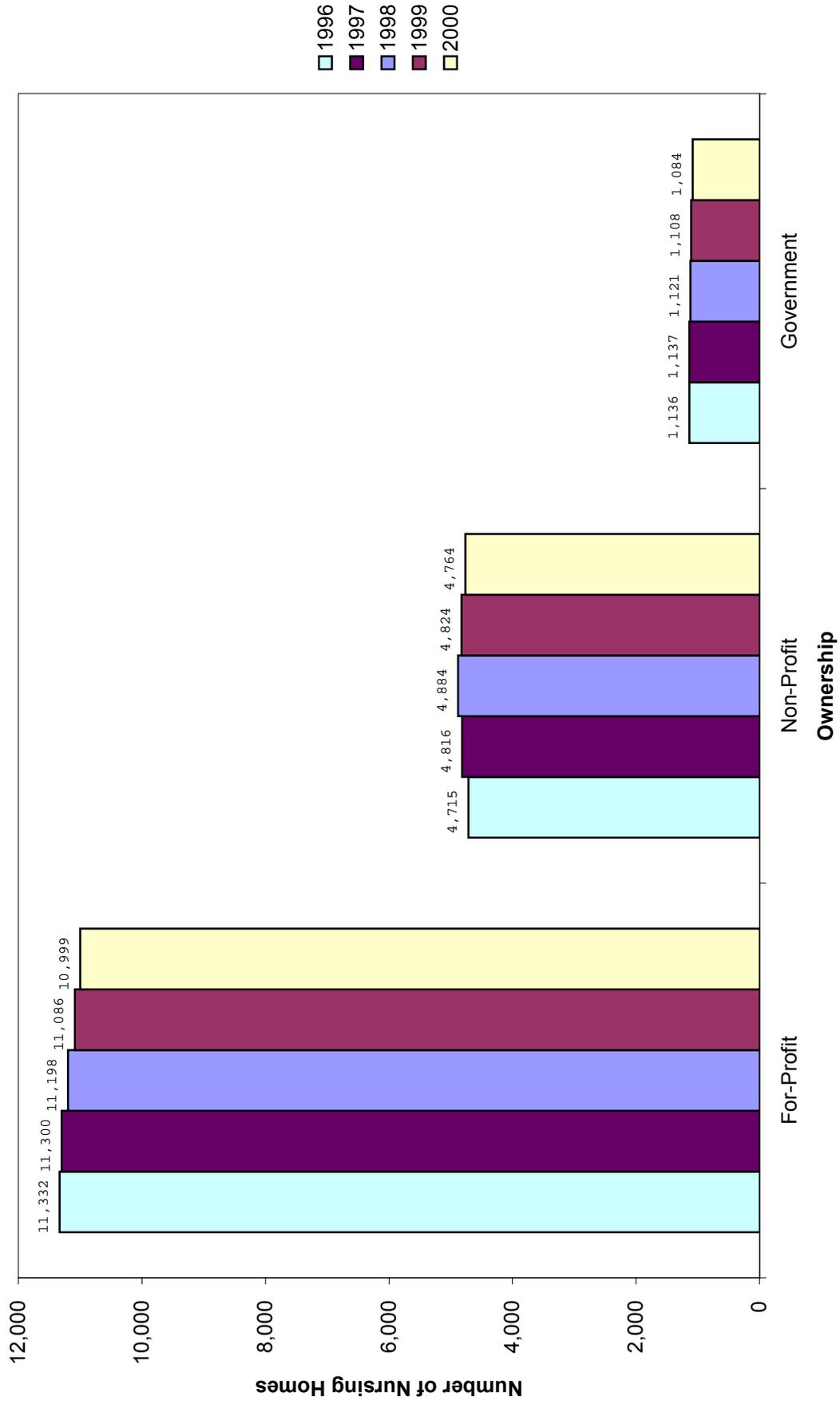
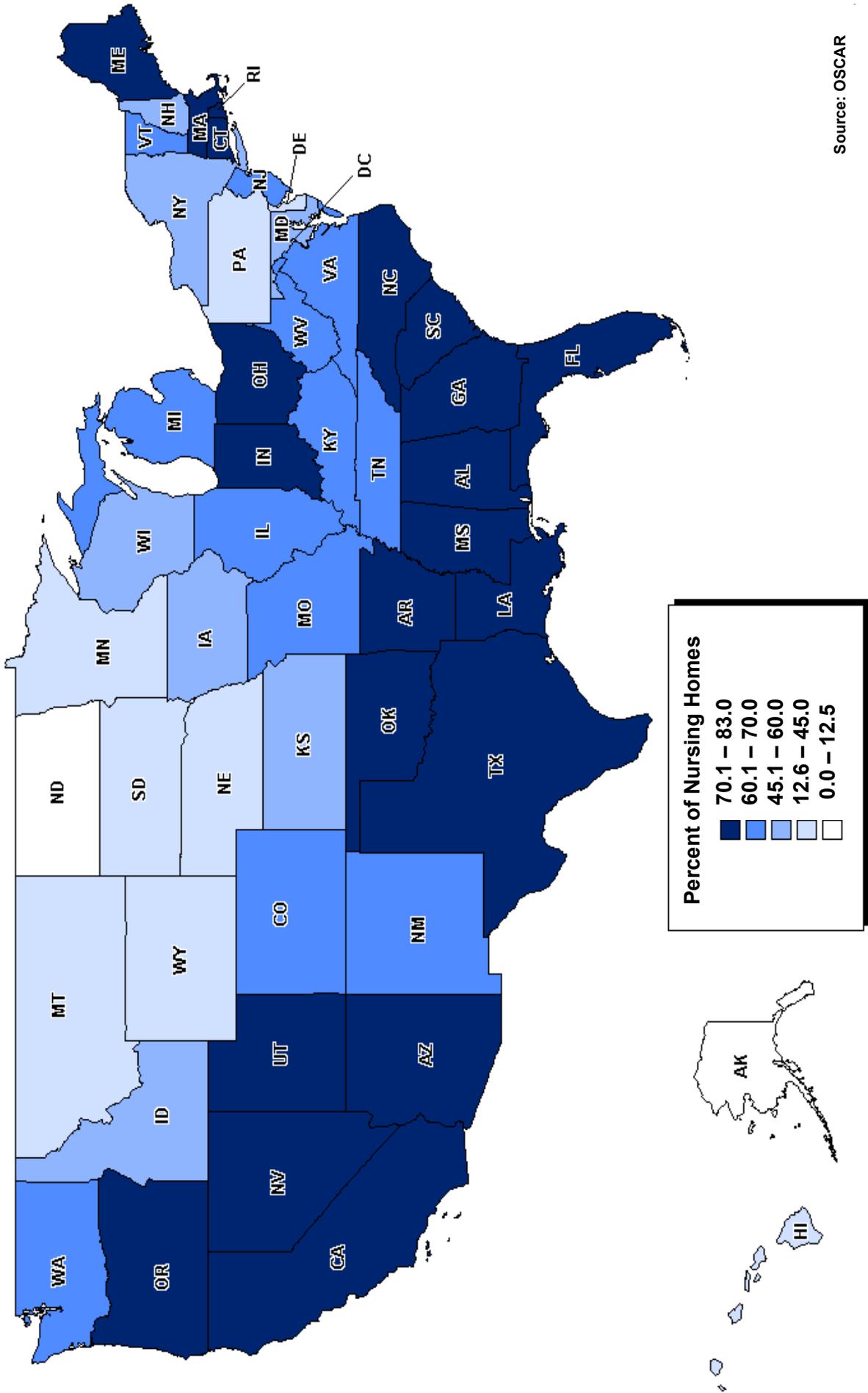
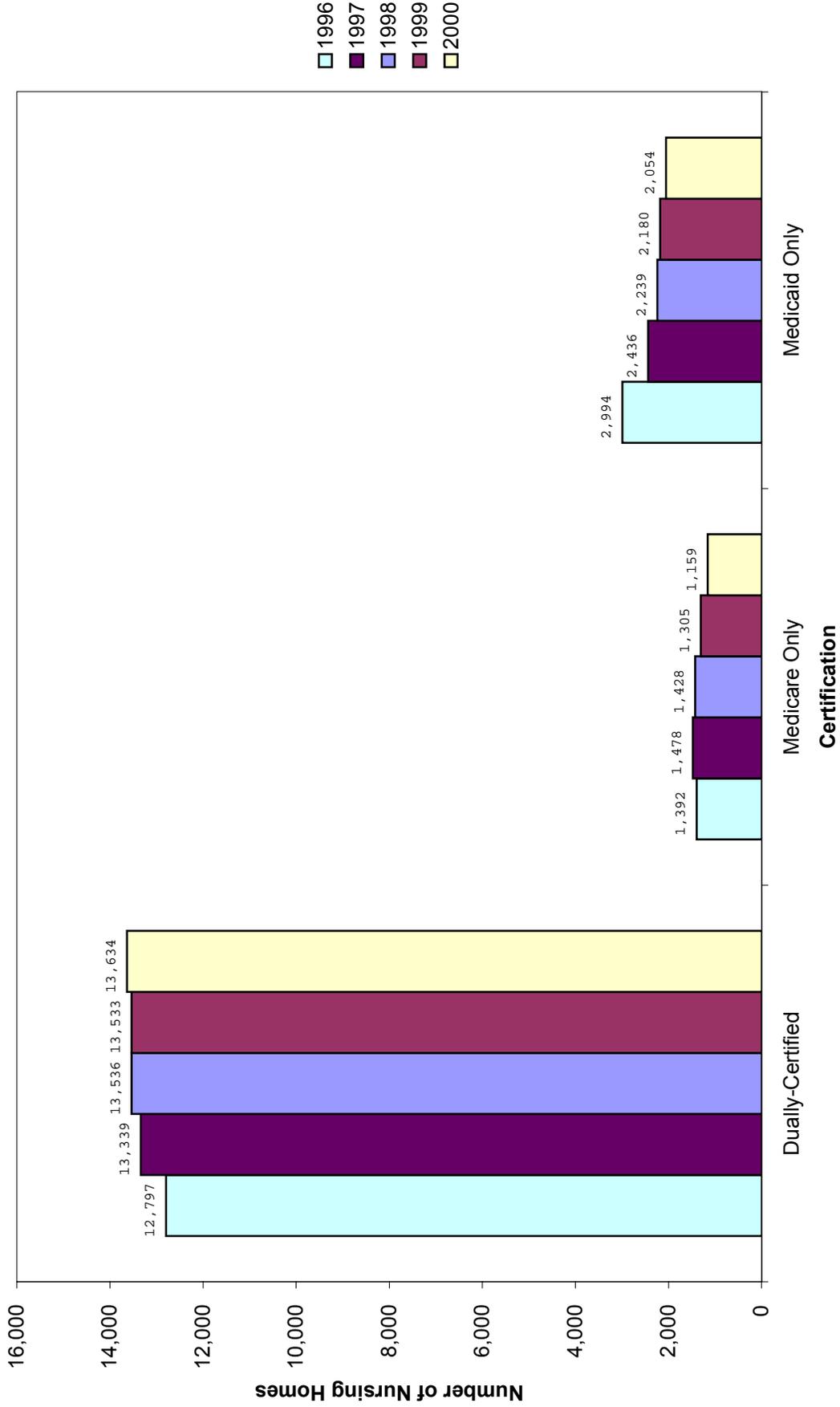


Figure 5. Percent of Nursing Homes that are For-Profit by State: United States, 2000



Source: OSCAR

Figure 6. Number of Nursing Homes by Certification by Year: United States, 1996-2000



Source: OSCAR

Figure 7. Nursing Home Occupancy Rates by Year: United States, 1996-2000

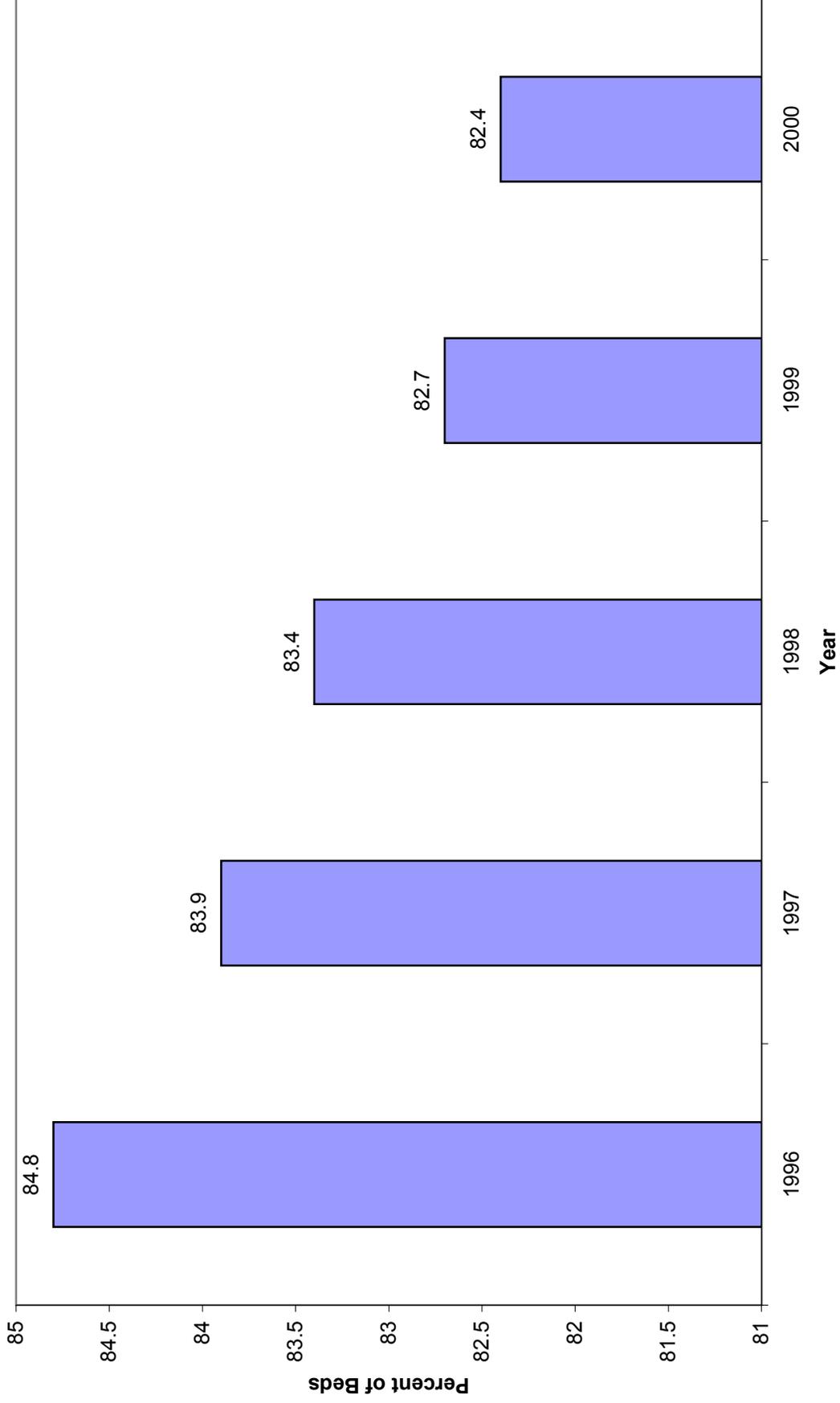
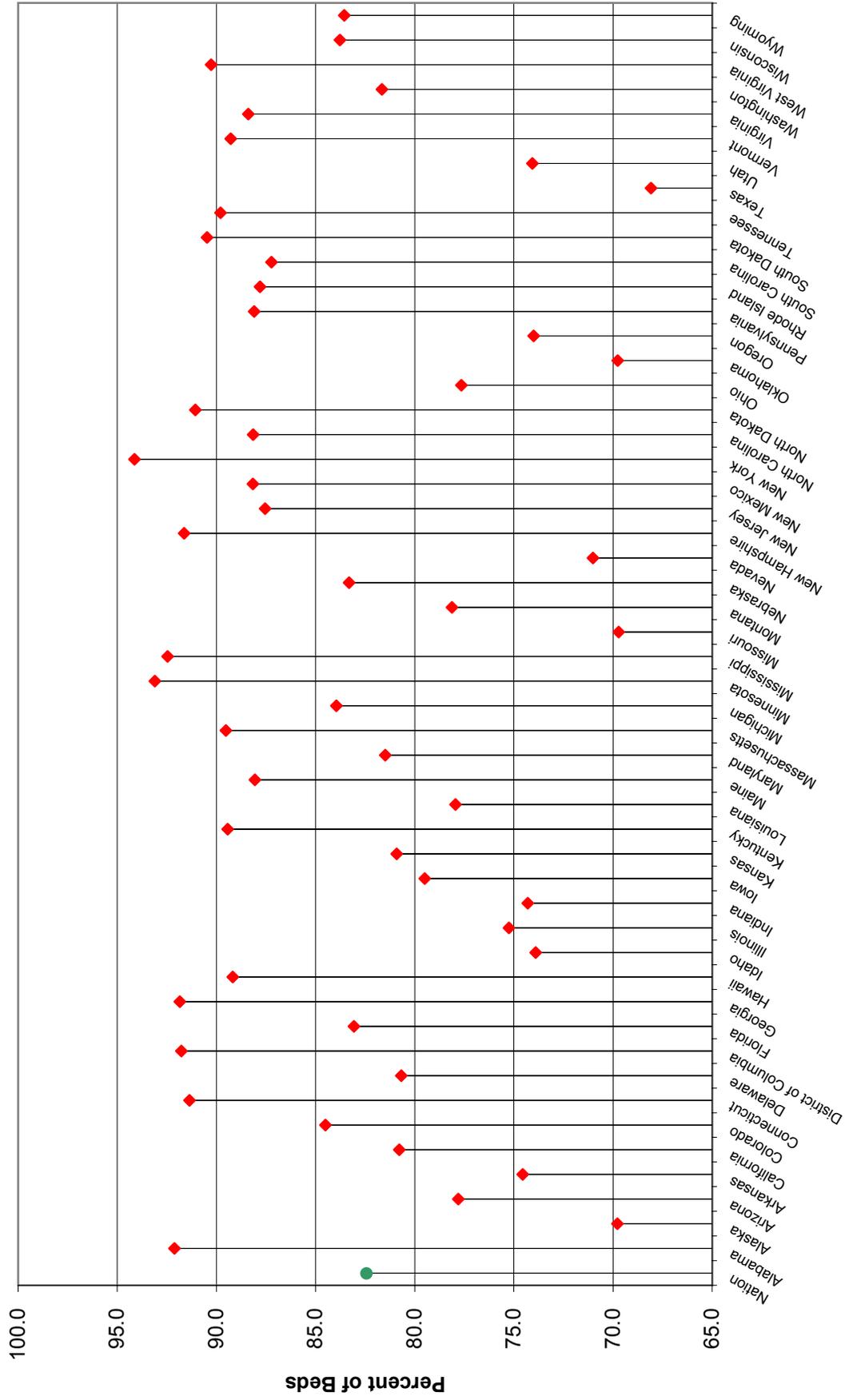


Figure 8. Nursing Home Occupancy Rates by State: United States, 2000



Characteristics of Nursing Home Residents

- More than 2.9 million individuals resided in our nation's nursing homes in 2000.

Table 5

- In 2000, nursing homes reported that 70 percent of their residents were female.

Figure 9, Tables 5 and 7

- A higher proportion of residents of government nursing homes are male and under age 65.

Table 5

- Homes that participate only in Medicare have a higher male to female ratio than do dually-certified or Medicaid-only nursing homes.

Table 7

- In 2000, the proportion of female nursing home residents varied from 58.5% of all residents in Alaska to 72.9% in Alabama.

Table 8

- In 2000, 75 percent all nursing home residents were 75 years of age or older.

Figure 10, Tables 5 and 9

- Residents under the age of 65 account for a large proportion of the population of nursing homes with more than 200 beds.

Tables 5 and 11

- In 2000, west-coast and southwestern states had lower percentages of residents aged 65 years and older on average, while north central states had higher percentages of residents in this category.

Figure 11, Table 10

- Hawaii, Iowa, Kansas, Minnesota, Nebraska, North Dakota, South Dakota, and Wisconsin have the highest proportions of residents aged 95 years and older. Alaska, California, Illinois, and Louisiana have the highest proportion of nursing home residents under the age of 65.

Table 10

- West coast and southwestern states had lower percentages of residents aged 85 years and older on average, while the percentage of residents in central, north central, and northeastern states had higher percentages of residents in this category in 2000.

Figure 12, Table 10

- Race distribution rates remained stable from 1998, to and 2000. White residents made up about 85 percent of the nursing home population in 2000. The same year, Black and Hispanic residents comprised approximately 10 and 3 percent, respectively, of the population. In 2000, fewer than 2 percent of nursing home residents were Asian/Pacific Islanders and Native Americans.

Figure 13, Tables 5 and 12

- Over 20 percent of the population of nursing homes with 200 or more beds consist of non-white residents, while minority groups account for less than 15 percent of the population of smaller nursing homes.

Tables 5 and 11

Figures and supporting tables are italicized.

Puerto Rico and the Virgin Islands have been excluded from the discussion due to the small number (fewer than 10) of nursing homes in those entities.

- In 2000, more than a third of nursing home residents required extensive assistance with 4 or more Activities in Daily Living (bed mobility, transferring, dressing, eating, or toileting).

Figure 14, Tables 13 and 14

- Small facilities with fewer than 50 beds report smaller populations of residents with high levels of ADL impairments.

Table 13

- As measured by the Cognitive Performance Scale, more than one-quarter of nursing home residents had no cognitive impairment in 2000, while more than 15 percent had severe or very severe cognitive impairment.

Figure 15, Tables 15 and 16

- Government facilities have a higher proportion of residents with severe cognitive impairment relative to other ownership types.

Table 15

- Facilities with fewer than 50 beds report that more than 50 percent of their residents have no cognitive impairment.

Table 15

- Technical Notes:

The source of these data is the Minimum Data Set (MDS). These data are collected and reported by nursing homes.

The Cognitive Performance Scale (Morris, 1994) is one method for estimating the cognitive ability of nursing home residents based on items reported in the MDS assessment. Based on the scoring algorithm a resident is classified as having very severe, severe, moderately severe, moderate, mild, very mild, or no impairment.

The activities of daily living (ADLs) evaluated were: bed mobility, dressing, eating, transferring, and toileting. There are many ways of estimating the amount of impairment in ADLs. For these charts and tables, dependency was considered to exist only when a resident required extensive assistance with one or more of these activities. The data presented are summary counts of the number of ADLs with which a resident requires extensive assistance.

References:

Morris JN, Fries BE, Mehr DR, Hawes C, Phillips C, Mor V, Lipsitz LA. MDS Cognitive Performance Scale. *J Gerontol.* 1994 Jul;49(4):M174-82.

Figures and supporting tables are italicized.

Puerto Rico and the Virgin Islands have been excluded from the discussion due to the small number (fewer than 10) of nursing homes in those entities.

