

SEP 18 2008

Washington, D.C. 20201

TO:

Kerry Weems

Acting Administrator

Centers for Medicare & Medicaid Services

FROM:

Daniel R. Levinson Daniel R. Levinson

Inspector General

SUBJECT:

Memorandum Report: "Trends in Nursing Home Deficiencies and

Complaints," OEI-02-08-00140

This memorandum report describes the nature and extent of nursing home deficiencies and complaints in 2007 and identifies trends from 2005 to 2007. This study is part of the Office of Inspector General's (OIG) continuing commitment to addressing the quality of care in nursing homes. It builds on OIG's prior work by analyzing the most recent data available on nursing home deficiencies and complaints.

In each of the past 3 years, over 91 percent of nursing homes surveyed were cited for deficiencies and a greater percentage of for-profit nursing homes were cited for deficiencies than not-for-profit and government nursing homes. During those same years, the most common deficiency categories cited were quality of care, resident assessment, and quality of life. Additionally, 17 percent of nursing homes surveyed in 2007 were cited for actual harm or immediate jeopardy deficiencies, and 3.6 percent were cited for substandard quality-of-care deficiencies—a slight increase since 2005. Lastly, the number of substantiated complaints decreased nearly 3 percent since 2005.

BACKGROUND

Survey and Certification Process

All nursing homes that participate in Medicare and/or Medicaid must be certified as meeting certain Federal requirements. The Centers for Medicare & Medicaid Services (CMS) contracts with States to perform nursing home surveys before nursing homes may be certified. States must conduct these standard surveys at least every 15 months, and the Statewide average interval between surveys must be 12 months or less. Surveys are

² 42 CFR §§ 488.308(a) and (b).

¹ Title XVIII (Parts A and B) and XIX of the Social Security Act.

unannounced and may be conducted at any hour on any day.³ Surveys assess medical, nursing, and rehabilitative care; dietary and nutrition services; activities and social participation; and sanitation, infection control, and the physical environment.⁴

Surveyors collect data from different sources. They conduct a medical record review based on a case-mix stratified sample of nursing facility residents.⁵ They also review plans of care to determine their adequacy, audit residents' assessments, and review compliance with legal requirements concerning residents' rights.⁶ In addition, surveyors observe facility operations and interview residents, family members, and staff to determine whether facilities are providing appropriate care.⁷

CMS provides guidance on long term care facility survey procedures and protocols through its "State Operations Manual." The Manual describes the intent of the regulations pertaining to nursing homes as well as the process for determining whether deficiencies have occurred and how to categorize them. Updates to the Manual are issued periodically.

<u>Deficiencies</u>. When a nursing home fails to meet one or more of the Federal requirements, surveyors cite a deficiency. There are 190 possible deficiencies, which fall into the categories listed in the box below.

Deficiency Categories

Dietary services

Resident rights
Admission, transfer, and discharge rights
Resident behavior and facility practices
Quality of life
Resident assessment
Quality of care
Nursing services

Physician services
Rehabilitative services
Dental services
Pharmacy services
Infection control
Physical environment
Administration

Laboratory and radiology services

Sources: 42 CFR § 483, subpart B; CMS "State Operations Manual," Appendix PP.

Surveyors also decide the scope and severity of the deficiency based on a matrix that uses the letters "A" through "L." See Figure 1 on the next page. The scope of the deficiency measures the number of residents potentially or actually affected by the deficiency. The scope rating has three different levels: isolated, pattern, and widespread. Isolated deficiencies occur when one or a very limited number of residents or staff are affected or the situation exists only occasionally. Pattern deficiencies occur when more than a very limited number of residents or staff are affected or the situation occurs repeatedly. Finally, widespread deficiencies occur when the situation is pervasive throughout the facility or potentially affects a large portion of the nursing home's residents.

³ 42 CFR § 488.307(a); CMS, "State Operations Manual," Pub. No. 100-07, ch. 7, § 7207B2, p. 34.

