State Nursing Home Enforcement Systems

Charlene Harrington, Joseph T. Mullan, and Helen Carrillo
University of California, San Francisco

Abstract This study presents interview and statistical data from a telephone and fax survey of state agency officials and statistical data from the Centers for Medicare & Medicaid Services' Online Survey Certification and Reporting (OSCAR) system. State survey activities for nursing facilities were reviewed and the number and types of intermediate sanctions issued by states in l999 were reported, along with barriers to the use of such sanctions. Using five selected enforcement measures to create a summary score, states were classified by quartiles based on the stringency of their nursing facility enforcement activities. Controlling for the number of complaints as a proxy for quality, the predictors of a summary of state enforcement actions were: percentage of population at age eighty-five and above, Democratic governors, higher percentages of chain facilities, and lower facility occupancy rates. Regional differences in enforcement patterns also were shown. Many federal policies and resource constraints were identified as barriers to effective regulation. The findings identified nursing facility survey and enforcement issues that need to be addressed by policy makers.

Poor nursing facility quality of care has been a national concern since the U.S. Senate Special Committee on Aging first began hearings in 1963 (this study follows hearing reports from 1963 to 1974; also see U.S. GAO 1987). Reports about poor quality continued into the l980s and led to an

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Institute of Medicine (IOM) (1986) report on widespread quality problems and recommendations for stronger federal regulations. The IOM report, as well as the active efforts of many consumer advocacy and professional organizations, resulted in Congress passing a major reform of nursing facility regulation in the Omnibus Budget Reconciliation Act of 1987 (Public Law 100–203) (OBRA 1987). OBRA 1987 strengthened the quality standards, the survey process, and the enforcement mechanisms for nursing facility regulation. OBRA and its subsequent regulations mandated uniform comprehensive assessments for all nursing facility residents and required the survey process to focus on resident outcomes. The overall goal of the survey and enforcement process under OBRA 1987 was to achieve facility compliance with federal quality requirements.

The Centers for Medicare & Medicaid Services (CMS) (formerly the Health Care Financing Administration [HCFA]) is responsible for setting the standards, establishing survey and monitoring procedures, and enforcing the law (U.S. HCFA 1995a, 1995b, 2000b). The 1995 HCFA guidelines required nursing facility deficiencies to be rated by surveyors based on their scope and severity and linked to intermediate sanctions (U.S. HCFA 1995a). The CMS enforcement requirements include a range of new federal intermediate sanctions including civil monetary penalties (CMPs), the denial of payment for new or current admissions, and the imposition of temporary management. Ultimately, CMS can decertify (terminate) facilities from the program that fail to meet the federal standards (U.S. HCFA 1995a, 1995b). The federal enforcement procedures are complex, and the implementation process has been slow and controversial (U. S. GAO 1998, 1999a).

The implementation of OBRA shifted federal regulations from a focus on the physical plant and safety features to a focus on quality of care and quality of life for residents (Morford 1988). It could be argued that the implementation of OBRA represented a fundamental shift from a "compliance model" that emphasized encouraging providers to improve quality to a "deterrence model" in which penalties are enforced for failures to comply with requirements (Hawkins and Thomas 1984; Day and Klein 1987).

Since 1965, when the Medicare and Medicaid programs were established, nursing facility regulation has been a joint federal and state responsibility. State survey agencies are responsible for licensing nursing facilities if they meet state legal requirements and for certifying facilities that meet the conditions for participation in the Medicare and Medicaid programs. State survey agencies have contracts with and are funded by CMS

to undertake certification and enforcement activities. Even though the regulatory system is shared between CMS and states, the implementation of the regulations has been largely devolved to the states.

Although it was expected that the OBRA 1987 changes would improve the survey and enforcement system and ultimately improve quality, there are still many nursing facilities with quality of care problems. The U.S. General Accounting Office (GAO) (1998, 1999a) found that one-third to one-fourth of nursing facilities nationwide continue to be cited for deficiencies that either caused actual harm or the potential for harm and serious injury. A number of studies and reports have related the poor quality of some nursing facility care to serious ongoing problems with the survey and enforcement system (Edelman 1997, 1998; U.S. OIG 1999; Abt and U.S. DHHS 1998; U.S. GAO 1999b, 1999c, 1999d). In spite of the new regulatory efforts, the average number of deficiencies steadily declined by 44 percent between 1991 and 1997 (Harrington and Carrillo 1999). The continued widespread variation in the number and type of deficiencies issued by states suggests that states are not using the regulatory process consistently (U.S. GAO 1998, 1999a). One of the most serious findings by the U.S. GAO (1998, 1999a) was that state surveyors were often unable to detect serious quality of care problems, and often CMS and the states allowed most facilities to correct deficiencies without penalties. Only a few facilities were terminated from the program, and most of these were later reinstated and continued to have deficiencies.