Figure 9. Nursing Home Residents by Gender by Year: United States, 1998-2000

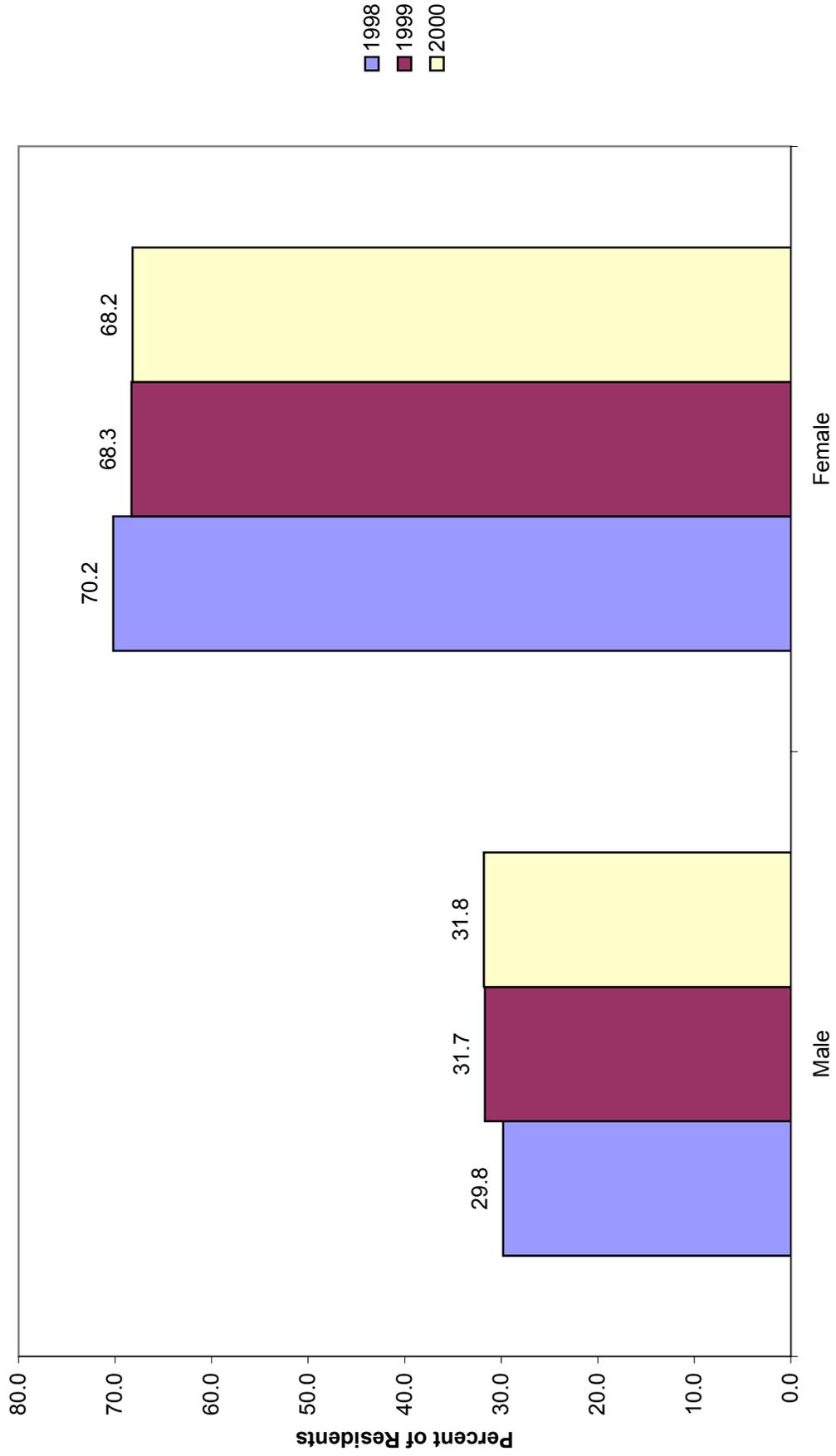
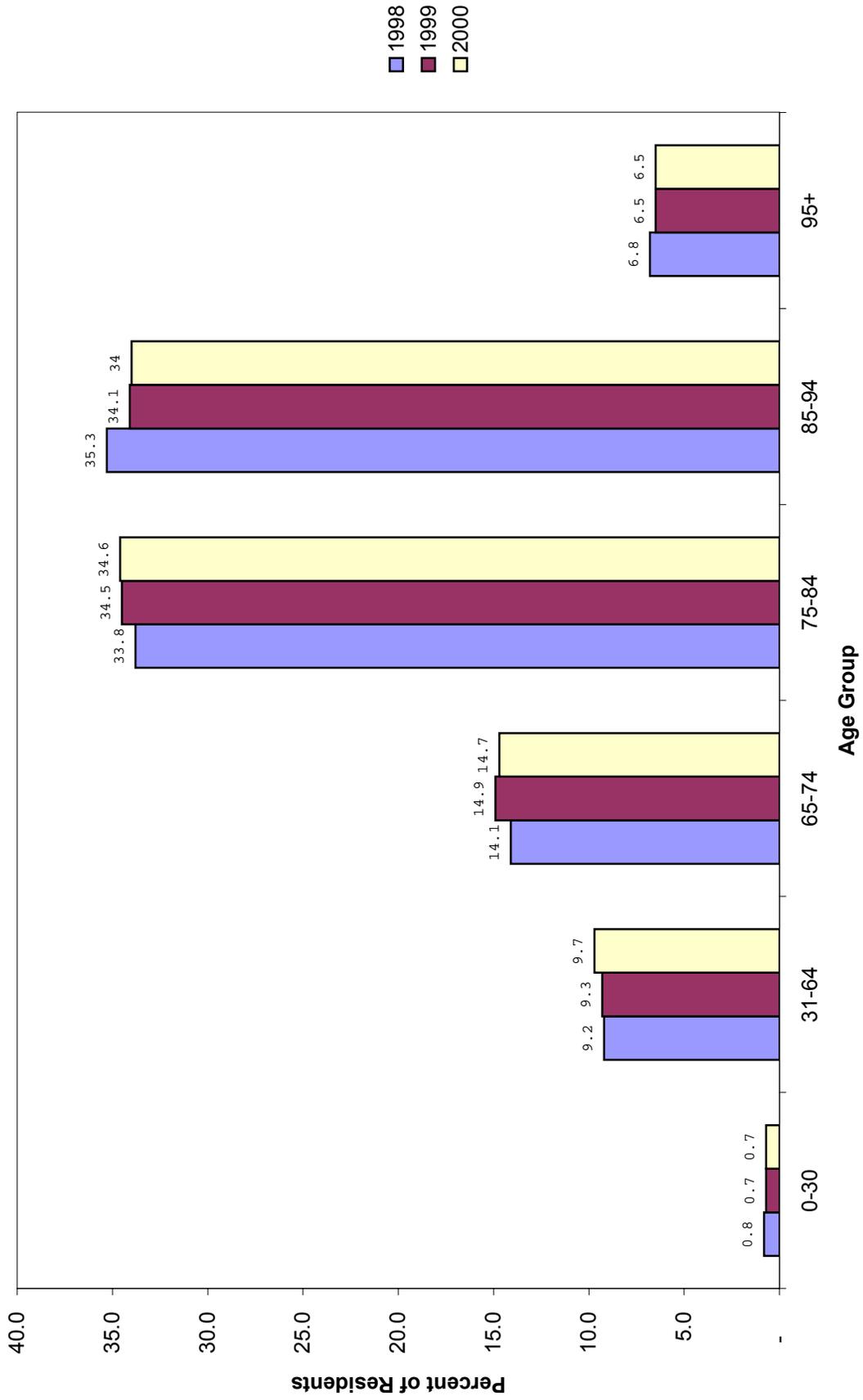
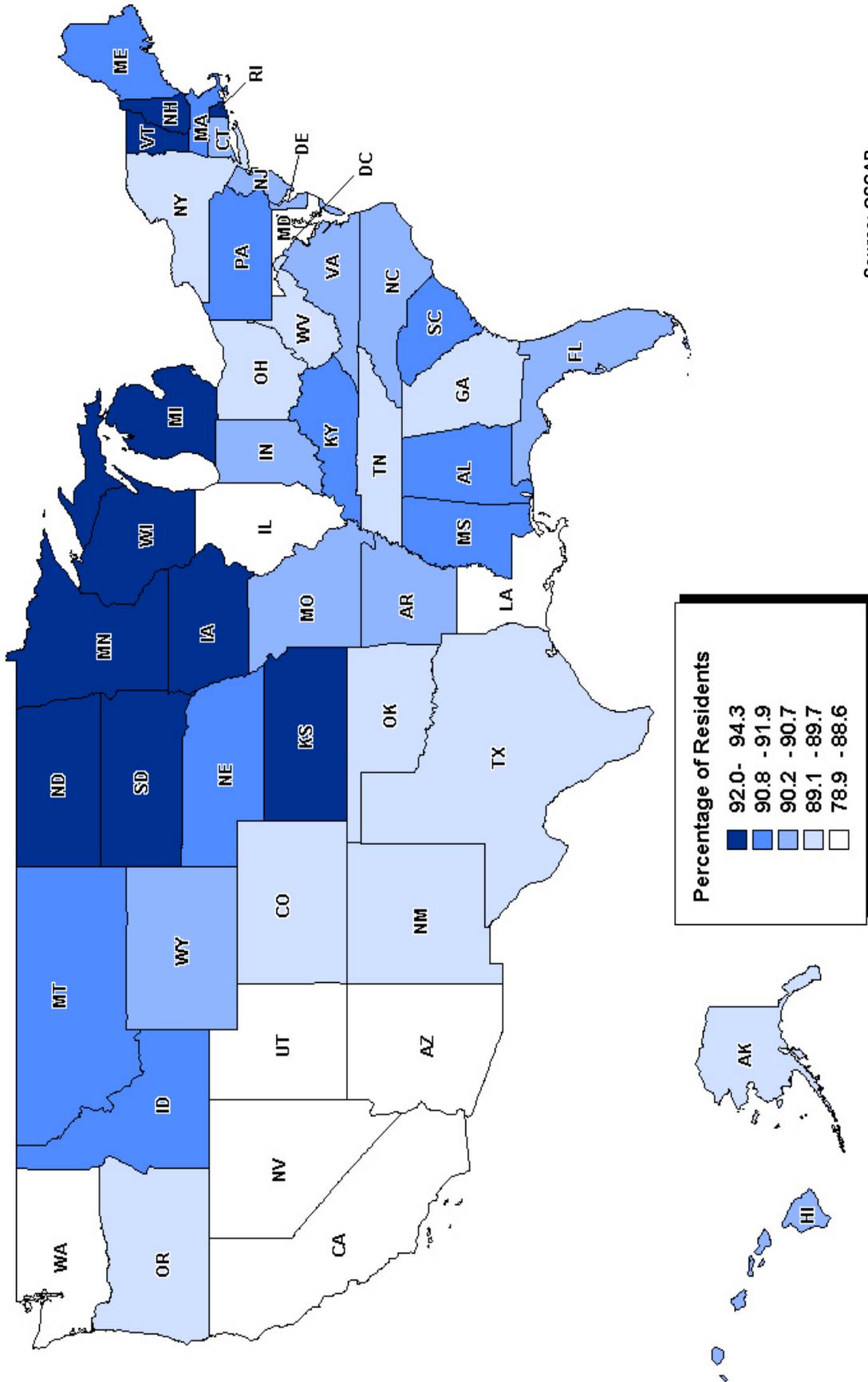


Figure 10. Nursing Home Residents by Age Group by Year: United States, 1998-2000



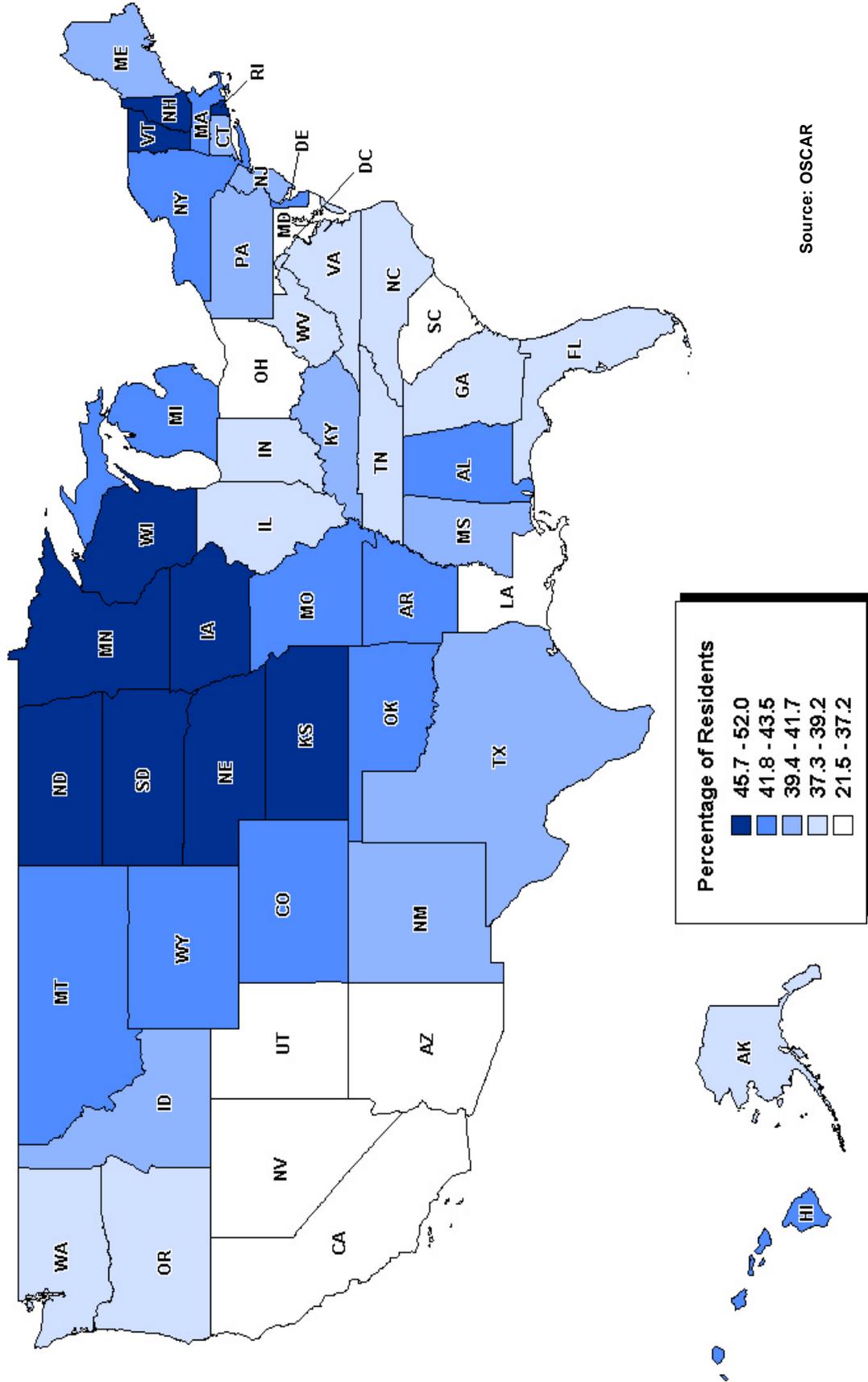
Source: MDS

Figure 11. Percent of Nursing Home Residents Aged 65 Years and Older by State: United States, 2000



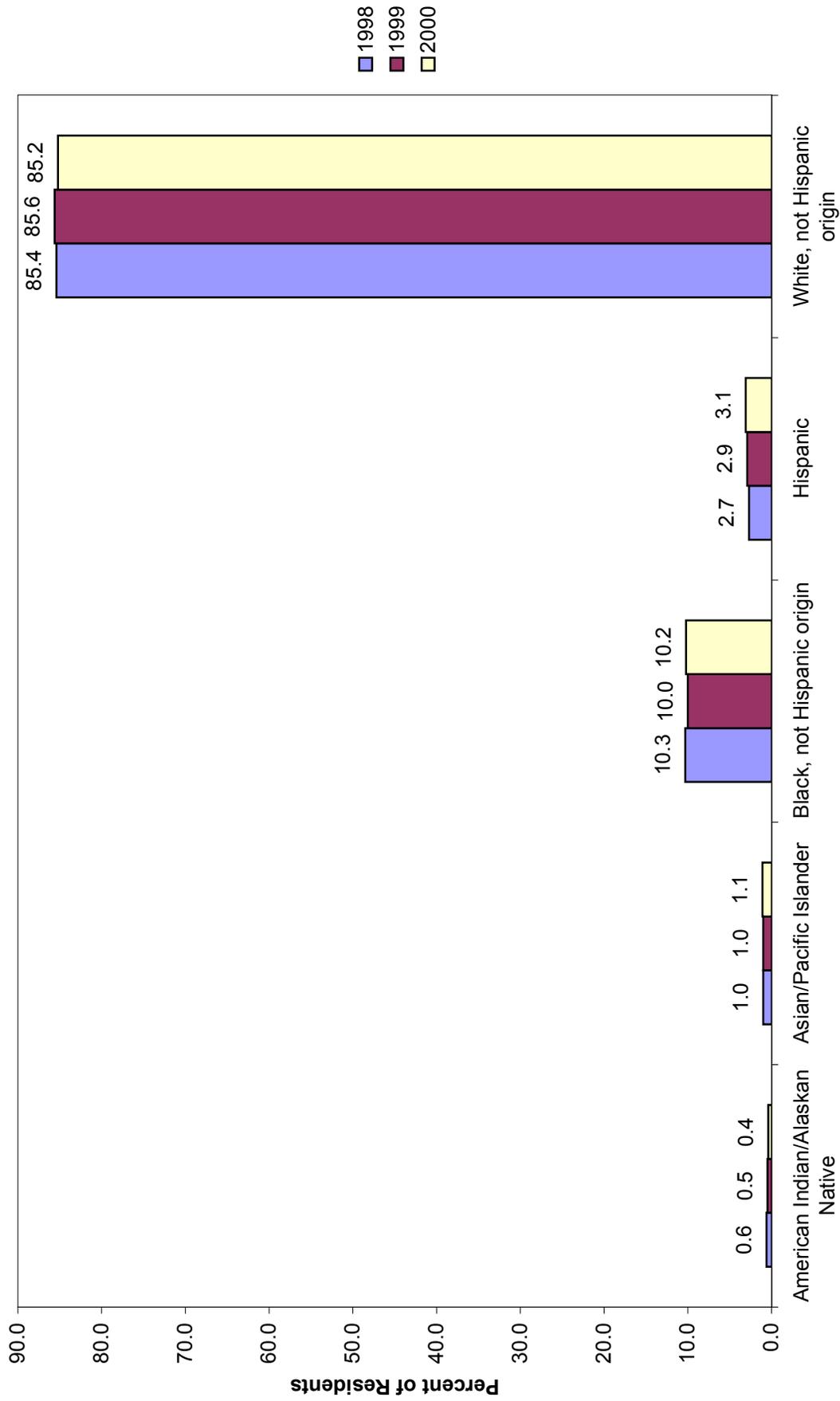
Source: OSCAR

Figure 12. Percent of Nursing Home Residents Aged 85 Years and Older by State: United States, 2000



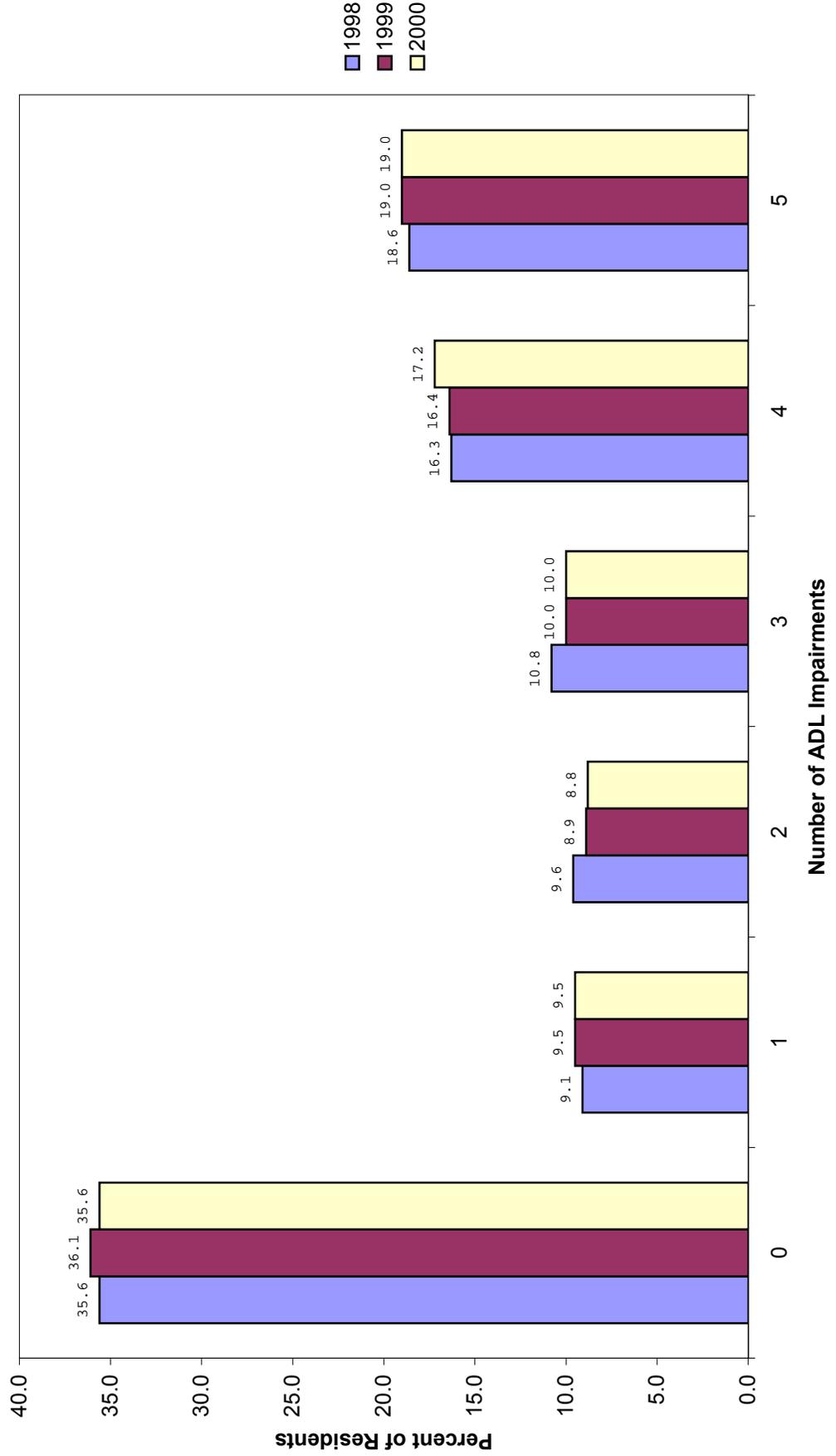
Source: OSCAR

Figure 13. Nursing Home Residents by Race by Year: United States, 1998-2000



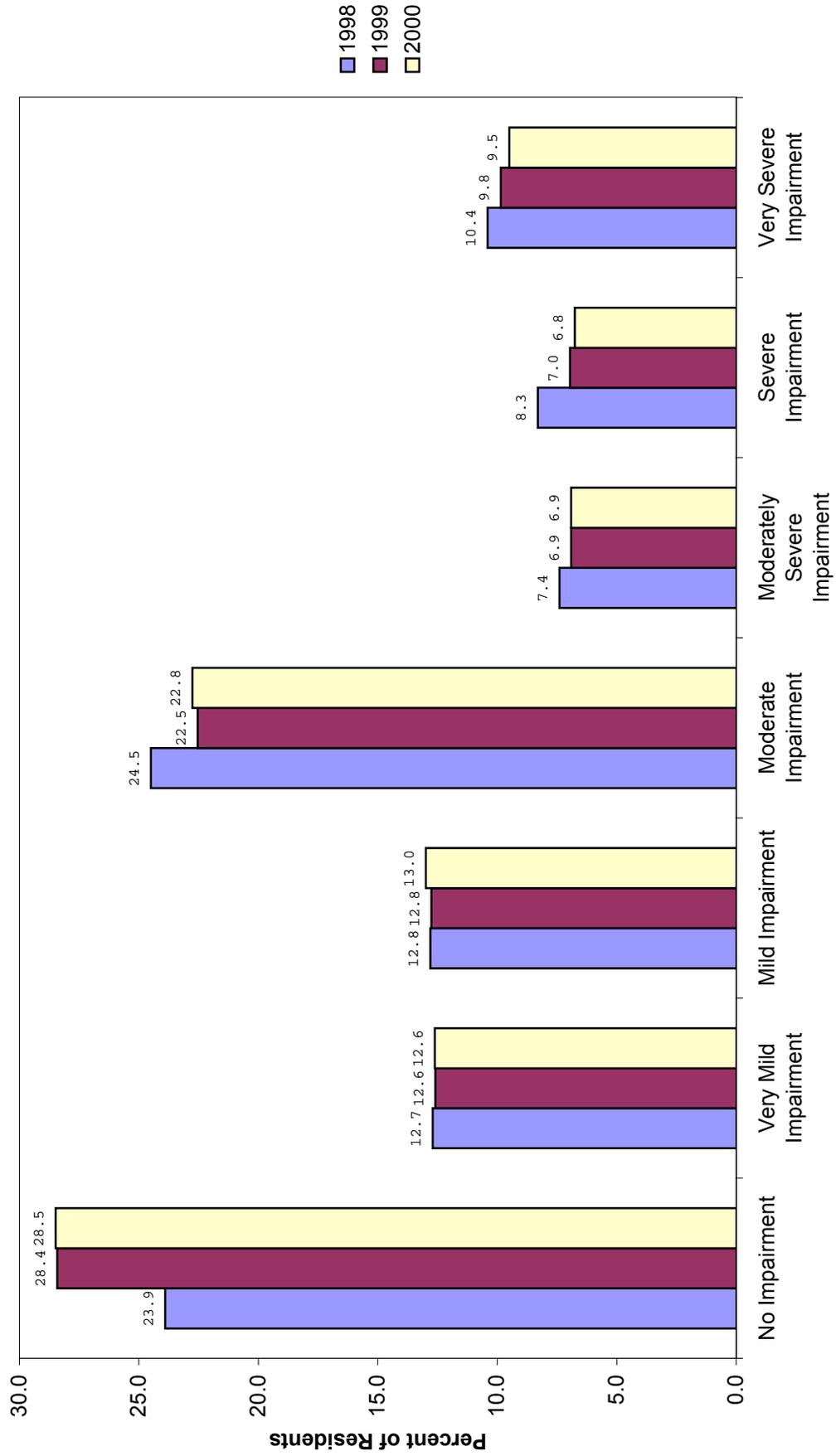
Source: MDS

Figure 14. Distribution of Number of ADL Impairments in Nursing Home Residents by Year: United States, 1998-2000



Source: MDS

Figure 15. Distribution of Cognitive Impairments in Nursing Home Residents by Year: United States, 1998-2000



Nursing Home Resident Clinical Characteristics

Pressure Ulcers

- The median pressure ulcer prevalence was 7.1, 7.4, and 7.7 in the third quarters of 1998, 1998, and 2000, respectively. Although the prevalence appears to be increasing, the quarterly data presented in Table 17 shows that the median prevalence fluctuates and that there is no obvious trend over time.