⁴ 42 CFR § 488.305(a)(2).

⁵ 42 CFR § 488.305(a)(1).

⁶ 42 CFR §§ 488.305(a)(3) and (4).

⁷ 42 CFR § 488.110(f).

⁸ CMS, "State Operations Manual," Pub. No. 100-07, App. P, pp. 93–94.

The severity rating measures the extent of the health and safety risk to residents. The most serious level, immediate jeopardy, occurs in "a situation in which the provider's noncompliance with one or more of the requirements of participation has caused, or is likely to cause, serious injury, harm, impairment or death to a resident." Immediate jeopardy requires the nursing home to take immediate corrective action. The three levels of deficiencies that are not immediate jeopardy are: (1) actual harm that is not immediate jeopardy; (2) no actual harm with a potential for more than minimal harm, but not immediate jeopardy; and (3) no actual harm with a potential for minimal harm. ¹⁰

Figure 1: Scope and Severity Matrix for Nursing Home Deficiencies

	Scope of the Deficiency						
		Isolated	Pattern	Widespread			
Deficiency	Immediate jeopardy to resident health or safety	J	К	L			
Severity of the Defic	Actual harm that is not immediate jeopardy	G	Н	I			
	No actual harm with a potential for more than minimal harm, but not immediate jeopardy	D	Е	F			
	No actual harm with potential for minimal harm	А	В	С			

Note: Shading indicates substandard quality of care for the categories of quality of care, quality of life, and resident behavior and facility practices.

The scope and severity of the deficiency are primary factors in determining the appropriate corrective action to be taken. Corrective actions include termination of participation in Medicare and Medicaid, civil money penalties, State monitoring, transfer of residents, and closure of the facility, among other remedies.

<u>Substandard Quality of Care</u>. Substandard quality of care exists when a facility has one or more deficiencies at the more serious scope and severity levels within certain categories. The scope and severity levels of substandard quality of care are shown in the shaded area of Figure 1 above. The categories related to substandard quality of care are quality of care, quality of life, and resident behavior and facility practices. A brief description of these categories is provided in the box on the next page.

⁹ 42 CFR § 488.301.

¹⁰ 42 CFR § 488.404(b)(1).

¹¹ 42 CFR § 488.404(b).

¹² 42 CFR § 488.406(a).

The Three Deficiency Categories Related to Substandard Quality of Care

Quality of Care: Includes, among other issues, appropriate treatment to prevent and treat pressure sores and urinary tract infections and resident freedom from unnecessary drugs and significant medication errors.

Quality of Life: Includes, among other issues, care that maintains or enhances dignity; the provision of social services to attain the highest practicable well-being of each resident; and a safe, clean, comfortable, and homelike environment.

Resident Behavior and Facility Practices: Includes, among other issues, freedom from physical or chemical restraints for purposes of discipline and convenience and freedom from abuse, corporal punishment, and involuntary seclusion.

If a nursing home is found to have provided substandard quality of care, surveyors must conduct an extended survey within 14 days. An extended survey includes a review of the policies and procedures related to such substandard quality of care as well as an examination of staffing, training, and a larger sample of residents' assessments. Substandard quality of care requires specific corrective actions such as a directed plan of correction, temporary management change, or termination of the provider agreement.

<u>Complaints</u>. Surveyors also investigate complaints. Complaints may be made by nursing home residents, family members, and facility employees, among others, and may be either verbal or written.¹⁴ State survey agencies must review all allegations. Depending on the outcome of the review, the survey agency may conduct a standard or abbreviated standard survey to investigate the allegation.¹⁵ These allegations are either substantiated or unsubstantiated during the survey. A substantiated allegation results in the citation of a deficiency.¹⁶ Surveyors may also cite additional deficiencies during this process. Complaints are grouped into the categories listed in the box below.¹⁷

Complaint Categories

Resident abuse Proficiency testing

Resident neglect Falsification of records/reports

Resident rights Unqualified personnel
Patient dumping Quality control
Environment Specimen handling

Care or services Diagnostic discrepancy/erroneous test results

Dietary Fraud/false billing

Misuse of funds/property Fatality/transfusion fatality

Certification/unauthorized testing

Other

Source: CMS Form 562.