The U.S. Senate Special Committee on Aging held a series of hearings between 1998 and 2000 regarding the GAO's studies and urged CMS to improve its survey and enforcement process. CMS reports to the U.S. Senate Special Committee on Aging showed some improvements in state regulatory activity (U.S. HCFA 2000a, 2001), but many problems with the regulatory system persisted (U.S. GAO 2000). A recent Institute of Medicine report recommended further reforms of nursing facility regulation to improve the survey and enforcement process (IOM 2001).

This essay examines state agency survey and enforcement activities for nursing facilities five years after the l995 federal enforcement procedures were adopted. The study had four aims: (1) to examine the variations in the survey process and enforcement actions across states, (2) to identify the barriers to effective enforcement from the perspective of state licensing and certification (L&C) officials, (3) to classify states on the basis of their enforcement stringency, and (4) to identify some factors that predict state regulatory enforcement activity.

The study presents interview and statistical data from a telephone and

fax survey of state L&C agency officials (or their designees) and statistical data from CMS's Online Survey Certification and Reporting (OSCAR) system. State L&C survey activities are reviewed, and the number and types of intermediate sanctions issued by states in 1999 are reported, along with barriers to the use of such sanctions. Using five selected enforcement measures, states are classified based on the stringency of their enforcement activities. Predictors of state enforcement are examined including political variables, facility characteristics, a competition measure, state Medicaid generosity, and a quality indicator. Finally, state licensing and certification official reports on enforcement barriers and resource constraints are considered. The findings from the study provide an overview of nursing facility regulatory issues that need to be considered by policy makers.

Background

Historically, the role of the states in the regulation of health care has been strong, even after the passage of Medicare and Medicaid in 1965, when the federal government began to prescribe requirements for providers to participate in the federal program (Litman 1997). L. D. Brown (1992: 24) argued that decentralized behavioral regulations have been popular in the United States because they let the federal government appear to be doing something about a problem, but in reality, they keep political conflicts focused away from Washington, do little to upset the system and providers, and give the appearance of using democratic decision making. S. M. Davidson (1997) has pointed out that states, with their shared responsibilities with the federal government, have certain freedoms to improvise in carrying out their mandates. Although state variation is often praised as a mechanism for developing innovations and adaptations to the special interests and needs of different population groups and regions, there are situations when variations can create inequities and problems (Lipson 1997; Leichter 1997).

Moreover, states differ in their willingness and ability to address certain policies (Davidson 1997), and these differences are related to historical and cultural attitudes (Davidson, Cromwell, and Schurman 1986) as well as politics and financial capacity. This is particularly the case where the role of the states in the nursing facility regulatory process is pivotal.

Survey Procedures

State surveys are required for nursing facility certification between nine and fifteen months (on average every twelve months), and investigations are required when complaints are made about poor quality of care. In addition, state surveyors are required to pass a Surveyor Minimum Qualifications Test (SMQT) administered by CMS and to follow its State Operations Manual (U.S. HCFA 1995a, 1995b, 1999, 2000a). When they find that a facility fails to meet a specific federal requirement, a deficiency is issued. State surveyors are responsible for rating the scope and severity of deficiencies. State agencies have the responsibility for taking enforcement actions against Medicaid-only certified facilities, and they work with federal officials on enforcement actions for Medicare-only and combination Medicare/Medicaid–certified facilities.

Under the 1998 HCFA initiatives, states are responsible for implementing a number of new reforms in their survey procedures (U.S. DHHS 1998). These include using staggered surveys (scheduled on weekends, holidays, or nights); making survey dates less predictable; conducting timely complaint investigations; targeting the poorest performing facilities for more frequent monitoring and surveys than other facilities; tracking changes in owners and poor performing facilities; ensuring the accuracy of the resident assessment data (minimum data set); using CMS quality indicators to target potential facility problems and selected sample residents during the survey; and submitting OSCAR data in a timely fashion, along with other responsibilities (U.S. HCFA 2000a, 2001; Walshe and Harrington 2002).