Figure 16, Table 17

- In the third quarter of 2000, the median level of pressure ulcer prevalence was greater than 10 percent in 4 States.

Figures 17 and 18, Table 18

- From the fourth quarter of 1998 to the fourth quarter 2000, the median incidence of pressure ulcers remained relatively stable at about 2 percent.

Figure 19, Tables 19, 20

- Technical notes:

The source of these data is the Minimum Data Set (MDS). These data are collected and reported by nursing homes.

We defined pressure ulcer as any pressure ulcer of stage 2 or greater.

Prevalence was assessed using the midpoint of each calendar quarter as a starting point. Cases of interest occurred 60 days before or after the midpoint and were unique. That is, if a resident had two assessments collected during the observation period, only the one closest in time to the starting point was retained. Prevalence was calculated as the number of identified cases divided by the number of eligible residents at baseline (the

midpoint estimate of the nursing home population).

Incidence of pressure ulcers was calculated by identifying all pressure ulcer cases that are not noted on admission or readmission assessments during a quarter of interest (e.g., January 1 to March 31). Each assessment indicating presence of a pressure ulcer is then compared with the resident's immediately preceding assessment. If the preceding comparison assessment indicates that no pressure ulcer is present, then the index assessment is considered an incident pressure ulcer. Incident pressure ulcers constitute the numerator of the quarter. The denominator consists of all eligible assessments closest to the midpoint of the quarter (but not more than 60 days from the midpoint) that indicate presence of no pressure ulcers.

Figures and supporting tables are italicized.

Puerto Rico and the Virgin Islands have been excluded from the discussion due to the small number (fewer than 10) of nursing homes in those entities.

**Figure 16. Median Pressure Ulcer Prevalence in Nursing Home Residents by Year:
United States, Third Quarter 1998-2000**

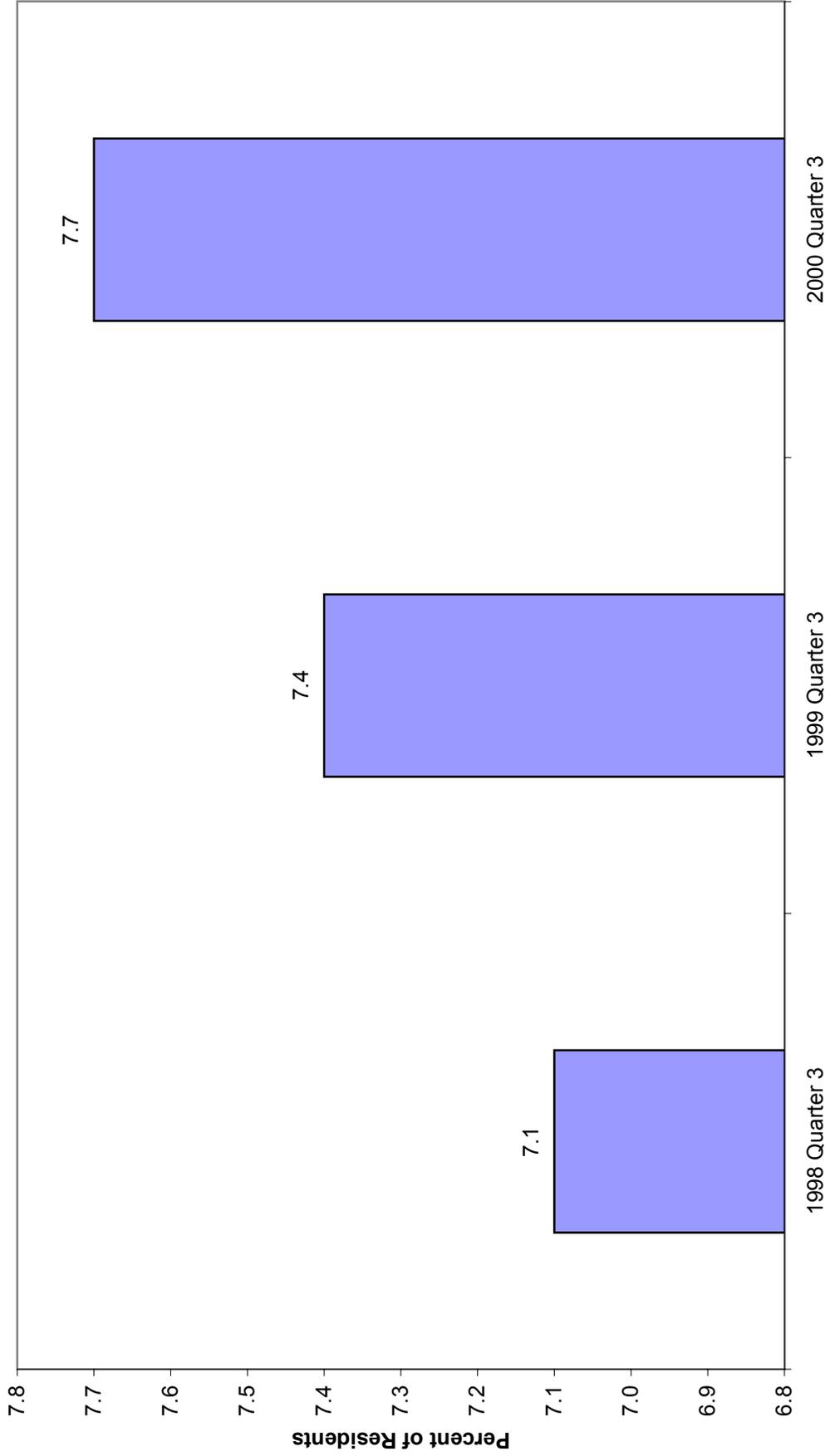
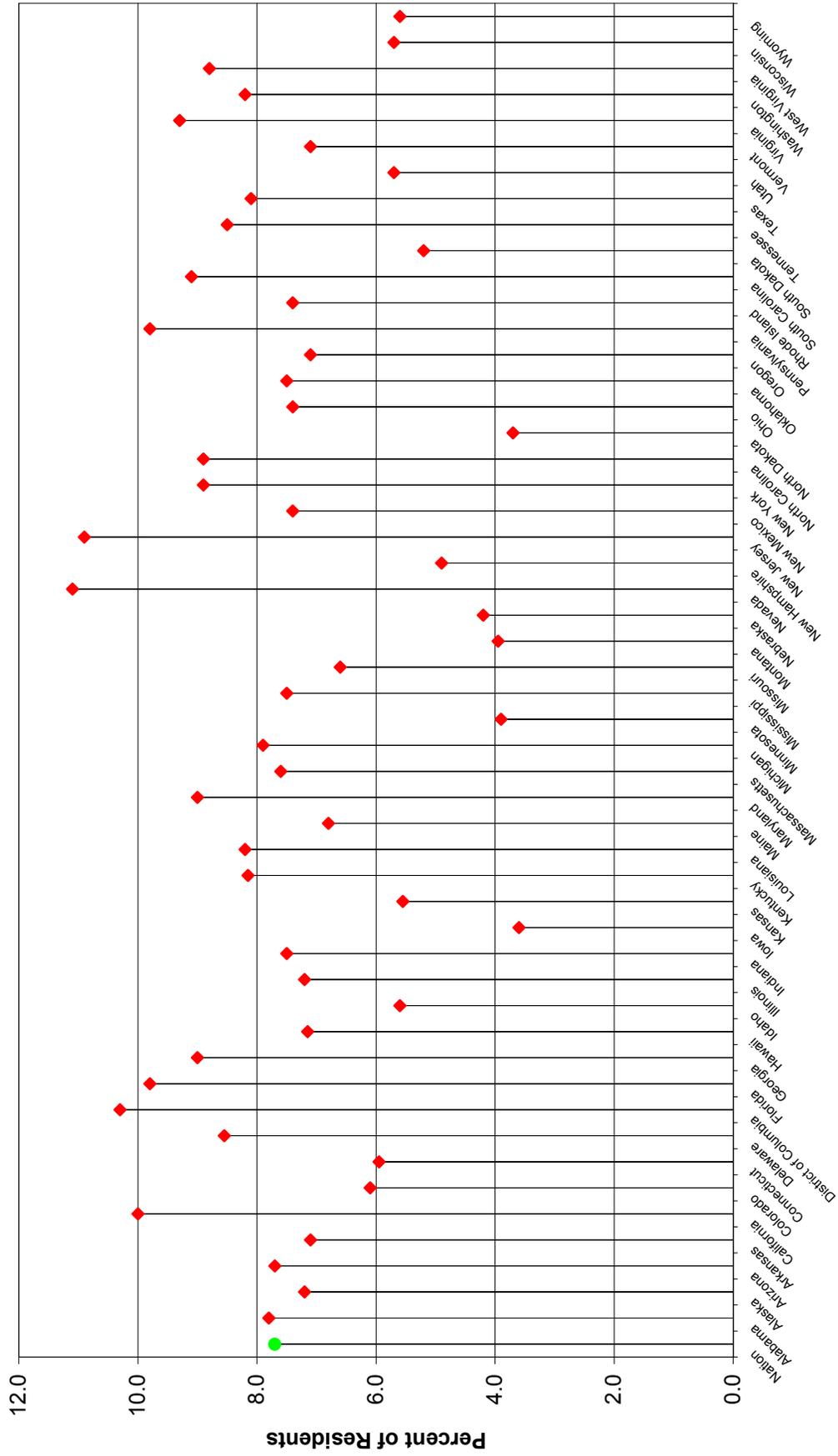
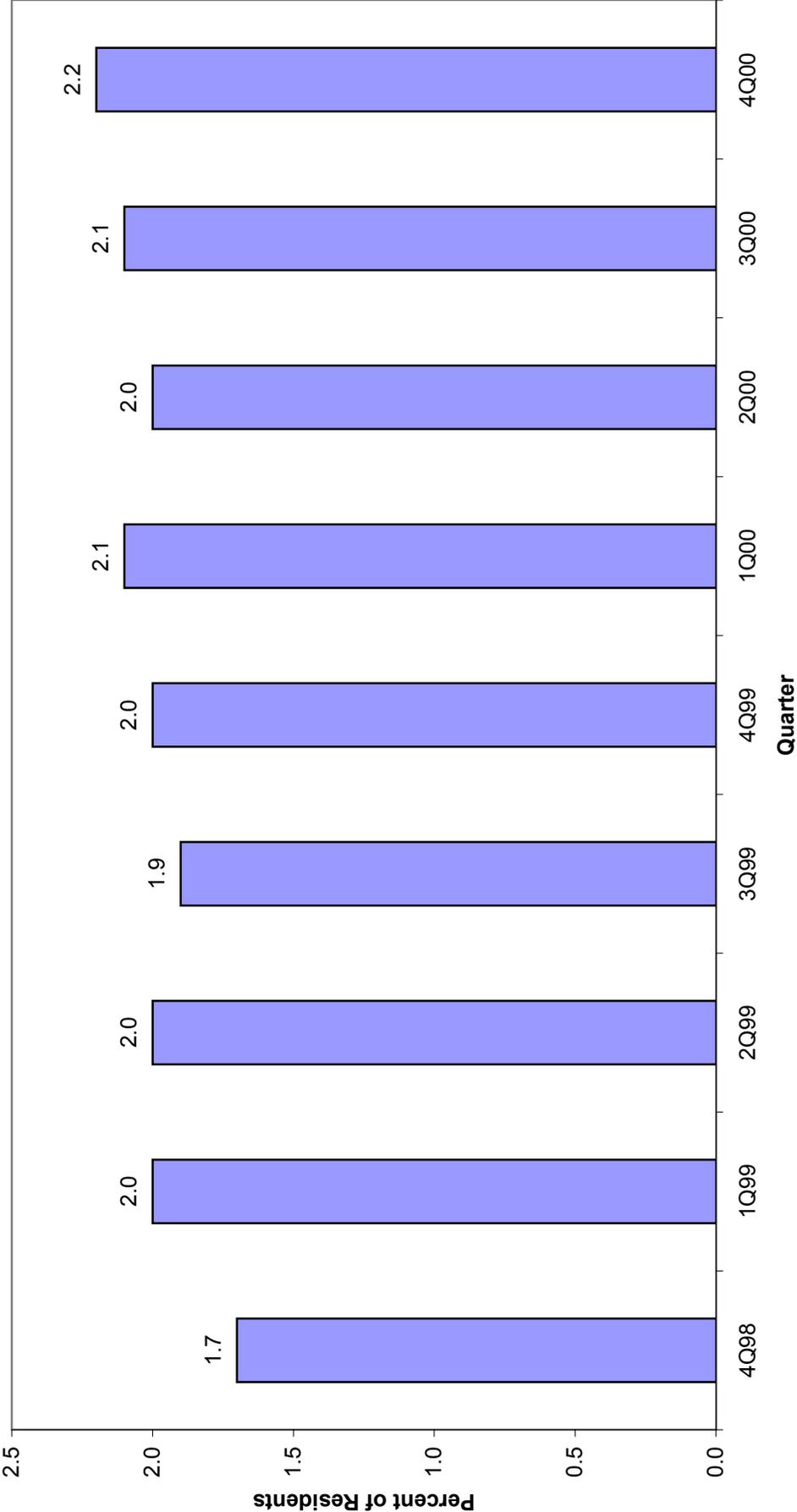


Figure 17. Median Pressure Ulcer Prevalence in Nursing Home Residents by State: United States, Third Quarter 2000



Source: MDS

Figure 19. Incidence of Pressure Ulcers in Nursing Home Residents by Quarter: United States, 1998-2000



Source: MDS

Nursing Home Resident Clinical Characteristics

Restraint Use

- In 5 States, the median prevalence of use of restraints was 15 percent or greater in the third quarter of 2000.

Figures 20 and 21, Table 22

- The median prevalence of restraints has decreased from 7.5 percent to 6.3 percent over the years examined, while the median incidence of new restraint use has remained steady at about 1 percent.

Tables 21, 22, 23, and 24

- Technical Notes:

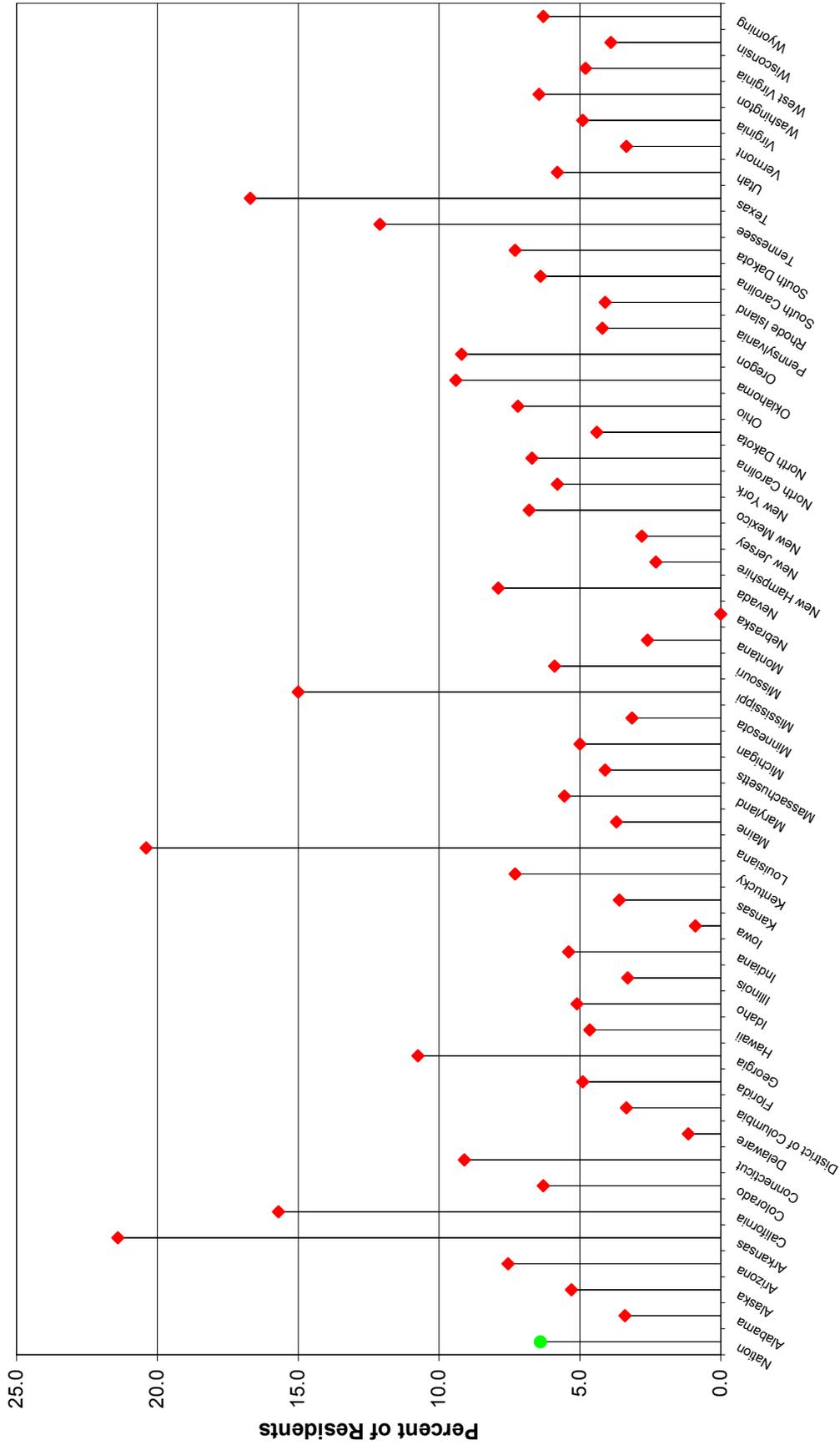
The source of these data is the Minimum Data Set (MDS). These data are collected and reported by nursing homes.

To estimate the incidence and prevalence of physical restraint use, we adopted a conservative approach, considering only individuals whom the nursing home reported were in a trunk restraint, limb restraint, or some sort of restraining chair at least once during the 7 days prior to the assessment. It is important to note that we did not report the use of bed rails for this measure, because of our concern about biases in the measurement of this item.

Figures and supporting tables are italicized.

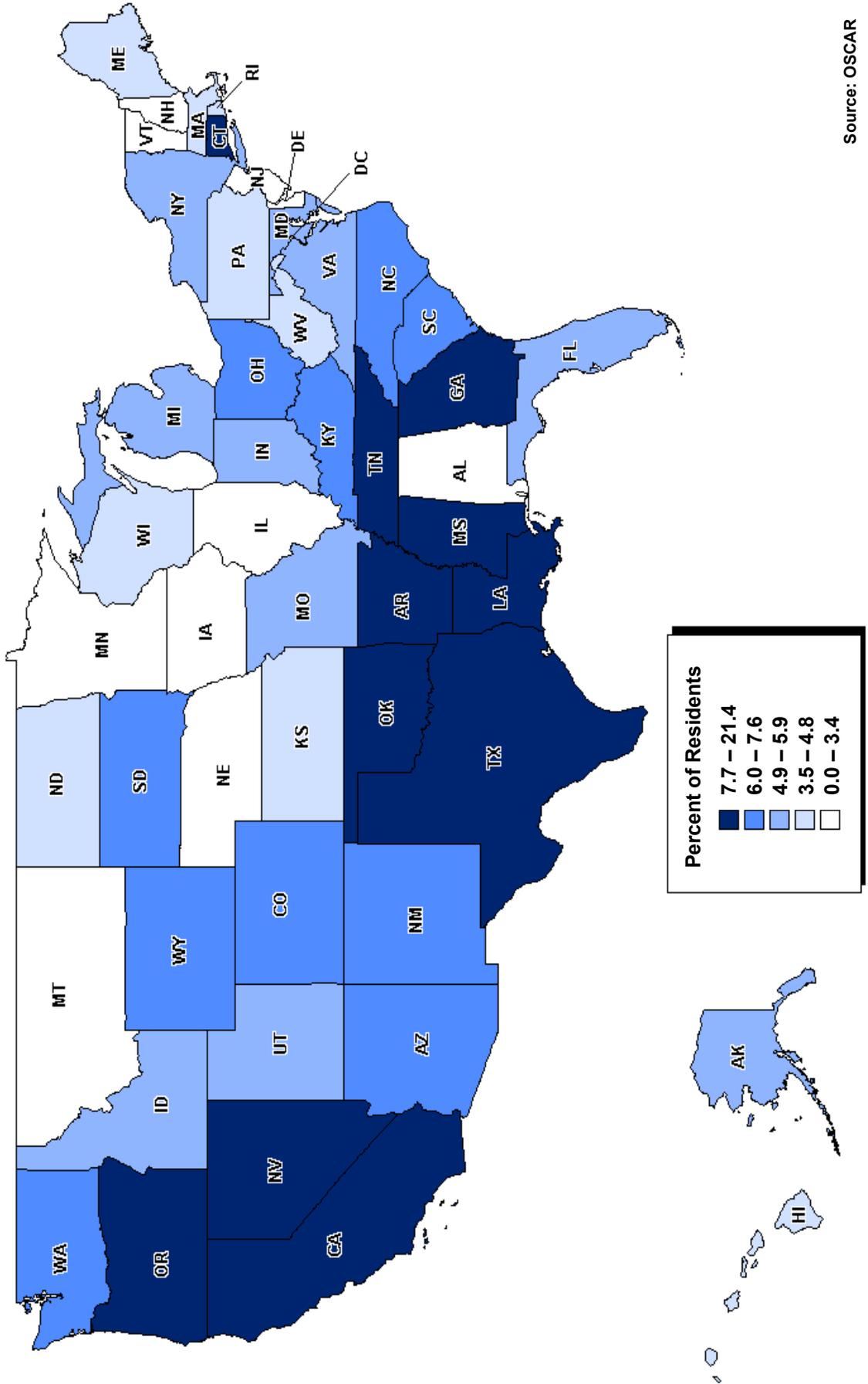
Puerto Rico and the Virgin Islands have been excluded from the discussion due to the small number (fewer than 10) of nursing homes in those entities.

Figure 20. Median Prevalence of Use of Restraints in Nursing Home Residents by State: United States, Third Quarter 2000



Source: MDS

Figure 21. Prevalence of Physical Restraints in Nursing Home Residents by State: United States, Third Quarter 2000



Source: OSCAR

Nursing Home Resident Clinical Characteristics

Tube Feeding, Weight Loss, and Dehydration

- The prevalence of tube feeding has been fairly steady, at 4.2 – 4.4 percent, since the beginning of 1999. State level tube feeding prevalence rates are displayed in Figures 22 and 23.