13 42 CFR § 488.310.

¹⁴ CMS, "State Operations Manual," Pub. No. 100-07, ch. 5, § 5010, pp. 7–8.

¹⁵ 42 CFR § 488.308(e)(2).

¹⁶ CMS Form 562.

¹⁷ These categories are also used for hospitals. Some categories, such as patient dumping, are not relevant to nursing homes.

Related Work

In 2003, OIG published a report entitled "Nursing Home Deficiency Trends and Survey and Certification Process Consistency." This report found that the percentage of nursing homes with deficiencies, the total number of deficiencies, and the average number of deficiencies per nursing home increased between 1998 and 2001. In addition, there was wide variation among States in the percentage of nursing homes with deficiencies and the average number of deficiencies per home. OIG found that this variability was due at least in part to differences in the survey process among States. Factors contributing to these differences included inconsistent survey focus, unclear Federal guidelines on citing deficiencies, and the lack of a common review process for draft survey reports.

METHODOLOGY

The information provided in this memorandum report is based on an analysis of data from CMS's Online Survey and Certification Reporting System (OSCAR). OSCAR includes the results of all State nursing home surveys. It contains the most current survey and the three previous surveys for every nursing home that is certified for Medicare and/or Medicaid.

To carry out our analysis, we identified all surveys conducted in 2005, 2006, and 2007 that were included in OSCAR. If a nursing home had more than one survey in a particular year, we included only the most recent survey for that year. We also used OSCAR to identify for-profit, not-for-profit, and government nursing homes as well as nursing homes that were part of an organization that owned two or more facilities (hereafter referred to as "multifacility") and those that were not (hereafter referred to as "single-facility").

We analyzed OSCAR data to determine the nature and extent of nursing home deficiencies and to identify trends. For each year, we determined the number of nursing homes surveyed, the percentage with at least one deficiency, and the average number of deficiencies per nursing home. In addition, we examined the scope and severity of deficiencies and determined the percentage of nursing homes that were cited for deficiencies considered substandard quality of care. We identified trends in these measures from 2005 to 2007. We also described instances in which there were differences of at least 1 percentage point among for-profit, not-for-profit, and government nursing homes and between multifacility and single-facility nursing homes. In all cases, the percentages cited were based on nursing homes that were surveyed.

We also obtained complaint information for 2005, 2006, and 2007 from OSCAR. We analyzed this information to determine the nature and extent of complaints and to identify trends. A complaint may contain several allegations. For the purposes of this report, we refer to each allegation as a "complaint." We determined the number of substantiated complaints and the number of nursing homes associated with these complaints.

This memorandum report describes the nature and extent of nursing home deficiencies and complaints in 2007 and identifies trends from 2005 to 2007. This review was not designed to provide explanations for changes in these measures.

This review was conducted in accordance with the "Quality Standards for Inspections" issued by the President's Council on Integrity and Efficiency and the Executive Council on Integrity and Efficiency.

RESULTS

In Each of the Past 3 Years, Over 91 Percent of Nursing Homes Surveyed Were Cited for Deficiencies

In 2005, 2006, and 2007, more than 91 percent of nursing homes surveyed were cited for deficiencies. Although this percentage remained stable during this time, it has increased over the last decade. According to the 2003 OIG report, the percentage of nursing homes cited for deficiencies increased from 81 percent in 1998 to 89 percent in 2001. Table 1 below shows the trends in deficiencies from 2005 to 2007.

In the past 3 years, the average number of deficiencies per nursing home increased slightly. In 2007, nursing homes were cited for an average of 7.0 deficiencies per home, compared to 6.4 deficiencies in 2005. During this period, the total number of deficiencies rose by almost 10 percent, while the number of nursing homes surveyed decreased by 1 percent.

Table 1: Trends in Deficiencies, 2005–2007						
	2005	2006	2007	Percentage Change 2005–2007		
Percentage of nursing homes with deficiencies	91.1%	91.8%	91.9%	0.9 %*		
Average number of deficiencies per nursing home	6.4	6.9	7.0	10.7%*		
Total number of deficiencies	95,624	102,487	104,665	9.5%		
Total number of nursing homes surveyed	15,046	14,954	14,872	-1.2%		

Source: OIG analysis of OSCAR data, 2008. *Percentage change may vary because of rounding.

Deficiency rates varied widely among States. In 2007, the percentage of nursing homes surveyed with deficiencies ranged from 76 percent in Rhode Island to 100 percent in Alaska, the District of Columbia, Idaho, and Wyoming. The average number of deficiencies also varied among States, from 2.5 deficiencies per nursing home in Rhode Island to 14.4 in the District of Columbia. These ranges were similar for each of the past 3 years. See Appendixes A and B for the trends in deficiencies by State.

A Greater Percentage of For-Profit Nursing Homes Were Cited for Deficiencies Than Not-for-Profit and Government Nursing Homes in Each of the Past 3 Years In 2007, 94 percent of for-profit nursing homes surveyed were cited for deficiencies, compared to 88 percent of not-for-profit and 91 percent of government nursing homes.

¹⁸ OIG, "Nursing Home Deficiency Trends and Survey and Certification Process Consistency," OEI-02-01-00600, March 2003, p. 7.

See Figure 2 below. Since 2005, the percentages of for-profit nursing homes with deficiencies were between 3 and 6 points higher than the percentages of the other types of nursing homes with deficiencies. In each of the past 3 years, for-profit nursing homes made up 67 percent of the nursing homes surveyed, not-for-profit homes accounted for 27 percent, and government-owned homes accounted for the remaining 6 percent.

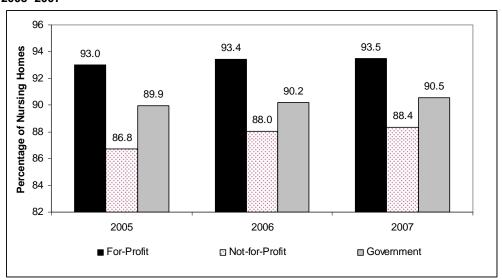


Figure 2: Percentage of Nursing Homes Surveyed With Deficiencies by Type of Ownership, 2005–2007

Source: OIG analysis of OSCAR data, 2008.

For-profit nursing homes also had a higher average number of deficiencies per home than the other types of nursing homes. In 2007, for-profit nursing homes averaged 7.6 deficiencies per home, while not-for-profit and government homes averaged 5.7 and 6.3, respectively. As Table 2 below shows, the averages for all types of nursing homes increased since 2005.

In addition, a greater percentage of multifacility nursing homes were cited for deficiencies, compared to single-facility nursing homes. In 2007, 93 percent of multifacility nursing homes surveyed were cited for deficiencies, as opposed to 91 percent of single-facility nursing homes. These numbers have not changed significantly since 2005. The average number of deficiencies was also higher for multifacility homes than for single-facility homes in each of the past 3 years. See Table 2 below.

Table 2: Average Number of Deficiencies per Nursing Home Surveyed by Type of Home, 2005–2007						
Type of Nursing Home 2005 2006 2007 Percentage Change						
For-profit	7.0	7.4	7.6	9.8%		
Not-for-profit	5.1	5.6	5.7	13.1%		
Government	5.5	6.0	6.3	14.1%		
Multifacility	6.6	7.2	7.3	10.9%		
Single-facility	6.1	6.5	6.7	10.4%		

^{*}Percentage change may vary because of rounding.