Figures 22 and 23, Table 25

- In the third quarter of 2000, the median prevalence of weight loss in nursing home residents was 9.5 percent. This is lower than the third quarter 1999 prevalence of 10.2 percent, and the third quarter 1998 prevalence of 10.1 percent.

Figure 24, Tables 27 and 28

- There has been a decrease in the 90th percentile level of prevalence of dehydration in nursing home residents from 2.7 percent during the third quarter of 1998 to 1.7 percent during the third quarter of 2000.

Figure 25, Tables 29 and 30

- In the third quarter of 2000, the national 90th percentile level of prevalence of dehydration was 1.7 percent. Across states, the prevalence of dehydration at the 90th percentile did not vary much from the national value.

Figure 26, Tables 29 and 30

- Technical Notes:

The source of these data is the Minimum Data Set (MDS). These data are collected and reported by nursing homes.

To estimate the prevalence of feeding tube use in nursing homes we identified all individuals whom the nursing home

reported had a feeding tube, defined as “any tube that can deliver food/nutritional substances/fluids/medications directly into the gastrointestinal system.” We excluded individuals admitted to the nursing home with feeding tubes because we wanted to separate the use of feeding tubes by nursing homes from the use of feeding tubes by hospitals.

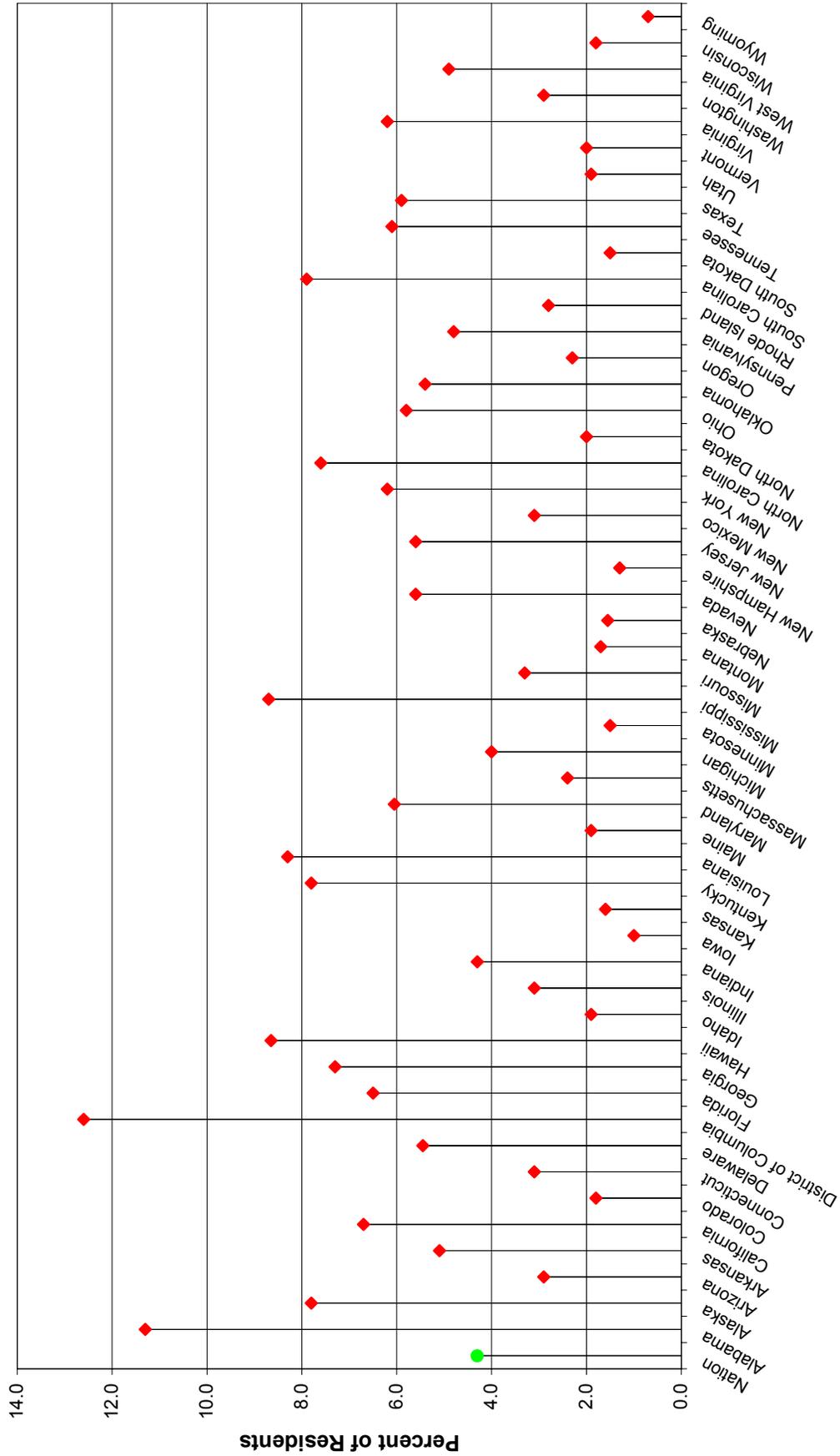
To estimate the prevalence of weight loss, we identified all individuals whom the nursing home indicated had experienced weight loss of more than 5 percent in the 30 days prior the assessment or more than 10 percent in the last 180 days. It is important to note that we excluded individuals who were reported by the nursing home to be in end-stage disease or who were receiving hospice care.

To estimate the prevalence of dehydration, we identified all individuals for whom the nursing home indicated that fluid output exceeds fluid input. It is important to note that we excluded individuals who were reported by the nursing home to be in end-stage disease or who were receiving hospice care.

Figures and supporting tables are italicized.

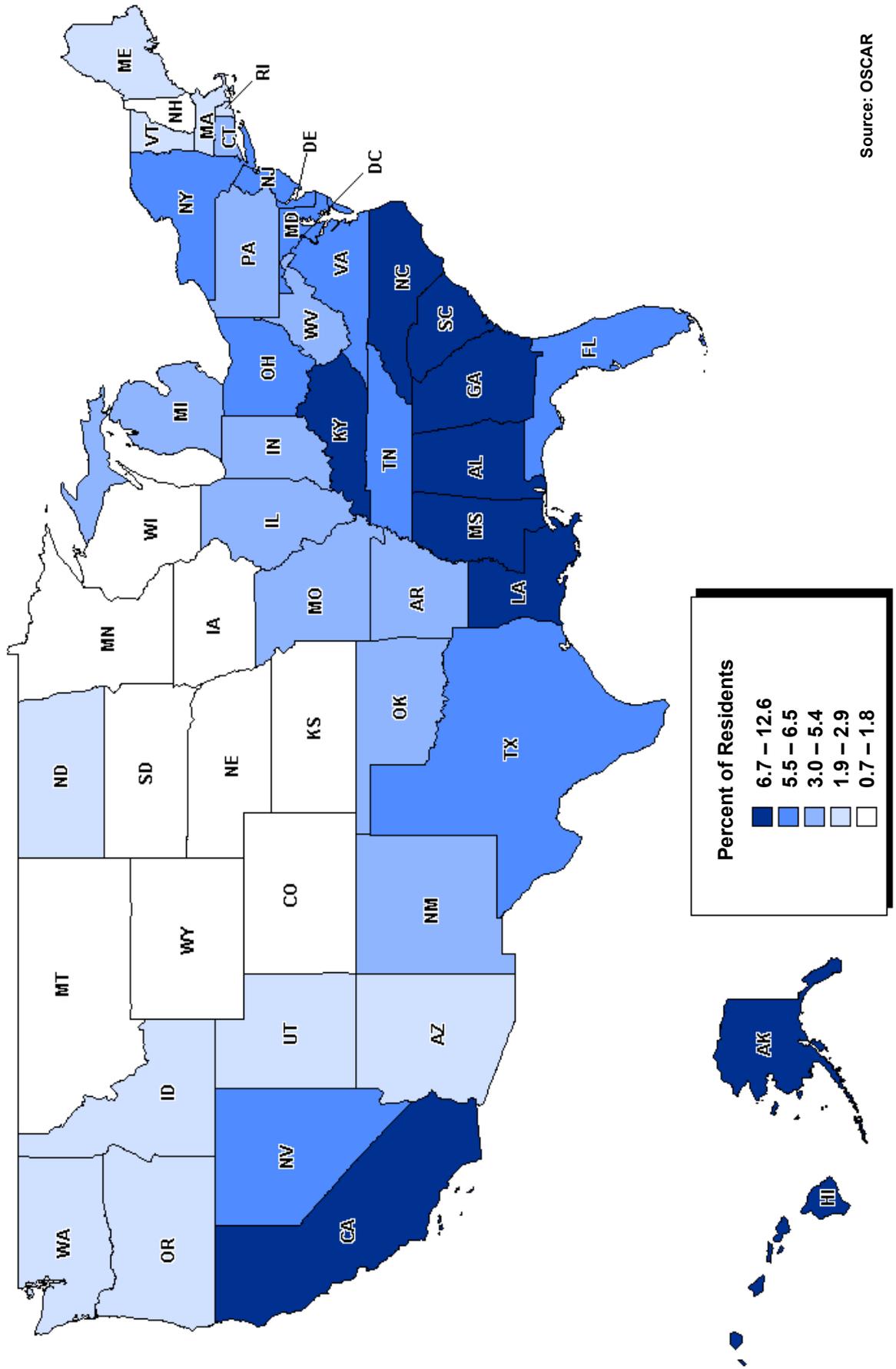
Puerto Rico and the Virgin Islands have been excluded from the discussion due to the small number (fewer than 10) of nursing homes in those entities.

Figure 22. Median Prevalence of Tube Feeding in Nursing Home Residents by State: United States, Third Quarter 2000



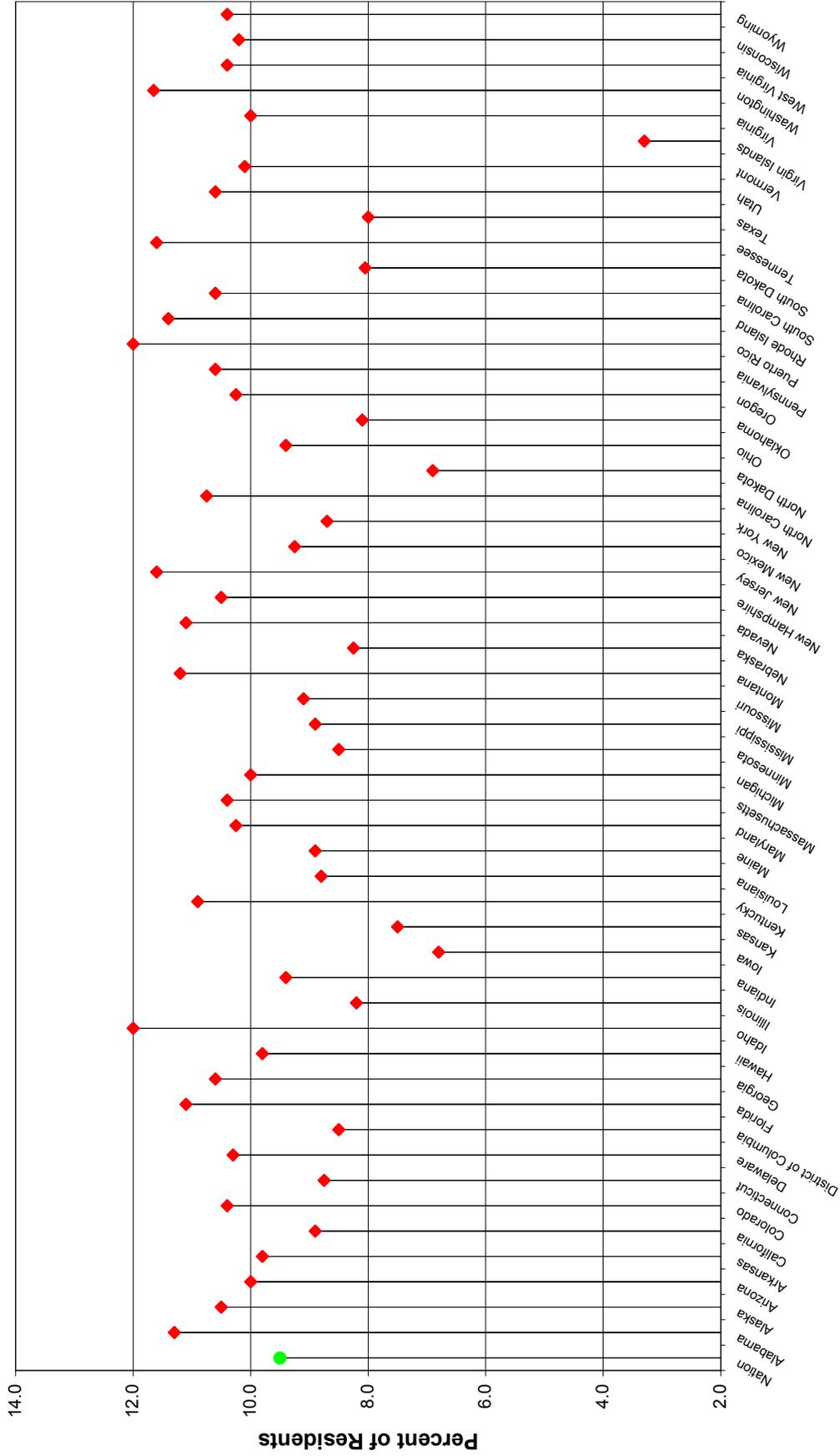
Source: MDS

Figure 23. Prevalence of Tube Feeding in Nursing Home Residents by State: United States, Third Quarter 2000



Source: OSCAR

Figure 24. Median Prevalence of Weight Loss in Nursing Home Residents by State: United States, Third Quarter 2000



Source: MDS

Figure 25. 90th Percentile Level of Prevalence of Dehydration in Nursing Home Residents by Year: United States, Third Quarter 1998-2000

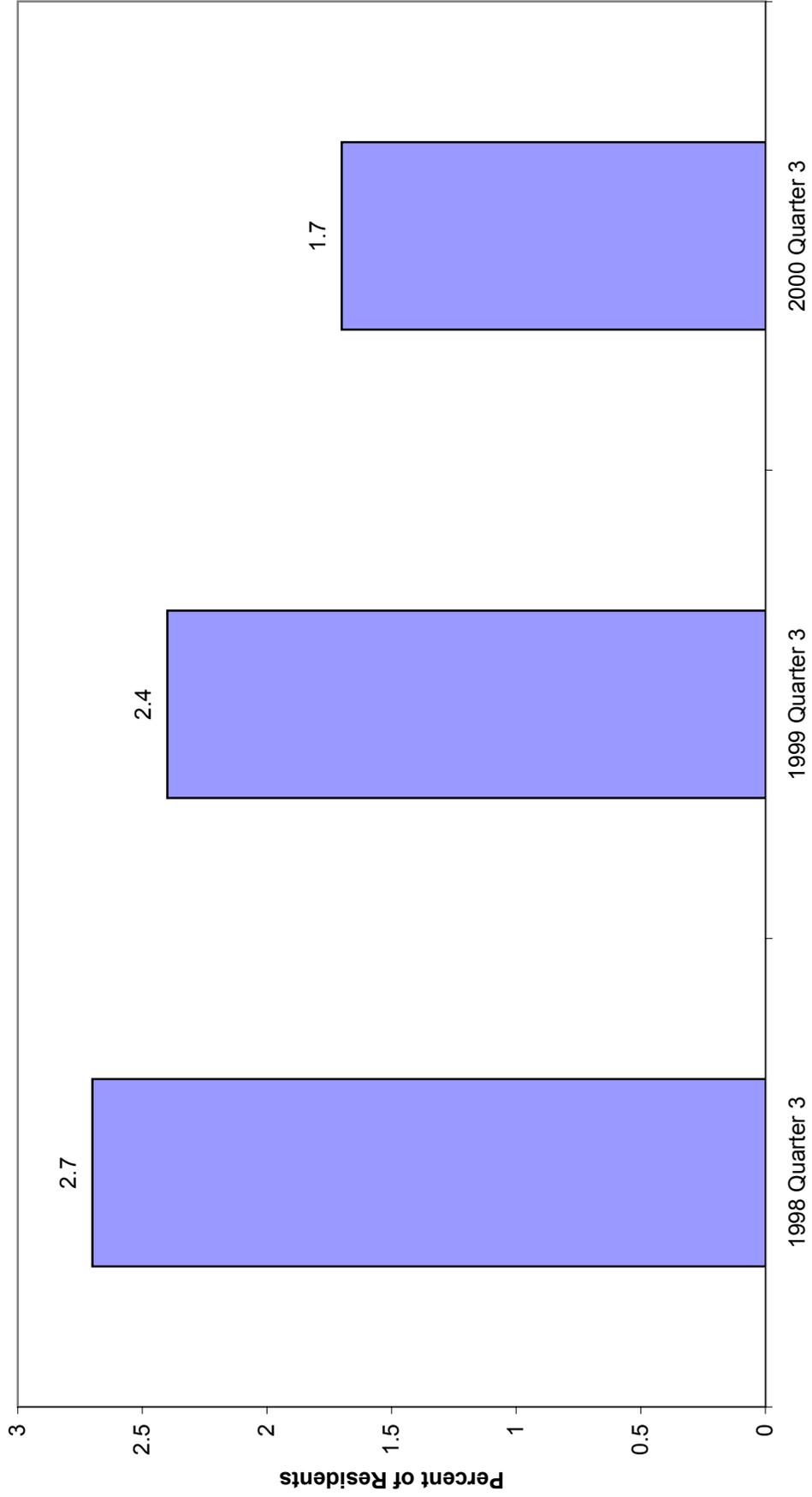
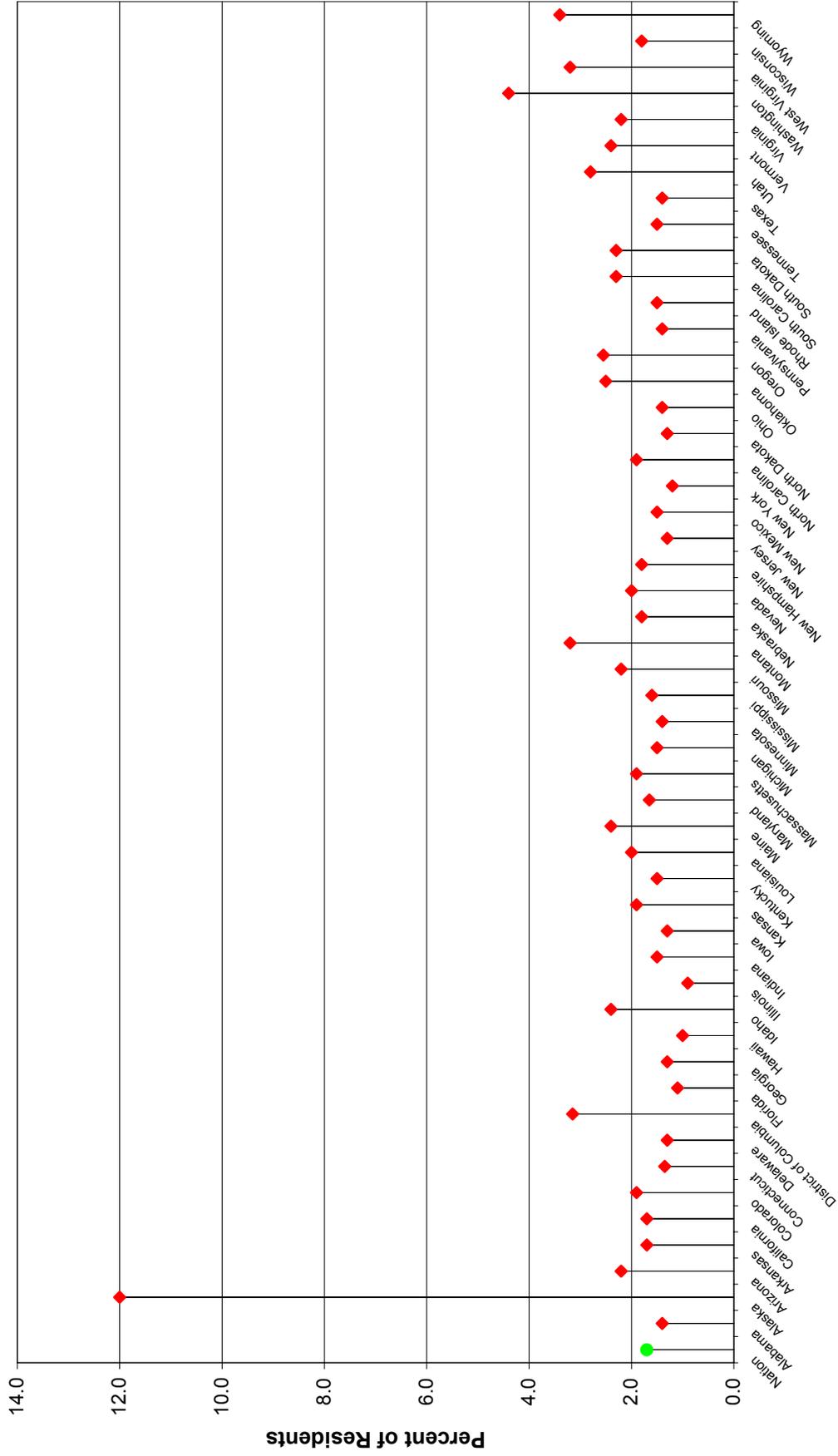


Figure 26. 90th Percentile Level of Prevalence of Dehydration in Nursing Home Residents by State: United States, Third Quarter 2000



Source: MDS

Nursing Home Resident Clinical Characteristics

Incontinence

- Nursing homes report that more than, in 2000, one third of their residents experienced bowel or bladder incontinence all or most of the time.

Figures 27; Tables 31 and 32

- The median prevalence of severe bowel or bladder incontinence has varied little since the third quarter of 1998; between 35.2 and 35.6 percent of residents were severely incontinent between third quarter 1998 and the fourth quarter 2000.

Figure 27, Tables 31 and 32

- Nursing homes reported that the median prevalence of severe bladder and bowel incontinence was above 50 percent in 2 States in 2000. The prevalence of this type of incontinence was less than 20 percent in 4 States in 2000.

Figures 28 and 29, Table 32

- Technical Note:

The source of these data is the Minimum Data Set (MDS). These data are collected and reported by nursing homes.

For this measure, incontinence, we identified persons who were incontinent of bladder or of bowel on almost all occasions. This is a measure of severe incontinence. It is important to note that this differs from the Quality Indicator on incontinence that is used in the survey process.

Figures and supporting tables are italicized.

Puerto Rico and the Virgin Islands have been excluded from the discussion due to the small number (fewer than 10) of nursing homes in those entities.

Figure 27. Prevalence of Severe Bowel or Bladder Incontinence in Nursing Home Residents by Quarter: United States, Quarterly 1998-2000

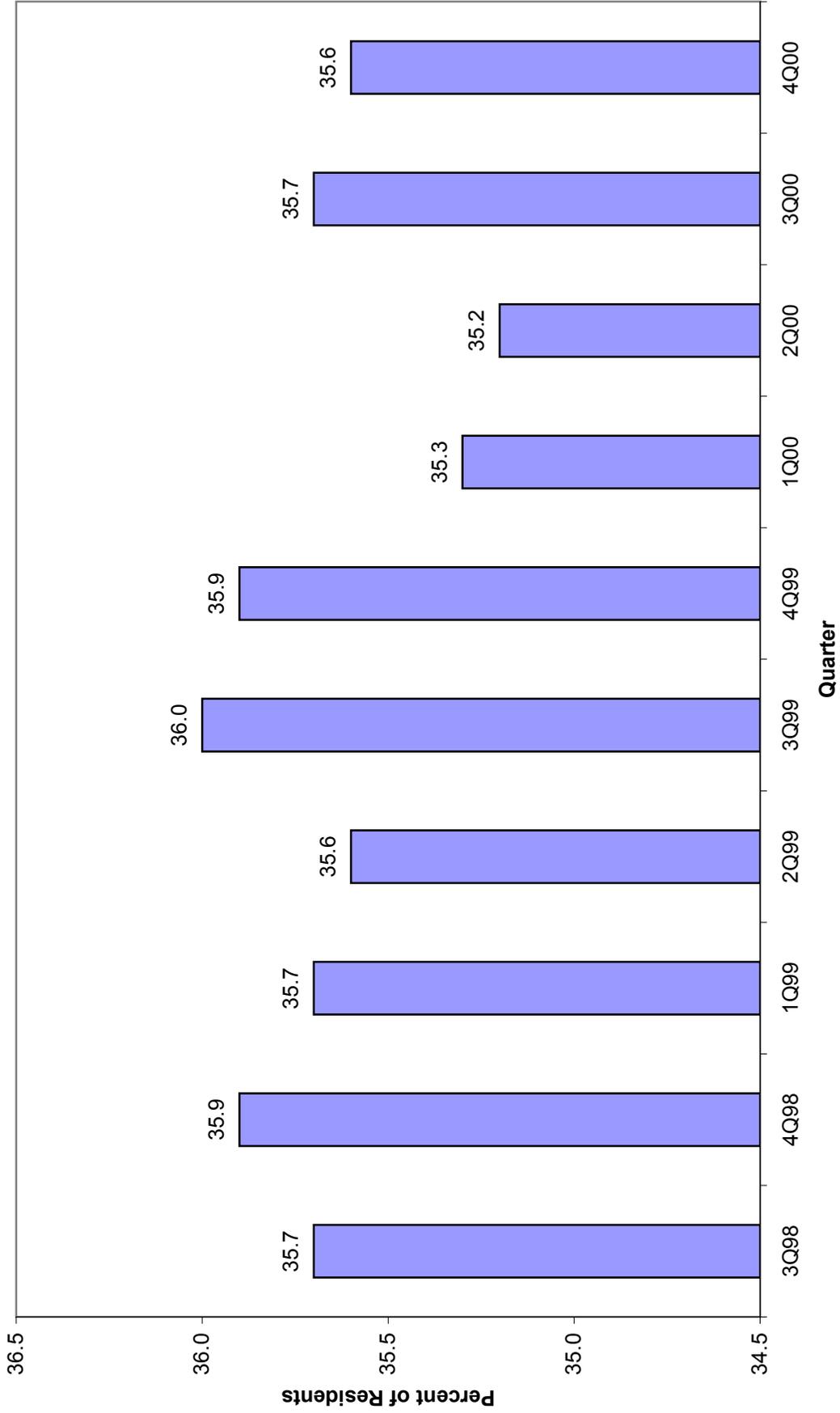
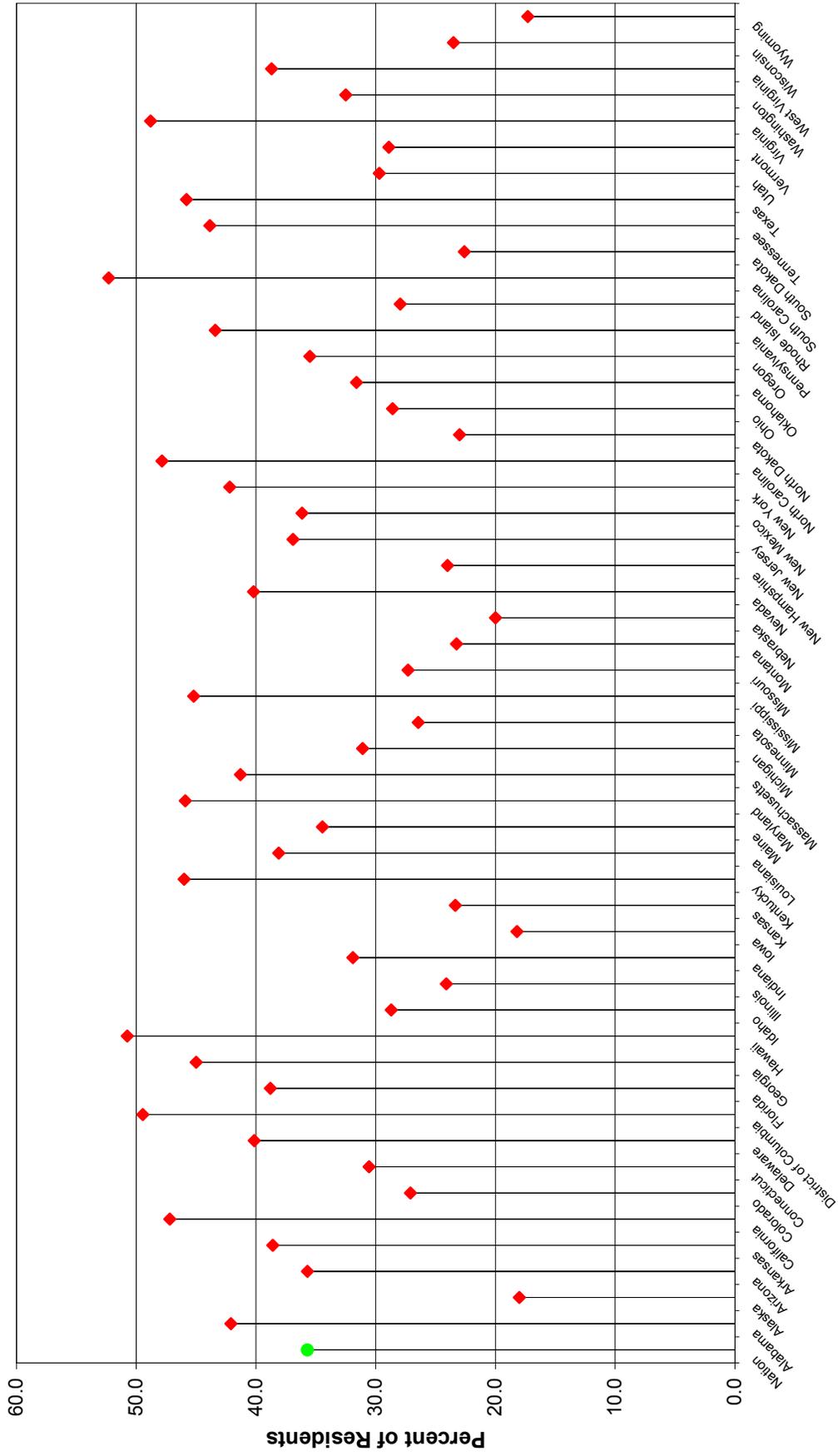


Figure 28. Median Prevalence of Severe Bowel or Bladder Incontinence in Nursing Home Residents by State: United States, Third Quarter 2000



Source: MDS

Nursing Home Survey Results

Mean Number of Health Deficiencies

- Nationally, the average number of health deficiencies per nursing home survey has increased from 5.1 in 1996 to 6.1 in 2000.

Figure 30, Tables 33 and 34

- There is great state variation in the mean number of health deficiencies cited in nursing home surveys in 2000.

Figures 31 and 32, Tables 33 and 34

- Since 1997, the percentage of nursing home surveys that do not result in health deficiencies has decreased substantially; while 22 percent of nursing home surveys did not result in health deficiencies in 1997, fewer than 13 percent were without deficiencies 2000.

Figure 33, Tables 35 and 36

- There is great state variation in the percent of nursing home surveys resulting in zero health deficiency citations in 2000. On average, northeastern states had higher rates of nursing home surveys with zero health deficiencies.

Figures 34 and 35, Tables 35 and 36

- Technical Notes:

These data are from the CMS's Online Survey Certification and Reporting (OSCAR) System, an administrative database that captures data about the survey and certification process. Data from OSCAR are a combination of self-reported data from nursing facilities and compliance data gathered by survey teams.

Note that for all of the calendar year calculations of health deficiencies, the weighting scheme is unique. The facility that was not surveyed during the particular calendar year is not counted and the facility that was surveyed twice during the year is doubly counted, giving it a weight of 2.

The percentage of surveys resulting in zero deficiencies is defined as the number of nursing home surveys that received zero deficiencies divided by the number of surveys conducted that year.

Figures and supporting tables are italicized.

Puerto Rico and the Virgin Islands have been excluded from the discussion due to the small number (fewer than 10) of nursing homes in those entities.

Figure 30. Mean Number of Health Deficiencies Cited in Nursing Home Surveys by Year: United States, 1996-2000

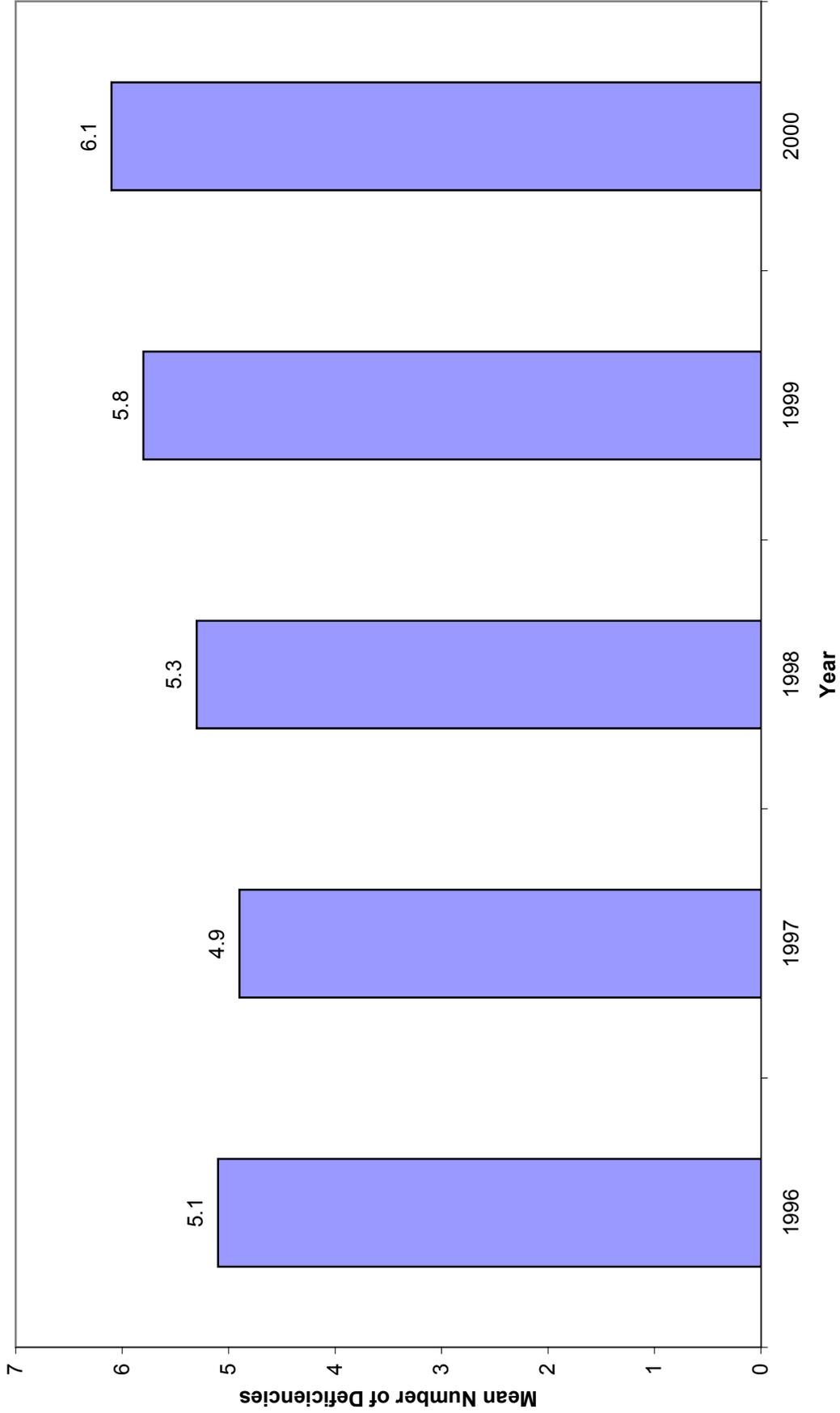
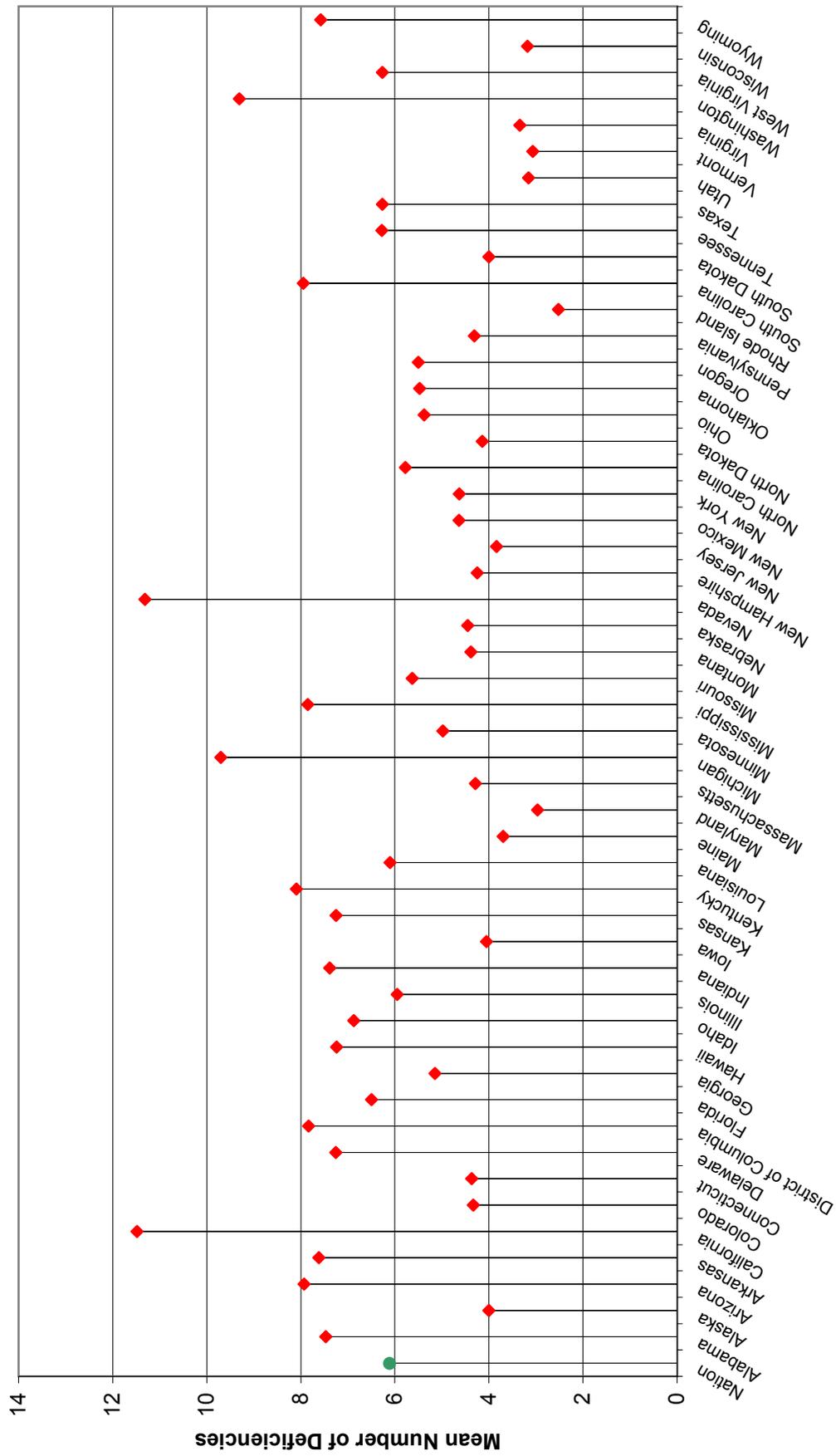


Figure 31. Mean Number of Health Deficiencies Cited in Nursing Home Surveys by State: United States, 2000



Source: OSCAR

Figure 32. Mean Number of Health Deficiencies Cited in Nursing Home Surveys by State: United States, 2000

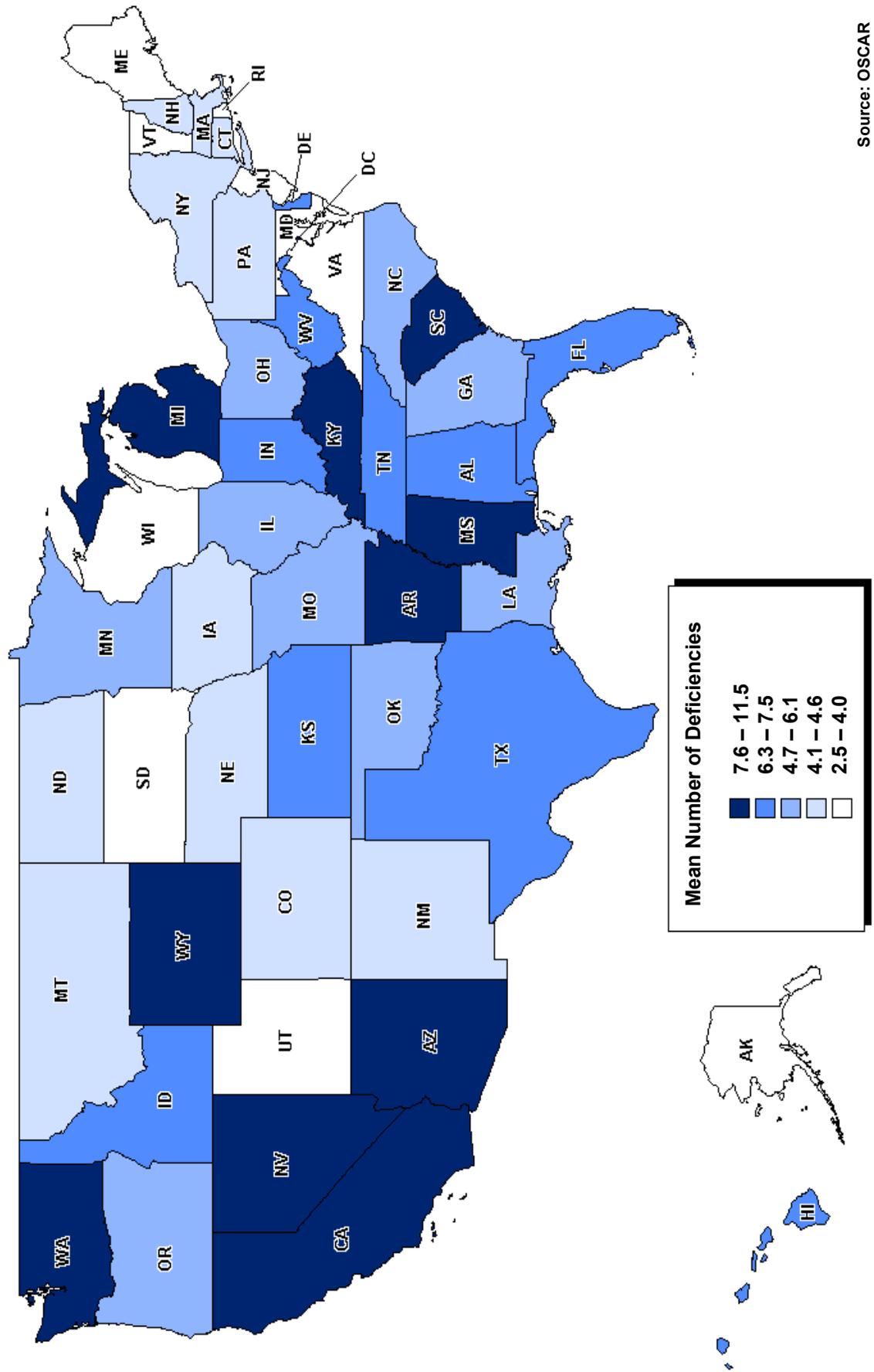


Figure 33. Percent of Nursing Home Surveys Resulting in Zero Health Deficiency Citations by Year: United States, 1996-2000