The Most Common Deficiency Categories Cited in Each of the Past 3 Years Were Quality of Care, Resident Assessment, and Quality of Life

The most common deficiency categories cited in 2005, 2006, and 2007 were quality of care, resident assessment, and quality of life. As shown in bold in Table 3 below, almost 74 percent of nursing homes surveyed were cited for quality-of-care deficiencies in 2007. The most common quality-of-care deficiencies involved accident hazards; providing care for residents' highest practicable physical, mental, and psychosocial well-being; and urinary incontinence. About 58 percent of nursing homes were cited for resident assessment deficiencies. The most common resident assessment deficiencies involved services meeting professional quality standards, comprehensive care plans, and service provision by qualified persons. Over 43 percent of nursing homes were cited for quality-of-life deficiencies. The most common quality-of-life deficiencies involved housekeeping and maintenance services, dignity, and accommodation of needs. In addition, almost 43 percent of nursing homes were cited for deficiencies in the dietary services category.

Table 3: Percentage of Nursing Homes Surveyed That Received at Least One Deficiency by Category, 2005–2007				
Deficiency Category	2005	2006	2007	Percentage-Point Difference, 2005–2007*
Quality of care	70.6	71.5	73.6	3.1
Resident assessment	54.4	58.0	58.2	3.8
Quality of life	43.1	45.6	43.3	0.2
Dietary services	43.1	44.4	42.9	-0.2
Resident rights	33.4	34.5	34.3	0.9
Administrative services	28.9	31.5	30.7	1.9
Pharmacy services	23.8	25.3	28.8	5.0
Infection control	26.3	28.7	28.4	2.1
Resident behavior and facility practices	26.4	26.7	27.4	1.0
Physical environment	22.9	23.7	23.8	0.9
Laboratory and radiology services	6.9	7.9	9.1	2.2
Nursing services	4.2	5.3	6.9	2.7
Physician services	4.6	5.4	5.7	1.1
Admission, transfer, discharge rights	1.6	1.6	1.7	0.1
Rehabilitative services	1.3	1.5	1.4	0.2
Dental services	1.2	1.4	1.4	0.2

Source: OIG analysis of OSCAR data, 2008.

The 2003 OIG report found that the most common deficiency categories cited in 2001 were also quality of care, resident assessment, quality of life, and dietary services, in the same descending order.¹⁹ During that year, 68 percent of nursing homes were cited for

^{*}Percentage-point difference may vary because of rounding.

¹⁹ OIG, "Nursing Home Deficiency Trends and Survey and Certification Process Consistency," OEI-02-01-00600, March 2003, p. 9.

quality-of-care deficiencies, 50 percent were cited for resident assessment deficiencies, 43 percent were cited for quality-of-life deficiencies, and 42 percent had dietary services deficiencies.

Most categories of deficiencies had minor increases between 2005 and 2007. The pharmacy services category measured the largest percentage-point increase. Deficiencies cited in this category, which addresses the accurate dispensation and administration of drugs to residents, increased by 5 percentage points. This increase coincided with the implementation in 2006 of Medicare Part D, which provided voluntary drug coverage to Medicare beneficiaries. In addition, CMS issued guidance in late 2006 that combined several drug-related deficiencies and revised its guidelines for citing these deficiencies.

Three types of deficiencies have been the most common since 2005. Approximately 36 percent of nursing homes surveyed were cited for deficiencies associated with accident hazards each year; between 33 percent and 35 percent of nursing homes were cited for deficiencies for the improper storage, preparation, distribution, or serving of food; and almost 28 percent were cited for deficiencies for not providing the care necessary for residents' highest practicable physical, mental, and psychosocial wellbeing. These most common deficiencies fell within the quality-of-care category and the dietary services category.