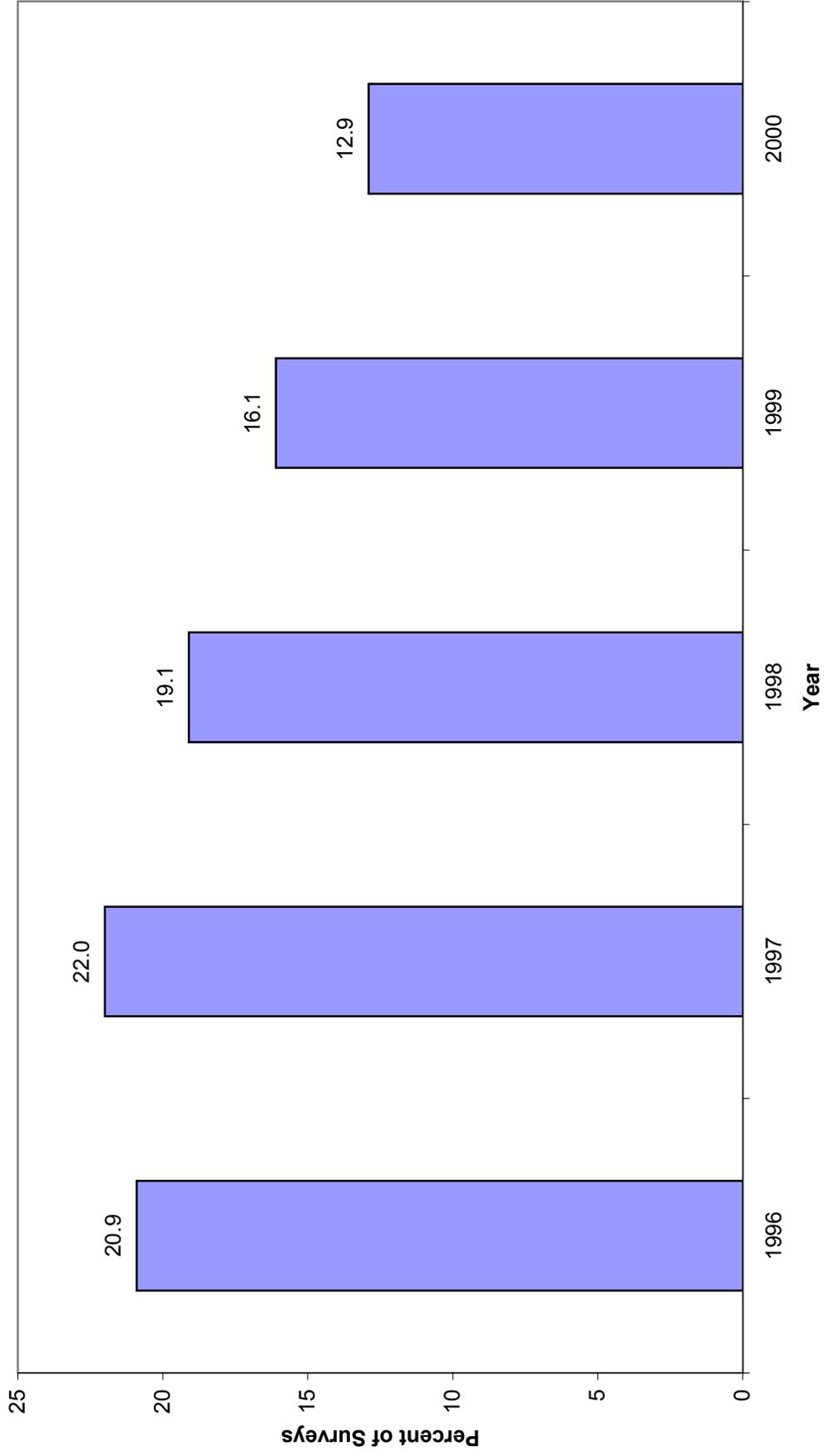
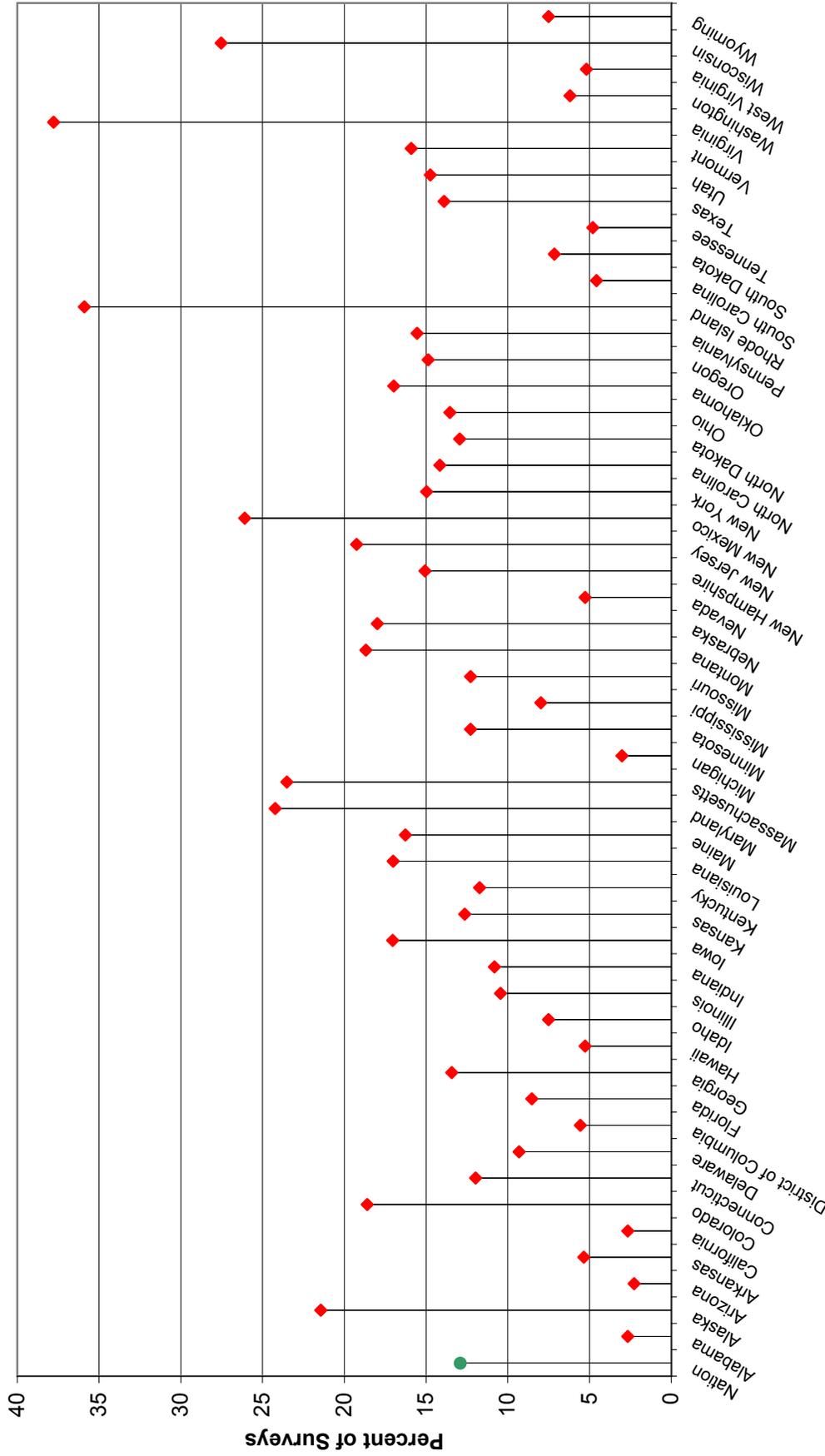
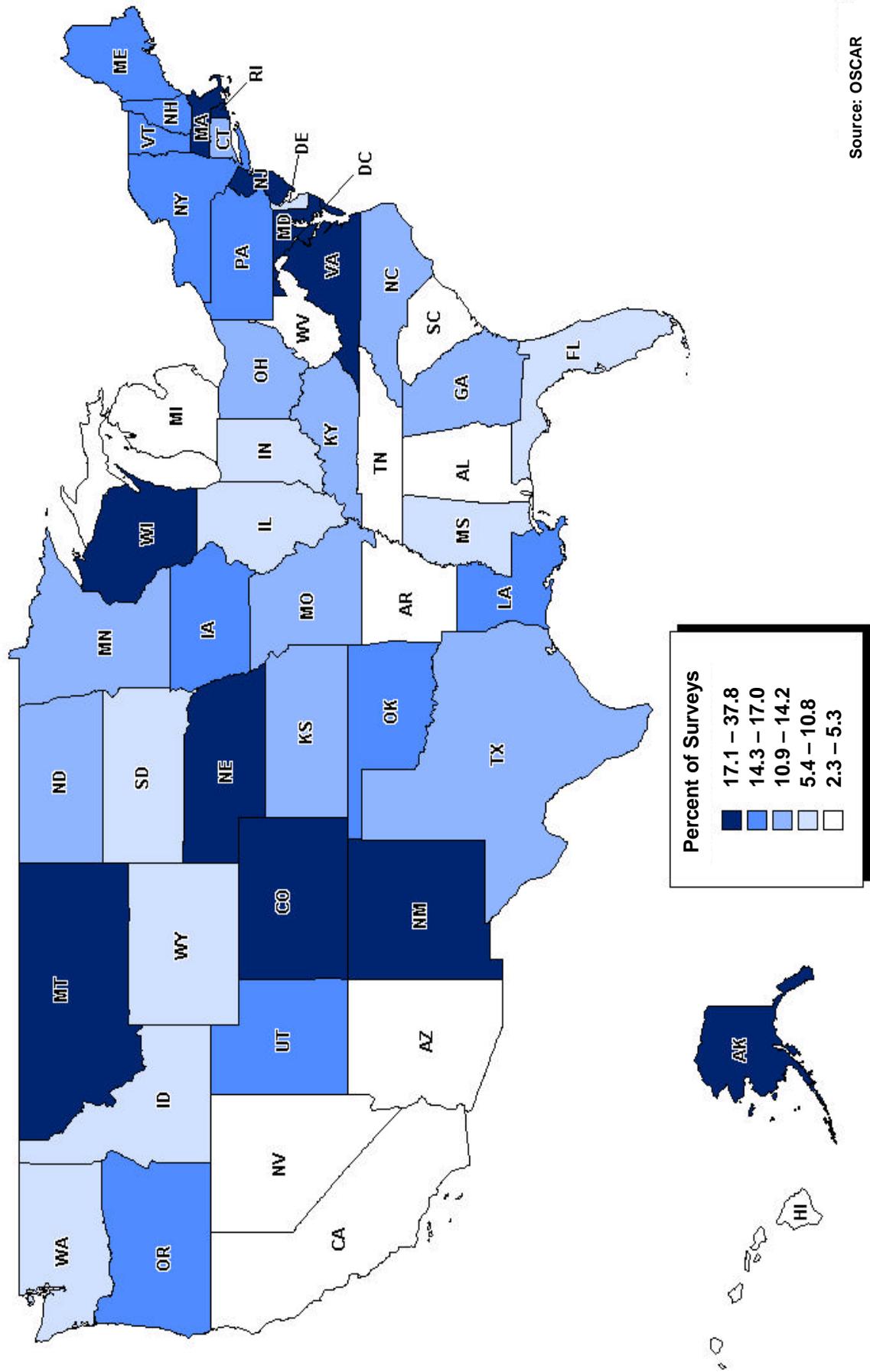


Figure 34. Percent of Nursing Home Surveys Resulting in Zero Health Deficiency Citations by State: United States, 2000



Source: OSCAR

Figure 35: Percent of Nursing Home Surveys Resulting in Zero Health Deficiency Citations by State: United States, 2000



Nursing Home Survey Results

Health Deficiencies -- Scope and Severity

- More citations are for isolated problems that caused minimal harm to residents than for any other level of deficiency.

Figures 36 and 37, Table 37

- The percent of nursing home surveys resulting in a health deficiency of actual harm or immediate jeopardy increased each year from 1996 to 1999. In 1999, more than 31 percent of facilities were cited at these levels. In 2000, at 25.1 percent, the rate decreased, falling below the 1996 rate of 26.3 percent.

Figure 38, Tables 38 and 39

- In 4 States, over 40 percent of nursing home surveys resulted in a health deficiency of actual harm or immediate jeopardy in 2000; in 4 States the citation rate was 10 percent or less.

Figure 39, Tables 38 and 39

- There is great state variation in the percent of nursing home surveys resulting in a health deficiency of actual harm or immediate jeopardy to residents.

Figure 40, Tables 38 and 39

- The percentage of deficiencies with the highest level of severity, immediate jeopardy, has increased every year since 1996. However, only a small proportion of surveys results in citations at this level: in 2000, the citation rate was 1.9 percent.

Figures 41 and 42, Tables 40 and 41

- Technical Notes:

These data are from the CMS's Online Survey Certification and Reporting

(OSCAR) System, an administrative database that captures data about the survey and certification process. Data from OSCAR are a combination of self-reported data from nursing facilities and compliance data gathered by survey teams.

In distributions of the scope and severity by year, the denominator is the number of citations, not nursing homes or surveys.

Note that for all of the calendar year calculations of health deficiencies, the weighting scheme is unique. The facility that was not surveyed during the particular calendar year is not counted and the facility that was surveyed twice during the year is doubly counted, giving it a weight of 2.

An “actual harm” deficiency is defined as a deficiency citation that is rated at scope and severity ‘G’ or more severe.

Immediate jeopardy is a deficiency that constitutes an immediate threat to the health or life of one or more nursing home residents. It is recorded by the state survey agency at scope and severity of “J” or higher.

Figures and supporting tables are italicized.

Puerto Rico and the Virgin Islands have been excluded from the discussion due to the small number (fewer than 10) of nursing homes in those entities.

Figure 36 (page 1 of 2). Percent Distribution of Scope and Severity of Health Deficiency Citations by Year: United States, 1996-2000

1996

	ISOLATED	PATTERN	WIDESPREAD
IMMEDIATE JEOPARDY	0.07 J	0.13 K	0.07 L
ACTUAL HARM	9.83 G	2.55 H	0.44 I
> MINIMAL HARM	31.02 D	23.60 E	5.58 F
MINIMAL HARM	N/A A	16.67 B	10.04 C

1997

	ISOLATED	PATTERN	WIDESPREAD
IMMEDIATE JEOPARDY	0.16 J	0.17 K	0.06 L
ACTUAL HARM	11.08 G	1.67 H	0.15 I
> MINIMAL HARM	38.20 D	21.99 E	4.97 F
MINIMAL HARM	N/A A	13.69 B	7.86 C

1998

	ISOLATED	PATTERN	WIDESPREAD
IMMEDIATE JEOPARDY	0.31 J	0.25 K	0.08 L
ACTUAL HARM	11.27 G	1.70 H	0.13 I
> MINIMAL HARM	40.71 D	22.81 E	5.13 F
MINIMAL HARM	N/A A	10.81 B	6.78 C

Figure 36 (page 2 of 2). Percent Distribution of Scope and Severity of Health Deficiency Citations by Year: United States, 1996-2000

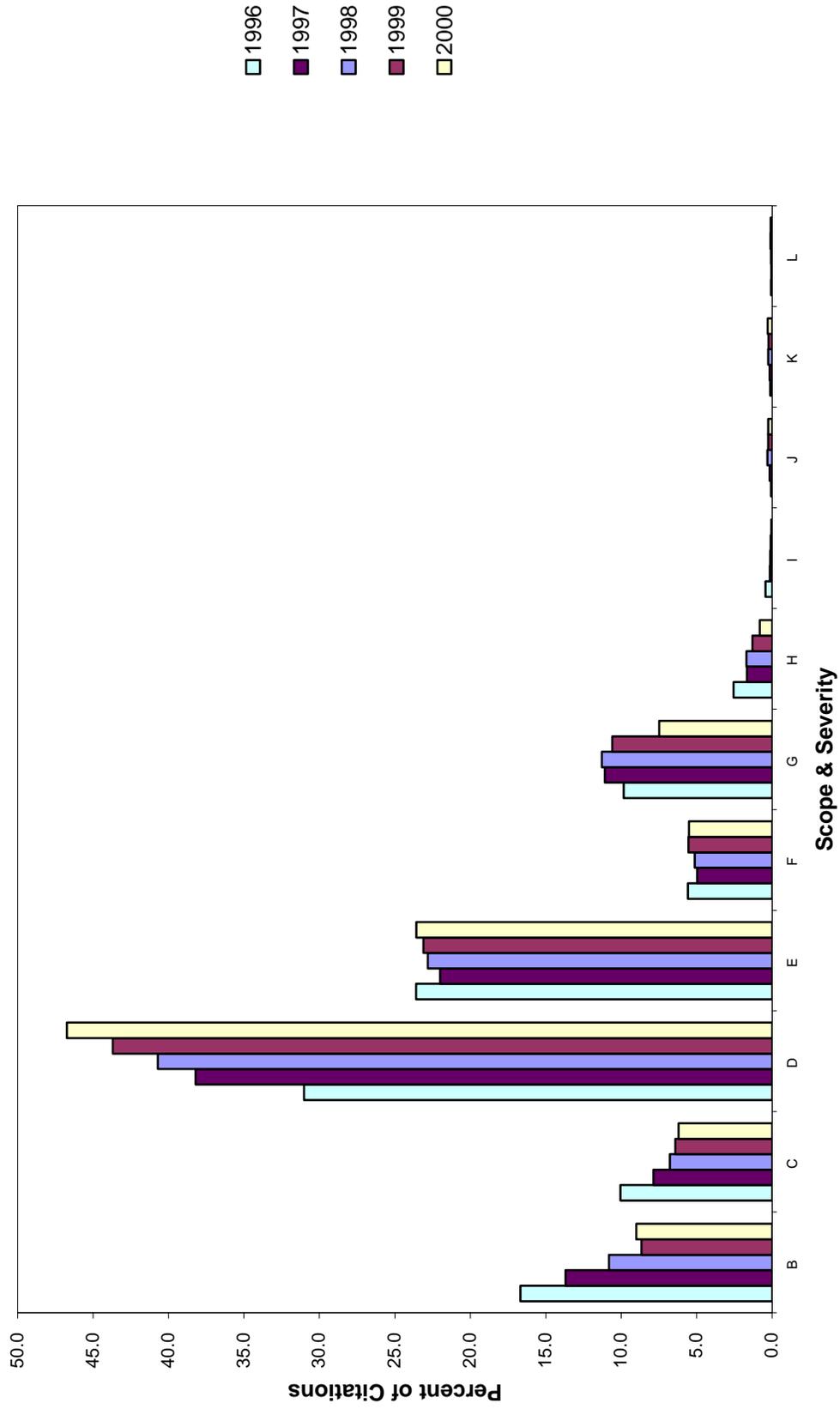
1999

	ISOLATED	PATTERN	WIDESPREAD
IMMEDIATE JEOPARDY	0.26 J	0.24 K	0.10 L
ACTUAL HARM	10.60 G	1.30 H	0.09 I
> MINIMAL HARM	43.70 D	23.11 E	5.54 F
MINIMAL HARM	N/A A	8.65 B	6.41 C

2000

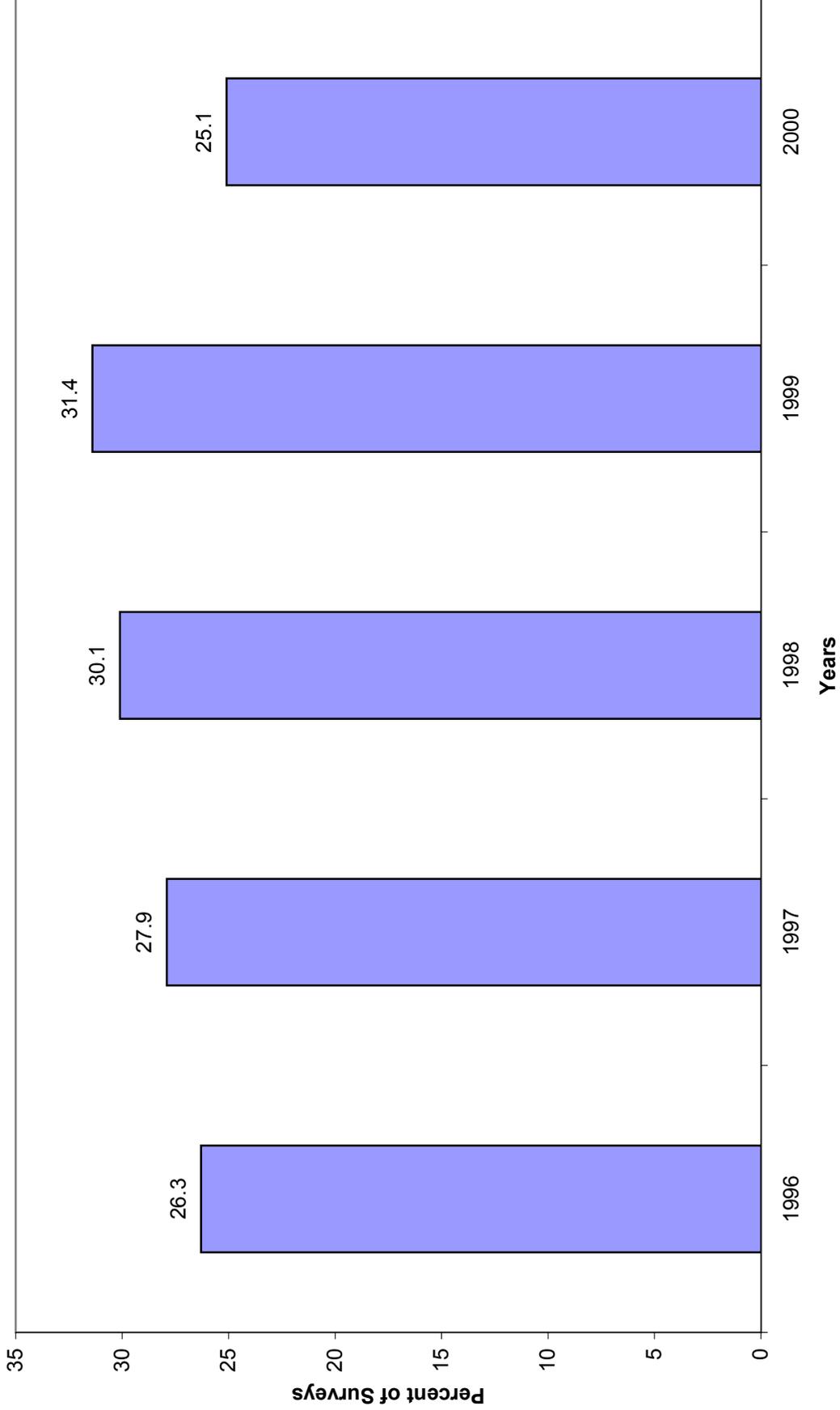
	ISOLATED	PATTERN	WIDESPREAD
IMMEDIATE JEOPARDY	0.25 J	0.28 K	0.10 L
ACTUAL HARM	7.48 G	0.82 H	0.05 I
> MINIMAL HARM	46.74 D	23.58 E	5.50 F
MINIMAL HARM	N/A A	9.00 B	6.20 C

Figure 37. Percent Distribution of Scope and Severity of Health Deficiency Citations by Year: United States, 1996-2000



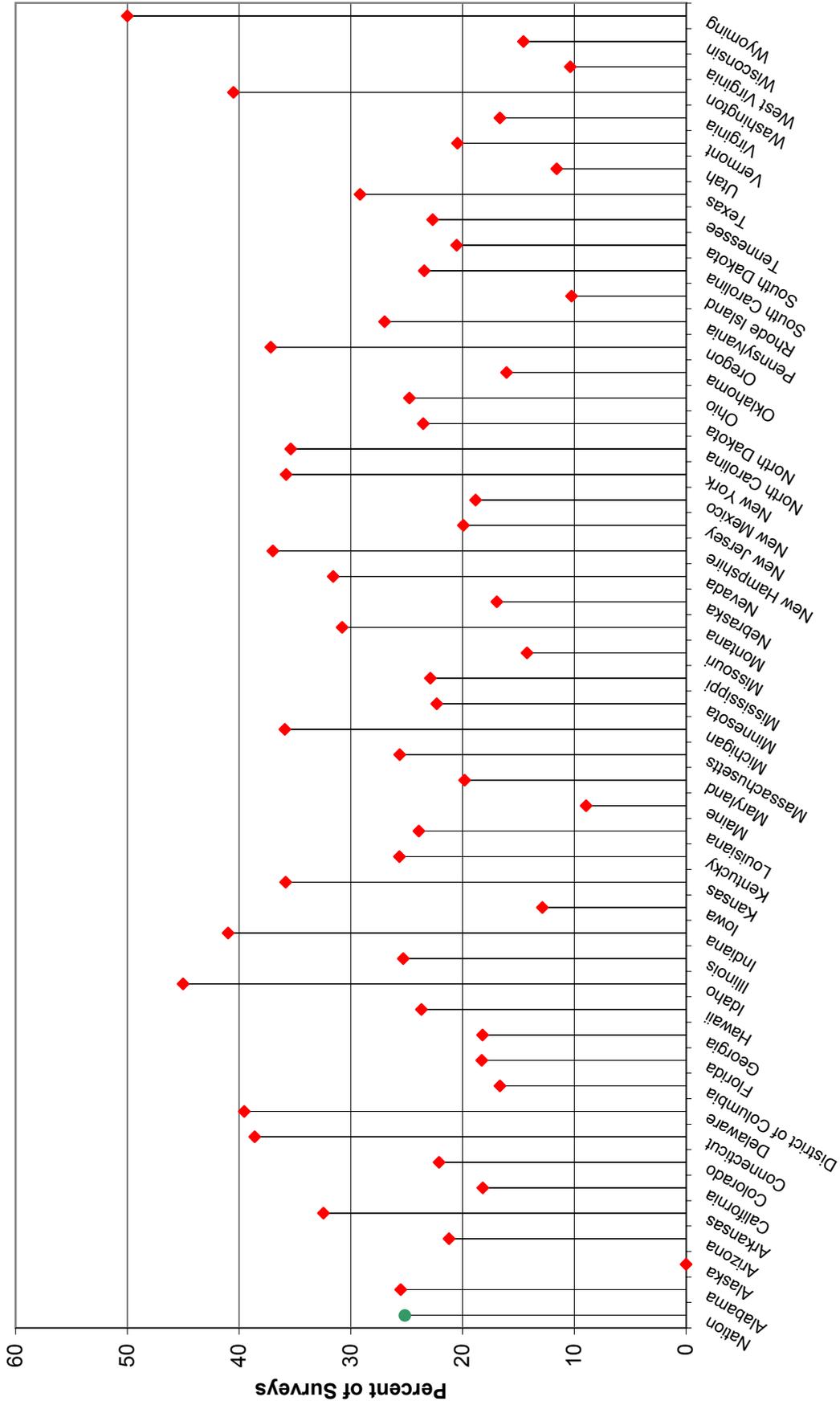
Source: OSCAR

Figure 38. Percent of Nursing Home Surveys Resulting in a Health Deficiency of Actual Harm or Immediate Jeopardy to Nursing Home Residents by Year: United States, 1996-2000



Source: OSCAR

Figure 39. Percent of Nursing Home Surveys Resulting in a Health Deficiency of Actual Harm or Immediate Jeopardy to Nursing Home Residents by State: United States, 2000



Source: OSCAR

Figure 41. Percent of Nursing Home Surveys Resulting in a Health Deficiency of Immediate Jeopardy to Nursing Home Residents by Year: United States, 1996-2000