Almost 17 Percent of Nursing Homes Surveyed Were Cited for Actual Harm or Immediate Jeopardy Deficiencies in 2007

In 2007, nearly 17 percent of nursing homes surveyed were cited for immediate jeopardy or actual harm deficiencies. Specifically, almost 3 percent of nursing homes were cited for immediate jeopardy deficiencies, and 15 percent were cited for actual harm deficiencies in 2007.²⁰ The majority of the nursing homes with actual harm deficiencies had isolated (G-level) rather than pattern or widespread deficiencies (H- and I-level).

The most common scope and severity ratings in 2007 were at the D and E levels. Eighty-three percent of nursing homes surveyed were cited for D-level deficiencies, and 63 percent were cited for E-level deficiencies. Both ratings indicate a severity of no actual harm with potential for more than minimal harm. Although most of the scope and severity levels did not change substantially since 2005, there was a small shift from B-level to C-, E-, and F-level deficiencies. This trend indicates that nursing homes were cited for more severe deficiencies as well as deficiencies that were wider in scope in 2007, compared to those in the prior 2 years. Table 4 on the next page shows the scope and severity levels for 2005 through 2007, with the largest percentage-point changes in bold.

_

²⁰ One percent was cited for both deficiencies.

Table 4: Percentage of Nursing Homes Surveyed That Had at Least One Deficiency by Scope and Severity Levels, 2005–2007					
Scope and Severity Level	2005	2006	2007	Percentage-Point Difference, 2005–2007*	
Α	0.0%	0.0%	0.0%	0.0	
В	30.5%	28.7%	27.6%	-3.0	
С	20.8%	21.9%	22.2%	1.4	
D	82.4%	83.1%	83.2%	0.9	
E	58.4%	61.8%	62.8%	4.4	
F	19.2%	21.1%	21.2%	2.0	
G	14.1%	15.4%	14.9%	0.7	
Н	1.0%	1.1%	1.0%	0.1	
1	0.1%	0.1%	0.1%	0.0	
J	1.2%	1.1%	1.3%	0.1	
К	1.0%	1.0%	1.2%	0.2	
L	0.4%	0.4%	0.4%	0.1	

Source: OIG analysis of OSCAR data, 2008.

According to the 2003 OIG report, the most common scope and severity ratings in 2001 were also at the D and E levels. However, the percentage of nursing homes with these ratings was somewhat lower than the figures above, at 77 percent and 55 percent, respectively. In addition, OIG reported that between 1998 and 2001, there was a shift away from G-level to more D- and E-level deficiencies. This shift demonstrated that nursing homes had deficiencies that were less severe but equal or wider in scope in 2001 compared to 1998.

In each of the past 3 years, a higher percentage of for-profit nursing homes surveyed were cited for immediate jeopardy or actual harm deficiencies, compared to the other types of nursing homes. In 2007, 17 percent of for-profit nursing homes surveyed were cited for these deficiencies, compared to 15 percent of not-for-profit and government homes. In addition, a slightly greater percentage of multifacility nursing homes were cited for immediate jeopardy or actual harm deficiencies, compared to single-facility homes, at 17 percent and 16 percent, respectively.

Substandard Quality-of-Care Deficiencies Increased Slightly Since 2005

The percentage of nursing homes with substandard quality-of-care deficiencies has risen slightly since 2005. In 2007, 3.6 percent of nursing homes surveyed were cited for these deficiencies, up from 3.0 percent in 2005. The small increase in substandard quality of care differs from the slight downward trend in the 2003 OIG report.²² That report found

_

^{*}Percentage-point difference may vary because of rounding.

²¹ OIG, "Nursing Home Deficiency Trends and Survey and Certification Process Consistency," OEI-02-01-00600, March 2003, p. 11.

²² Ibid., p. 10.

that the percentage of nursing homes cited for quality-of-care deficiencies decreased from 4.5 percent in 1998 to 4.2 percent in 2001.