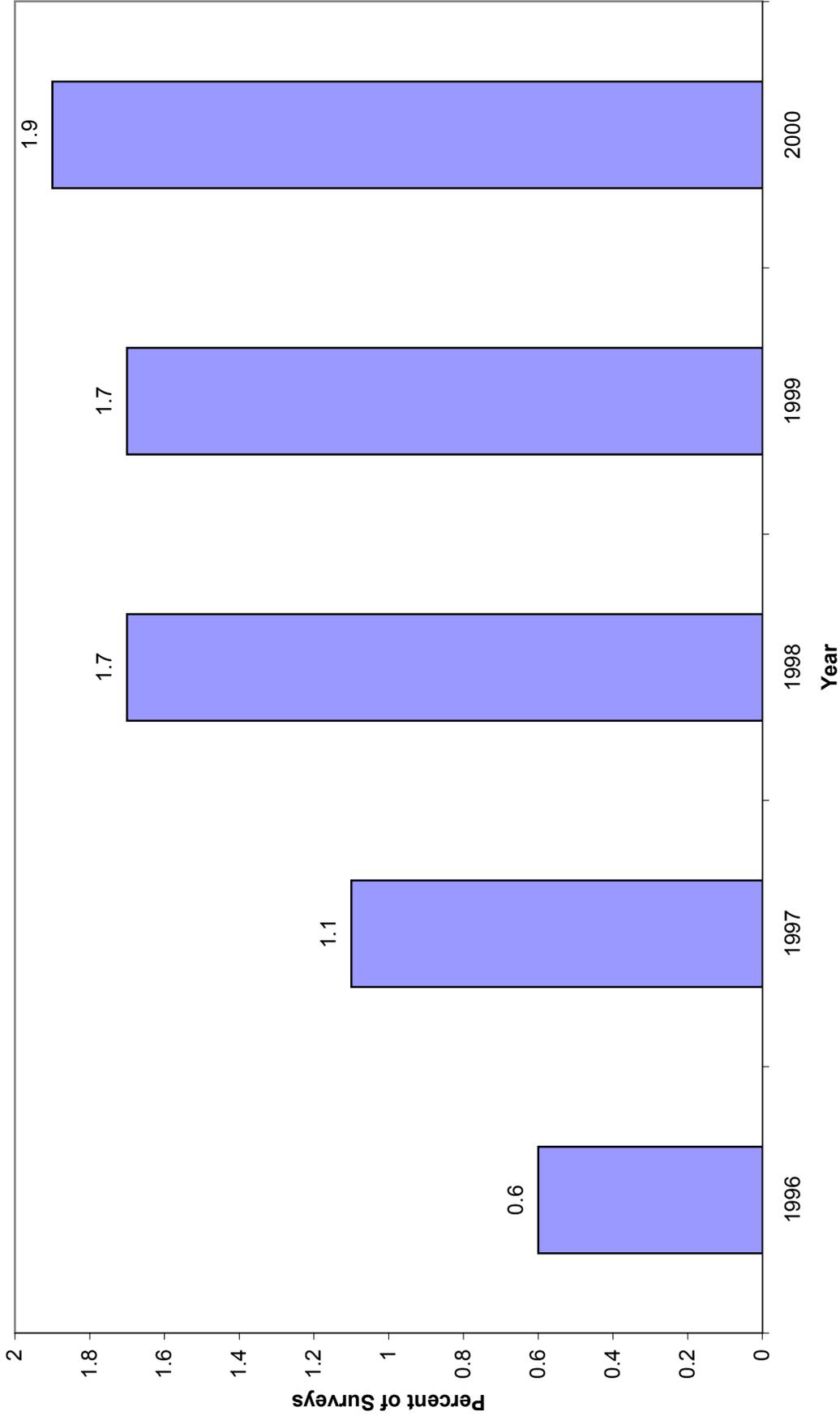
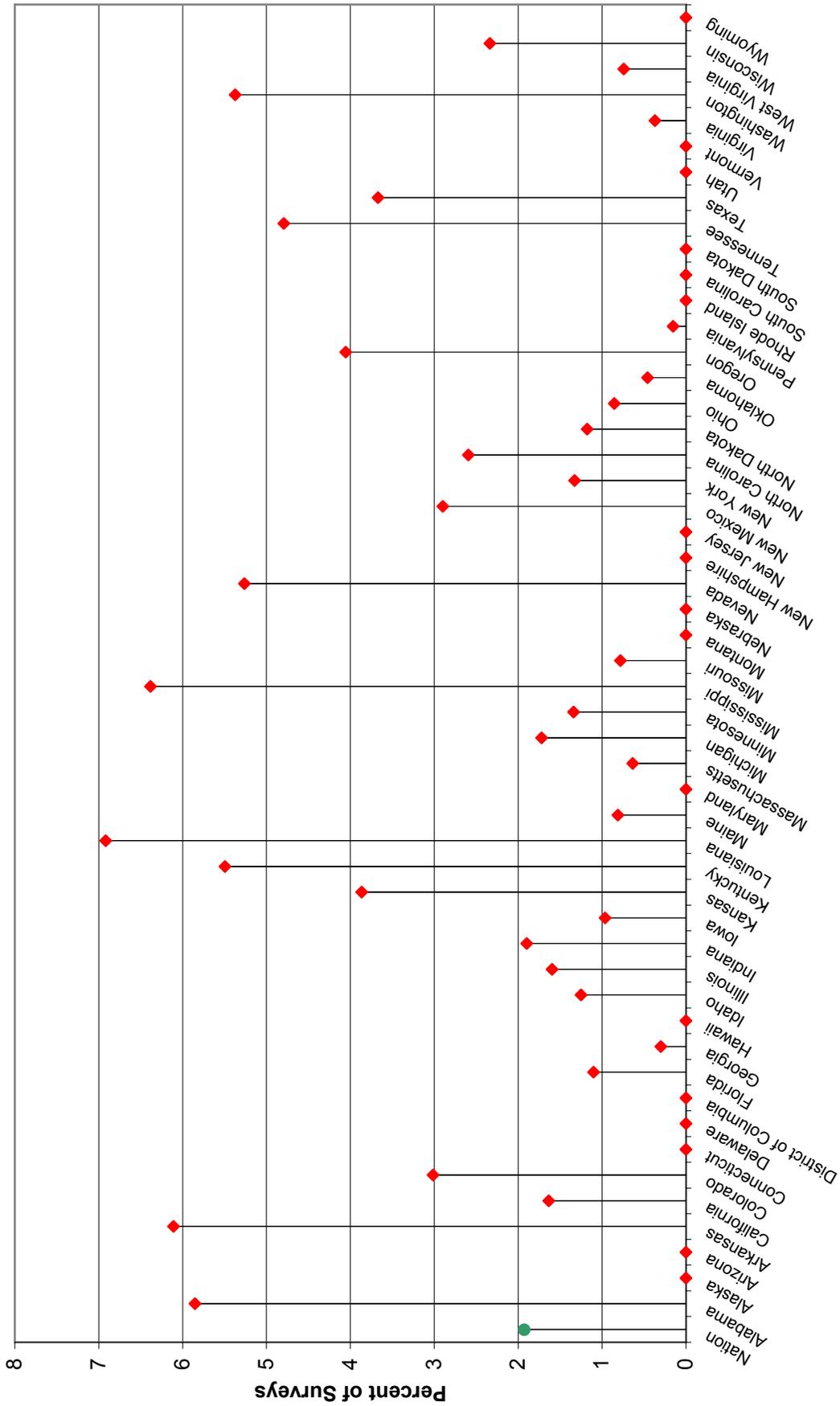


Figure 42. Percent of Nursing Home Surveys Resulting in a Health Deficiency of Immediate Jeopardy to Nursing Home Residents by State: United States, 2000



Source: OSCAR

Nursing Home Survey Results

Health Deficiencies -- Substandard Quality of Care

- The percentage of nursing home surveys resulting in citations for substandard quality of care fluctuated from year to year, but was never above 5.8 percent during the four-year period (1996-2000). The lowest citation rate for this type of deficiency was 4.4 percent (in 2000).

Figure 43, Tables 42 and 43

- In 2000, only 3 states found zero instances of substandard quality of care.

Figures 44 and 45, Tables 42 and 43

- Technical Notes:

These data are from the CMS's Online Survey Certification and Reporting (OSCAR) System, an administrative database that captures data about the survey and certification process. Data from OSCAR are a combination of self-reported data from nursing facilities and compliance data gathered by survey teams.

Note that for all of the calendar year calculations of health deficiencies, the weighting scheme is unique. The facility that was not surveyed during the particular calendar year is not counted and the facility that was surveyed twice during the year is doubly counted, giving it a weight of 2.

Substandard quality of care is defined as any deficiency in the Code of Federal Regulations (42 CFR 483.13 Resident Behavior and Facility Practices, 42 CFR 483.15 Quality of Life, or 42CFR 483.25 Quality of Care), at a scope and severity level of F, H, I, J, K, or L.

Figures and supporting tables are italicized.

Puerto Rico and the Virgin Islands have been excluded from the discussion due to the small number (fewer than 10) of nursing homes in those entities.

Figure 43. Percent of Nursing Home Surveys Resulting in Citation for Substandard Quality of Care by Year: United States, 1996-2000

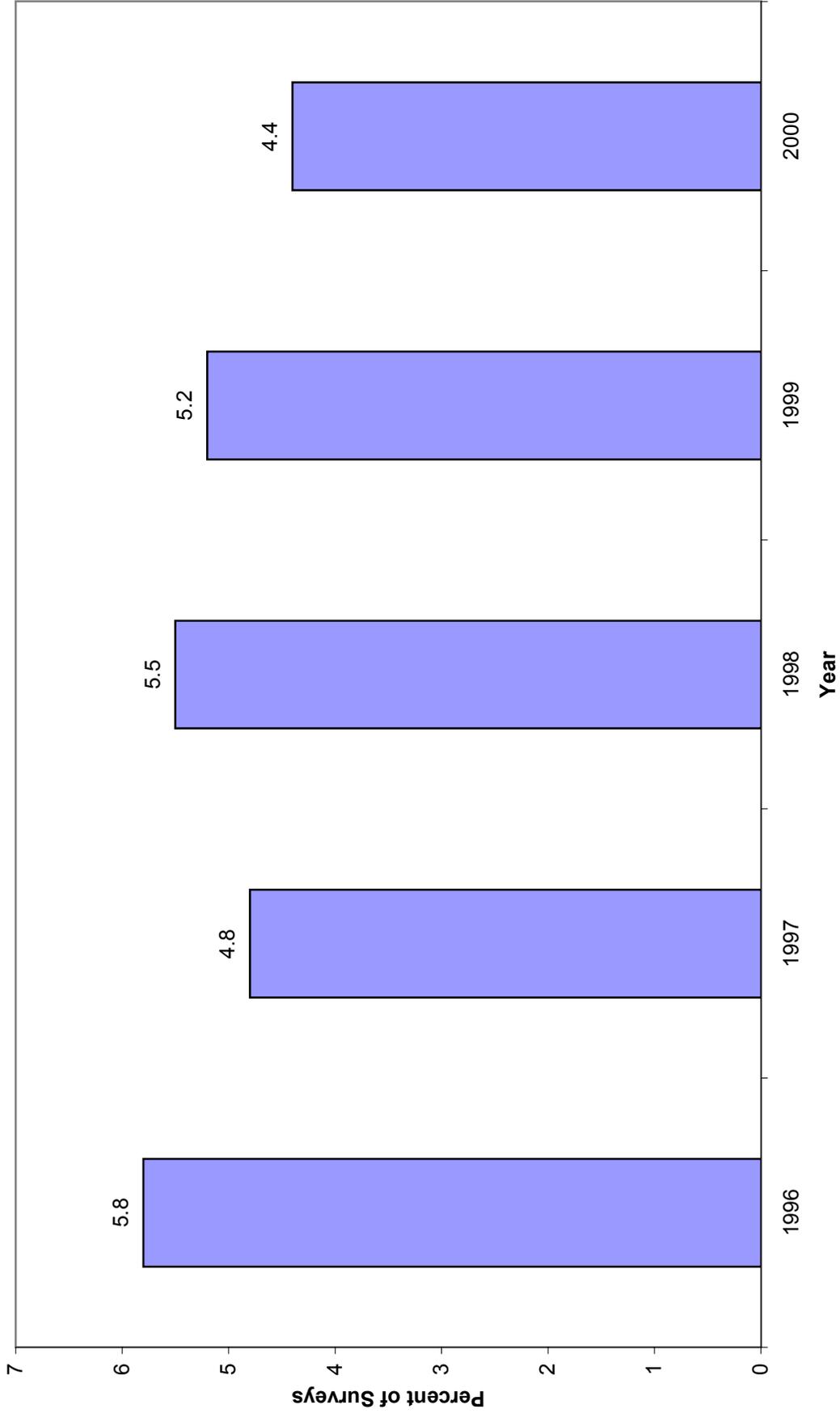
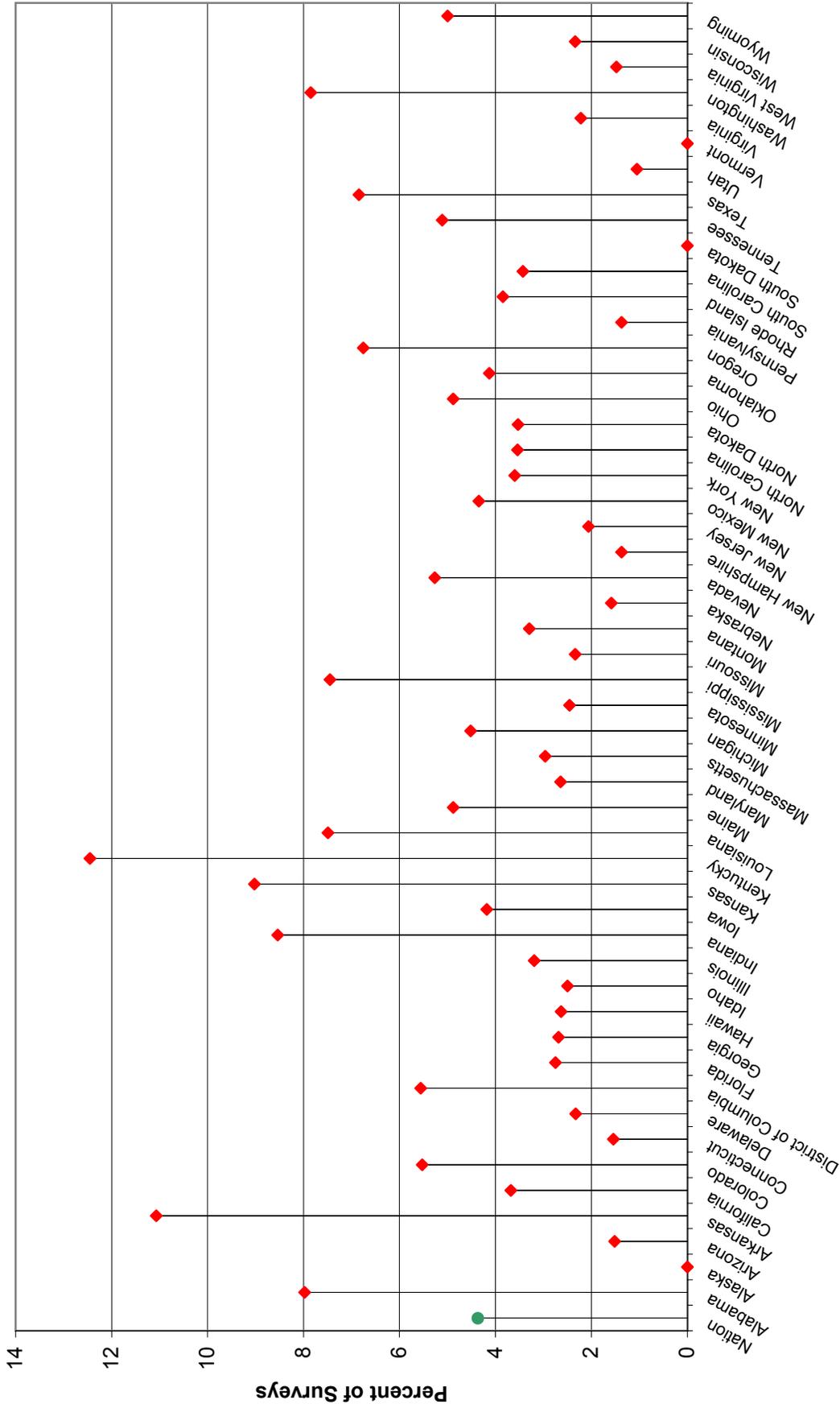
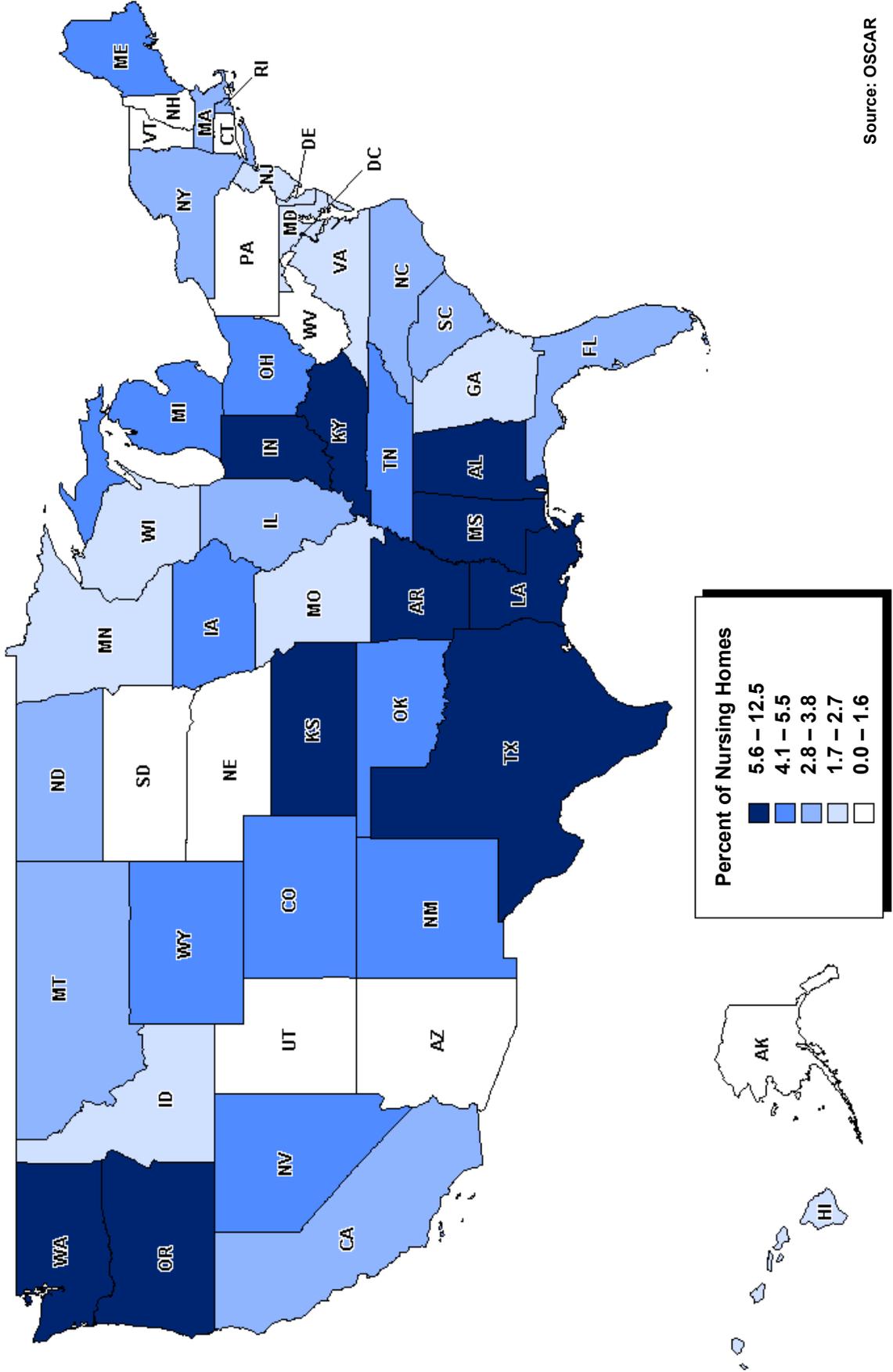


Figure 44. Percent of Nursing Home Surveys Resulting in Citation for Substandard Quality of Care by State: United States, 2000



Source: OSCAR

Figure 45. Percent of Nursing Home Surveys Resulting in a Citation for Substandard Quality of Care by State: United States, 2000



Source: OSCAR

Nursing Home Survey Results

Health Deficiencies – Abuse, Restraint Use, and Pressure Ulcer Citations

- During the four-year period (1996 to 2000), fewer than 2.5 percent of surveys per year resulted in citations for abuse. In 2000, 13 states cited no instances of abuse in nursing homes, while 4 states cited this deficiency in 5 percent or more of its surveys.

Figures 46, 47, and 48; Tables 44 and 45

- Fewer nursing home surveys are resulting in citations for the improper use of physical and chemical restraints. In 1996, 14.4 percent of surveys resulted in citations. These deficiencies were cited in fewer than 10 percent of surveys performed in 2000.

Figures 49 and 50, Tables 46 and 47

- The pressure ulcer citation rate increased from 15.3 percent in 1996 to 18.6 percent in 1999. The rate decreased to 17.8 percent in 2000.

Figures 51 and 52, Tables 47 and 48

- Technical Notes:

These data are from the CMS's Online Survey Certification and Reporting (OSCAR) System, an administrative database that captures data about the survey and certification process. Data from OSCAR are a combination of self-reported data from nursing facilities and compliance data gathered by survey teams.

Note that for all of the calendar year calculations of health deficiencies, the weighting scheme is unique. The facility that was not surveyed during the particular calendar year is not counted and the facility that was surveyed twice during the year is doubly counted, giving it a weight of 2.

Abuse citations are those deficiencies cited under tag F223 of the Interpretive Guidelines from the "State Operations Manual for Provider Certification"

Restraint use citations are those deficiencies cited under tags F221-F222 of the Interpretive Guidelines from the "State Operations Manual for Provider Certification"

Pressure ulcer citations are those deficiencies cited under tag F314 of the Interpretive Guidelines from the "State Operations Manual for Provider Certification"

Figures and supporting tables are italicized.

Puerto Rico and the Virgin Islands have been excluded from the discussion due to the small number (fewer than 10) of nursing homes in those entities.