The percentage of for-profit nursing homes with substandard quality-of-care deficiencies was higher compared to the other types of nursing homes. In 2007, 4.2 percent of for-profit homes were cited for these deficiencies, in contrast to 2.3 percent of not-for-profit homes and 3.0 percent of government homes. These percentages increased slightly for all three types of homes since 2005. During the same time, the percentage of multifacility homes with substandard quality of care deficiencies increased from 2.9 percent to 3.9 percent while the percentage of single-facility homes stayed at about 3 percent.

The Number of Substantiated Complaints Decreased Slightly Since 2005

The number of substantiated complaints decreased nearly 3 percent since 2005. As shown in Figure 3 below, a total of 14,394 complaints were substantiated in 2007, a decrease from 14,781 in 2005. The total number of complaints has similarly decreased since 2005. Almost 39 percent of complaints in each year were substantiated.

The number of nursing homes associated with these complaints also decreased. In 2007, 2,759 nursing homes were associated with at least one substantiated complaint, compared to 2,856 in 2005. In each of the past 3 years, almost 40 percent of these complaints were related to care or services. About 20 percent of substantiated complaints involved resident abuse or neglect.

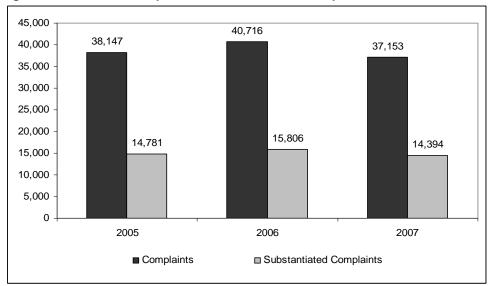


Figure 3: Numbers of Complaints and Substantiated Complaints, 2005–2007

CONCLUSION

Deficiency rates have not changed significantly over the past 3 years. More than 91 percent of nursing homes surveyed were cited for deficiencies, and a greater percentage of for-profit nursing homes were cited for deficiencies than not-for-profit and government nursing homes. The most common deficiency categories cited in each of the past 3 years were quality of care, resident assessment, and quality of life. Additionally, 17 percent of nursing homes surveyed in 2007 were cited for actual harm or immediate jeopardy deficiencies, and 3.6 percent were cited for substandard quality-of-care deficiencies—a slight increase since 2005. Lastly, the number of substantiated complaints decreased nearly 3 percent since 2005.

We note that many factors in addition to quality of care may affect deficiency rates. These factors may include an increase in enforcement, additional guidance or training from States and CMS, legislative changes, and State surveyor practices.

This report is being issued directly in final form because it contains no recommendations. If you have comments or questions about this report, please provide them within 60 days. Please refer to report number OEI-02-08-00140 in all correspondence.

Appendix A

Percentage of Nur			1
Deficiencies by State	2005–20 2005	2006	2007
Alabama	97.6%	97.0%	96.8%
Alaska	80.0%	100.0%	100.0%
Arizona	92.9%	96.2%	97.4%
Arkansas	95.4%	97.6%	97.9%
	+		
California	98.6%	98.2%	99.1%
Colorado	95.0% 95.6%	95.9%	96.6%
Connecticut		97.4%	98.7%
Delaware	97.6%		97.6%
District of Columbia	100.0%	100.0%	100.0%
Florida	97.1%	96.8%	97.2%
Georgia	95.2%	95.0%	88.1%
Hawaii	100.0%	97.9%	97.4%
Idaho	94.4%	100.0%	100.0%
Illinois	87.1%	87.5%	90.4%
Indiana	89.2%	88.9%	89.1%
Iowa	85.3%	86.6%	88.4%
Kansas	92.3%	95.2%	96.9%
Kentucky	90.1%	91.2%	87.6%
Louisiana	92.5%	91.8%	94.7%
Maine	100.0%	98.2%	95.2%
Maryland	93.4%	96.9%	94.4%
Massachusetts	83.3%	81.4%	80.3%
Michigan	95.4%	94.4%	96.0%
Minnesota	96.6%	98.6%	97.5%
Mississippi	86.6%	87.1%	86.7%
Missouri	88.0%	89.7%	92.5%
Montana	96.5%	92.8%	91.4%
Nebraska	86.9%	91.6%	91.4%
Nevada	82.6%	90.9%	83.3%
New Hampshire	85.7%	70.3%	83.5%
New Jersey	88.7%	88.0%	92.2%
New Mexico	92.7%	92.5%	97.1%
New York	90.4%	91.2%	92.0%
North Carolina	88.8%	91.1%	89.6%
North Dakota	98.7%	97.6%	93.5%
Ohio	86.1%	85.9%	87.4%
Oklahoma	93.7%	95.5%	93.8%
Oregon	72.6%	74.1%	81.4%
Pennsylvania	89.7%	93.4%	89.7%
Rhode Island	85.7%	86.8%	76.3%
South Carolina	93.1%	96.9%	92.7%
South Dakota	89.8%	94.2%	88.6%
Tennessee	95.5%	91.1%	92.0%
Texas	92.1%	91.1%	89.6%
Utah	86.3%	93.3%	97.5%
	91.7%		
Virginia		100.0%	94.6%
Virginia	84.4%	87.2%	93.1%
Washington	90.9%	91.5%	90.9%
West Virginia	97.5%	96.2%	95.8%
Wisconsin Wyoming	79.3% 100.0%	83.8% 100.0%	85.6% 100.0%

Appendix B

Average Number of Surveyed by State, 2		s per Nursing	Home
STATE	2005	2006	2007
Alabama	7.2	6.8	6.4
Alaska	5.3	9.5	6.5
Arizona	8.7	9.2	7.7
Arkansas	9.3	10.7	8.6
California	10.2	11.3	11.8
Colorado	8.5	9.3	9.7
Connecticut	8.0	8.5	9.0
Delaware	8.3	13.1	13.3
District of Columbia	13.6	12.5	14.4
Florida	7.5	8.3	8.0
Georgia	6.6	6.8	6.5
Hawaii	8.5	7.0	7.0
Idaho	8.8	9.9	8.7
Illinois	4.4	4.9	5.3
Indiana	5.8	6.8	7.9
Iowa	4.2	4.3	5.0
Kansas	8.9	9.8	9.9
Kentucky	4.5	5.5	4.5
Louisiana	8.2	7.1	7.9
Maine	8.5	8.3	8.3
Maryland	7.8	9.5	9.8
Massachusetts	5.3	5.2	5.5
Michigan	7.4	7.6	8.8
Minnesota	8.5	10.1	10.2
Mississippi	3.7	4.0	4.3
Missouri	6.2	7.1	8.2
Montana	6.3	6.4	6.9
Nebraska	4.1	5.3	6.9
Nevada	9.4	10.2	6.9
New Hampshire	5.5	4.5	4.4
New Jersey	4.2	4.3	4.3
New Mexico	7.7	7.1	7.1
New York	4.1	4.6	5.3
North Carolina	4.9	4.7	4.4
North Dakota	4.8	4.8	4.3
Ohio	4.5	4.8	5.5
Oklahoma	8.0	8.9	9.1
Oregon	4.7	4.8	4.7
Pennsylvania	4.6	5.2	4.6
Rhode Island	4.9	3.5	2.5
South Carolina	8.2	7.9	7.6
South Dakota	4.0	4.9	4.5
Tennessee	6.6	5.9	5.7
Texas	6.5	6.8	6.5
Utah	4.2	4.7	5.7
Vermont	6.4	7.2	8.0
Virginia	5.2	6.4	7.3
Washington	6.3	6.3	6.6
West Virginia	7.9	7.8	8.6
Wisconsin	3.3	4.2	4.7
Wyoming	7.9	15.1	12.3