Figure 46. Percent of Nursing Home Surveys Resulting in a Citation for Abuse of Residents by Year: United States, 1996-2000

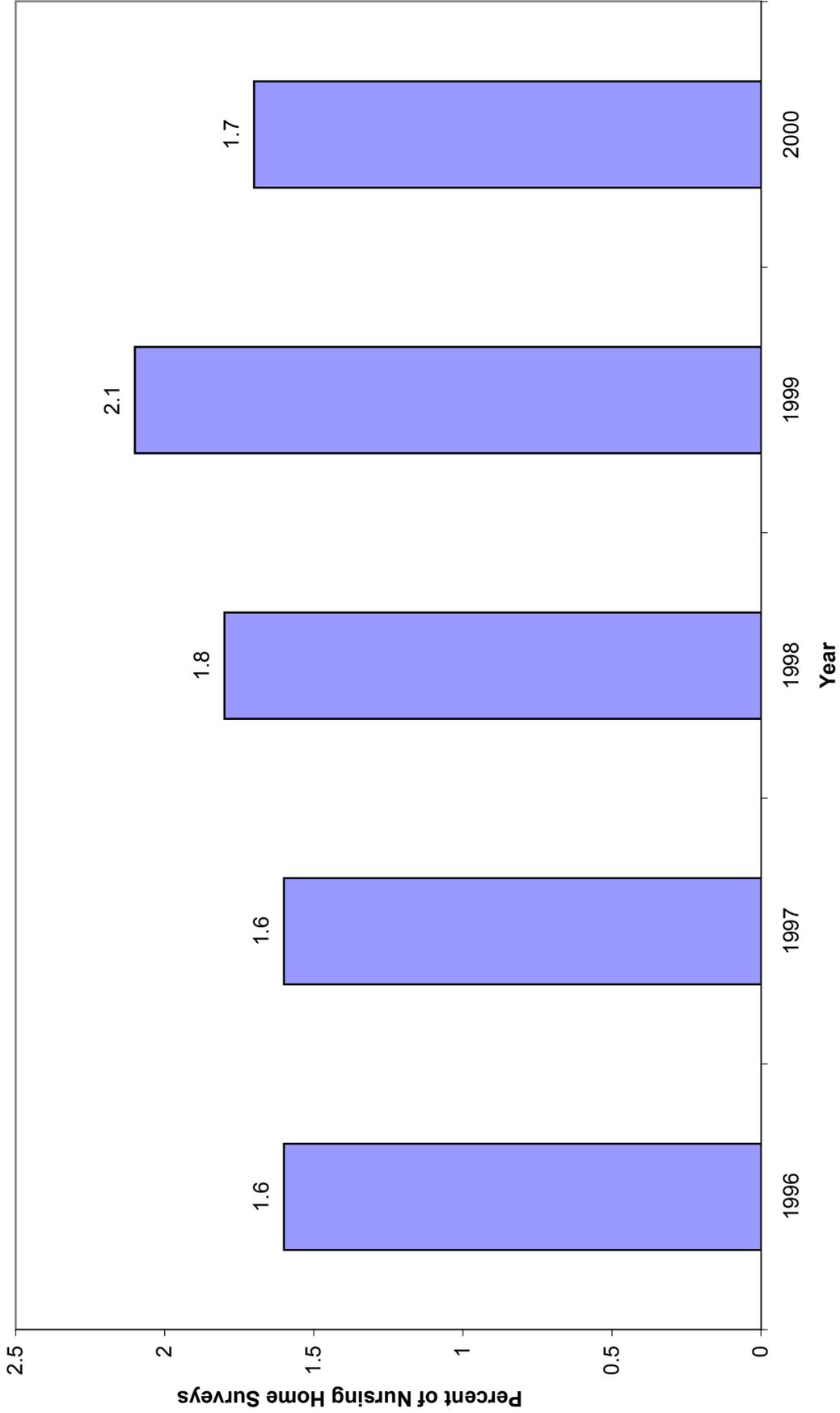
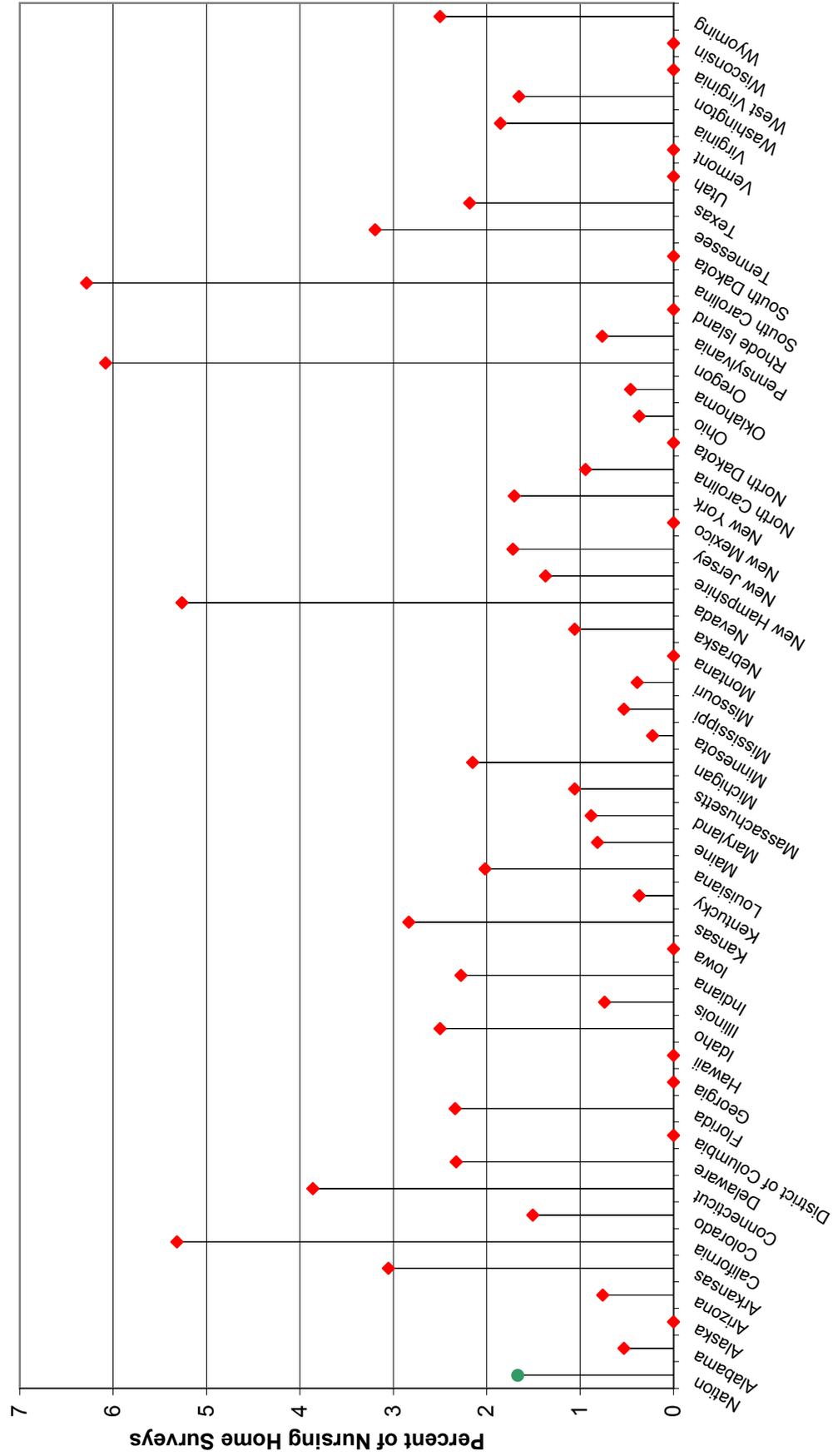
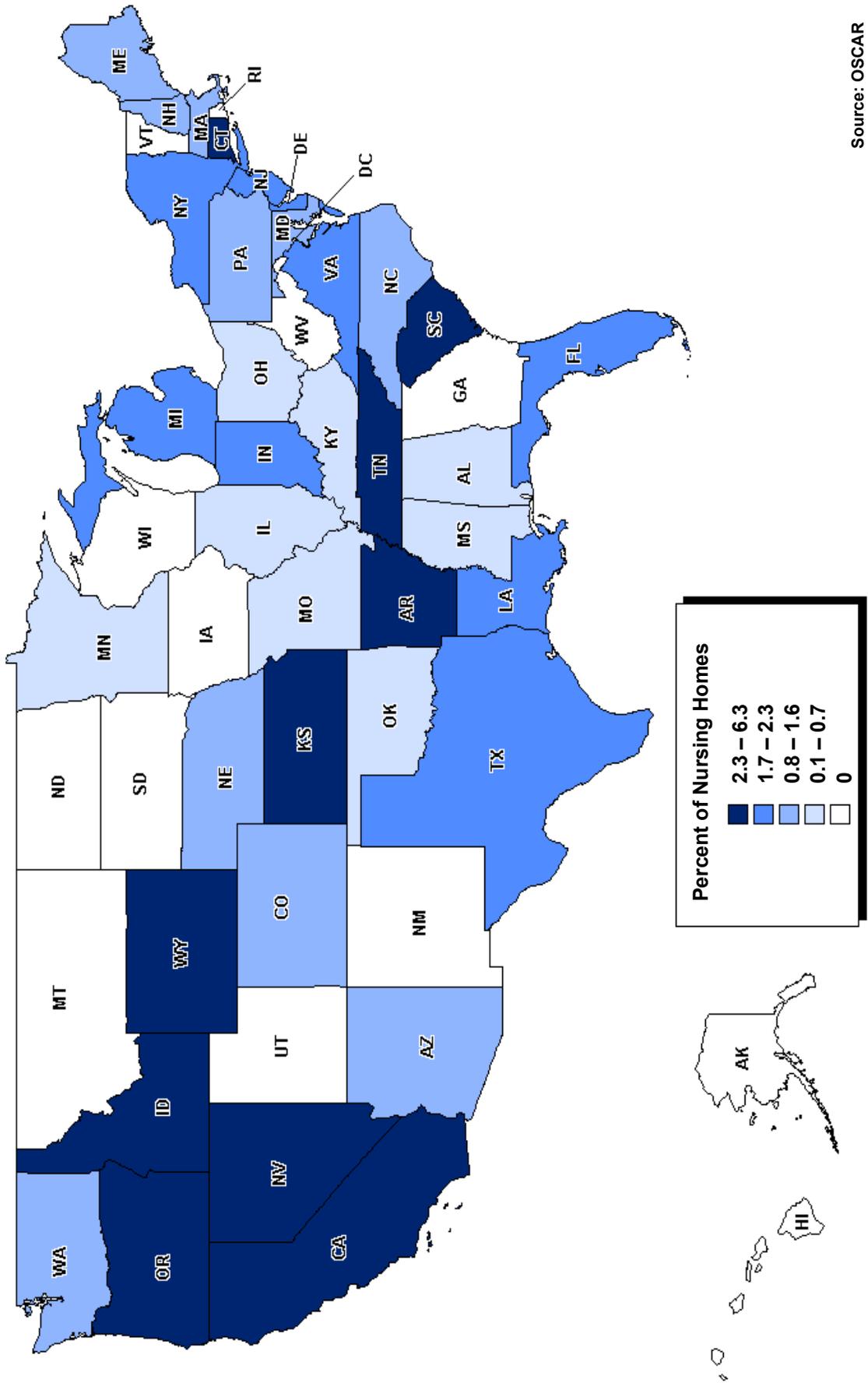


Figure 47. Percent of Nursing Home Surveys Resulting in a Citation for Abuse of Residents by State: United States, 2000



Source: OSCAR

Figure 48. Percent of Nursing Home Surveys Resulting in a Citation for Abuse of Residents by State: United States, 2000



Source: OSCAR

Figure 49. Percent of Nursing Home Surveys Resulting in a Citation for Use of Restraints by Year: United States, 1996-2000

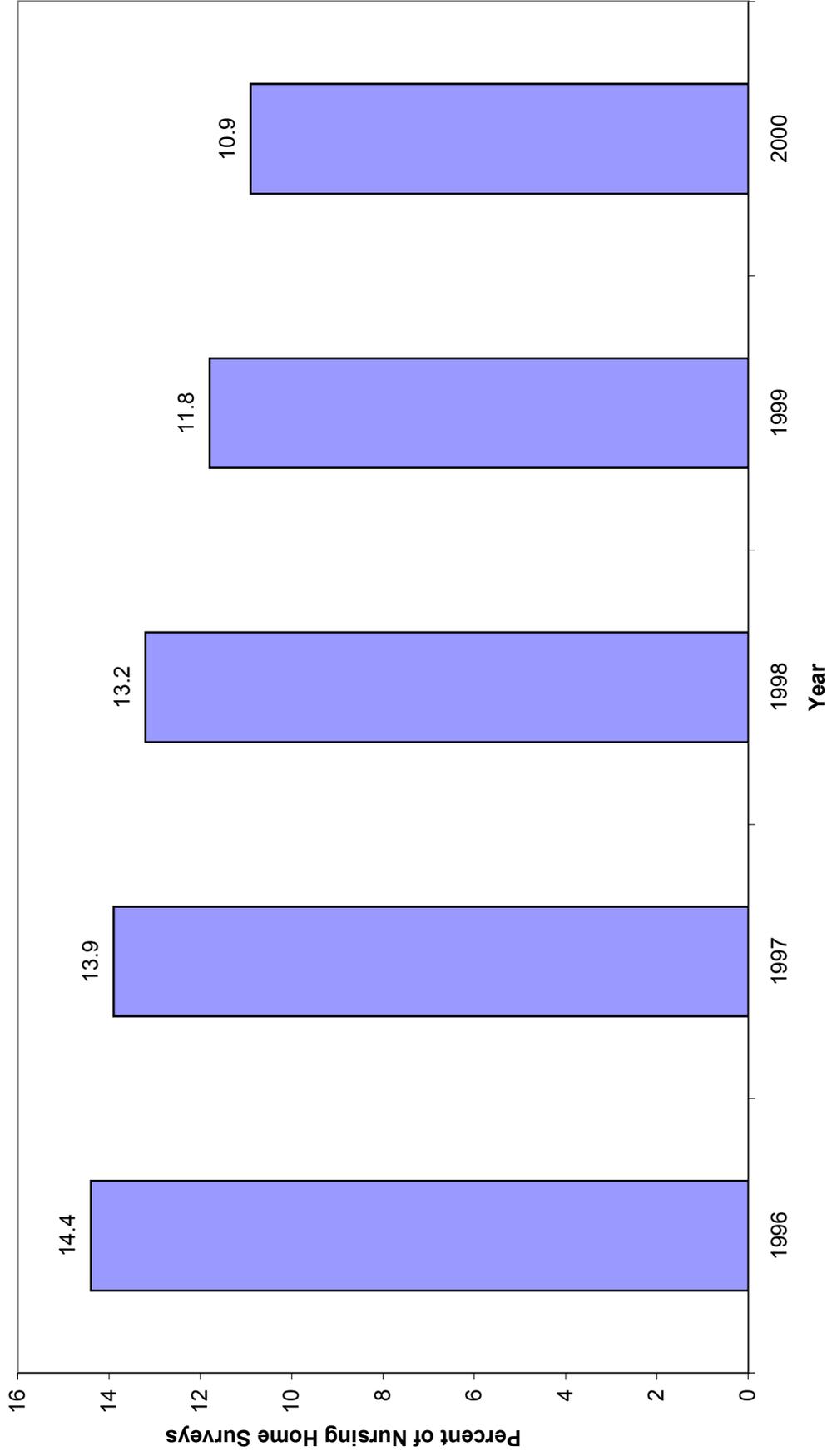
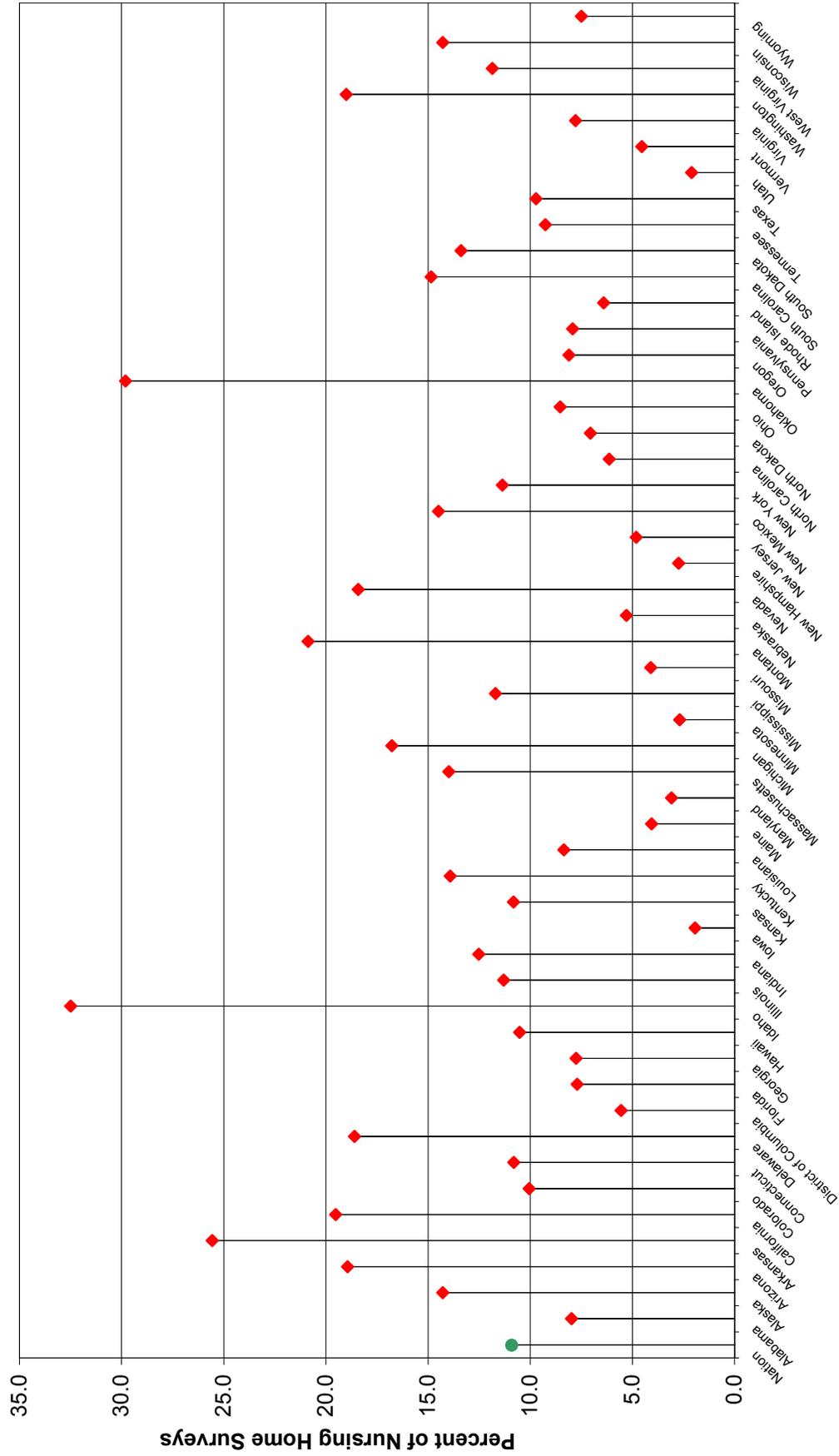
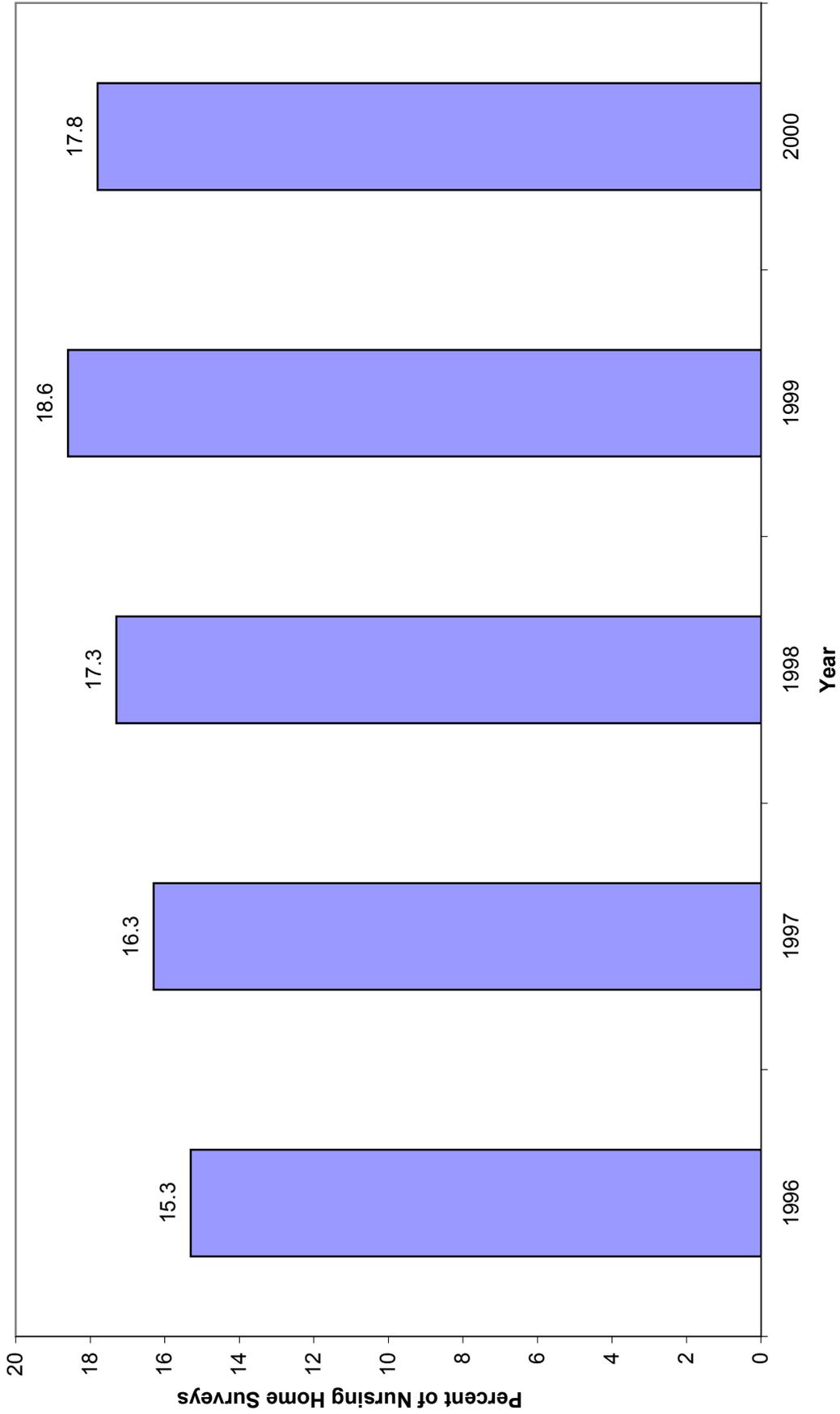


Figure 50. Percent of Nursing Home Surveys Resulting in a Citation for Use of Restraints by State: United States, 2000



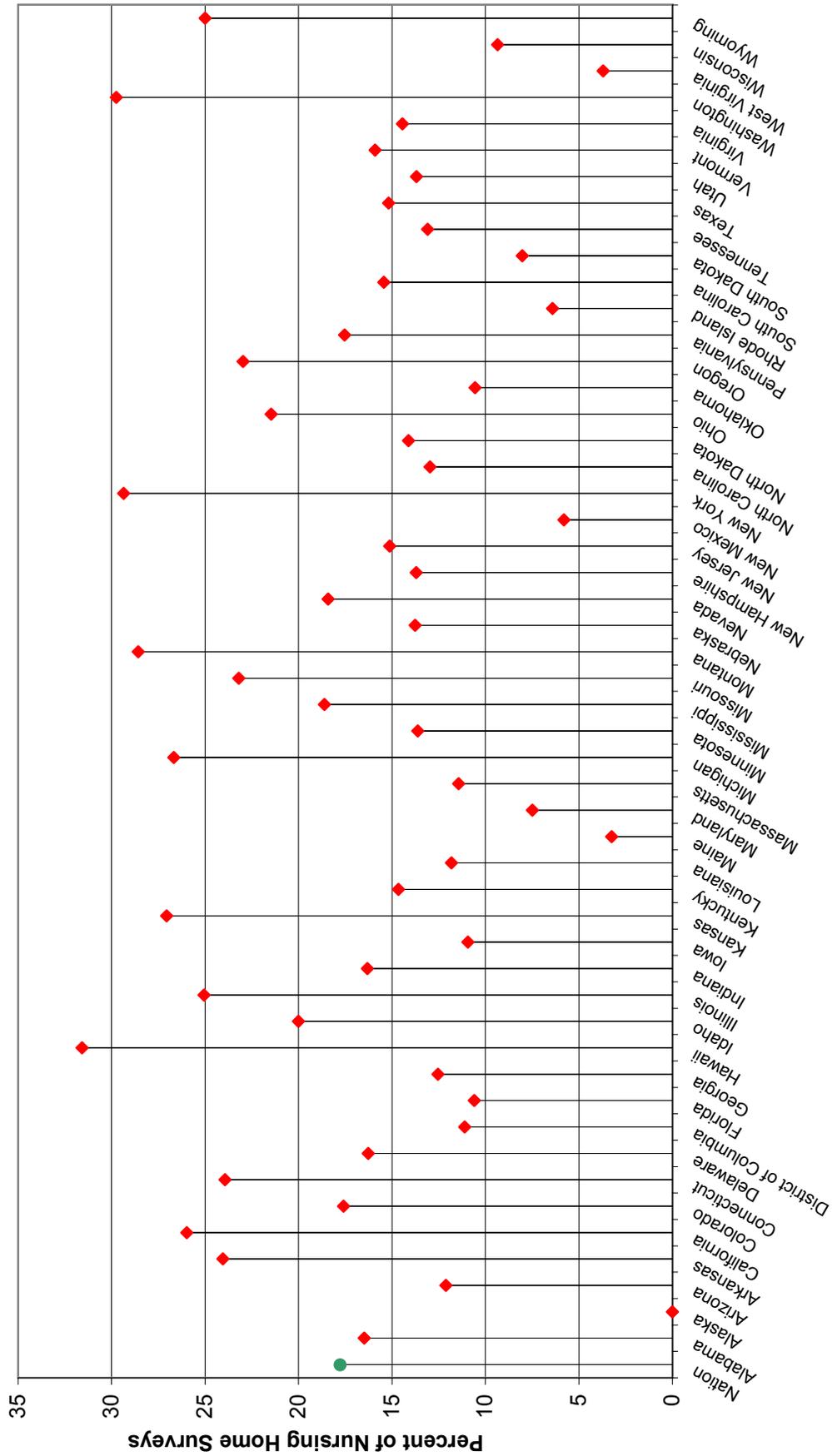
Source: OSCAR

Figure 51. Percent of Nursing Home Surveys Resulting in a Citation for Failure to Treat or Prevent Pressure Ulcers by Year: United States, 1996-2000



Source: OSCAR

Figure 52. Percent of Nursing Home Surveys Resulting in a Citation for Failure to Treat or Prevent Pressure Ulcers by State: United States, 2000



Source: OSCAR