Classifying Deficiencies and Imposing Sanctions

In July 1995, HCFA established a graded system for classifying deficiencies by severity and scope in one of twelve categories labeled "A" through "L" depending on the extent of patient harm (severity) and the number of patients adversely affected (scope). Facilities with deficiencies at the C level or below are considered to be in "substantial compliance" with the regulations and are not subject to sanctions (U.S. HCFA 1995a). Facilities with higher deficiencies are "not in substantial compliance" and are subject to intermediate sanctions or termination from the program, depending on the severity of the problem. Facilities with deficiencies that have a potential for more than minimal harm (D or E level) are required to provide a plan of correction (U.S. GAO 1999b: 8). Facilities with deficiencies

rated as F through I are required to receive a denial of payment for new admissions or CMPs of $50 to $3,000 per day of noncompliance. Deficiencies that cause actual or potential for death or serious injury (at the J to L levels) are categorized as causing immediate jeopardy and are subject to such sanctions as temporary management, termination, and/or civil monetary penalties of $3000 to $10,000 per day of noncompliance.

Substandard Quality of Care

Substandard quality is defined as one or more deficiencies related to participation requirements under resident behavior and facility practices (42 Code of Federal Regulations Section 483.13), quality of life (ibid. at Section 483.15), or quality of care (ibid. at Section 483.25) that constitutes either immediate jeopardy or actual harm. The jeopardy or actual harm must be a pattern or widespread (H level or higher), or it must have the potential for more than minimal harm that is widespread (F level) (U.S. HCFA 1999). Facilities receiving a determination of substandard quality of care are subject to losing their authority to conduct nurse aide training, which, consequently, may make the hiring of nurse aides difficult.

Procedural Issues

CMS requires a notice period before the sanction can take effect, and sanctions recommended by states must be sent to the CMS regional officials for them to review the sanctions and give fifteen to twenty days of notice for the facility to come into compliance (ibid.). In cases of immediate jeopardy, the sanction can be put into effect after a two-day notice. The requirement for CMS regional office approvals of CMPs and other intermediate sanctions adds another layer of bureaucracy and time delays (IOM 2001). The CMP system is seriously hampered by an increasing backlog of administrative appeals that can last for several years and the provision that prohibits collection until the appeal is resolved (U.S. GAO 1999b). Additional funds were appropriated by Congress to increase the number of hearing officers for appeals to speed the process, but the bureaucratic appeals process has continued to be cumbersome and time consuming (IOM 2001).

Methods

Measures of State Enforcement Stringency

There are many ways to measure the stringency of state enforcement. We examined indicators of enforcement identified by CMS, the GAO, or others (Abt and U.S. DHHS 1998; U.S. GAO 1998, 1999a, 1999b; Harrington and Carrillo 1999). For this study, five indicators of enforcement were selected: (1) the average number of deficiencies issued per facility; (2) the percentage of facilities that received a deficiency compared to those facilities that received no deficiencies; (3) the percentage of facilities that received a deficiency at the G level or above (residents experience harm or serious jeopardy that was either an isolated event, a pattern, or a widespread problem); (4) the percentage of facilities that were cited for substandard care; and (5) the average number of state and federal CMPs issued per facility surveyed. All state and federal CMPs issued to facilities were combined because some states exclusively used their state CMP system.

A number of other measures of enforcement activities could have been selected. The amount of federal and state funds for nursing regulation was not examined because its relationship with enforcement was explored in another study (Walshe and Harrington 2002) and complaint investigation and confirmation rates have had some data reporting problems (U.S. GAO 1999b). The average dollar value of federal CMPs was considered but not selected because the amount appears to be largely determined by CMS regional offices rather than by state officials. Other intermediate sanctions described in the findings of this study were used too infrequently to be good indicators. After reviewing the available data, the investigators considered the five selected variables to be the most accurate and interesting indicators of enforcement activities.

Predictors of Regulatory Stringency

Although studies show wide variations in state survey and certification activities (Harrington and Carrillo 1999; U.S. GAO 1998, 1999a, 1999b, 1999c, 2000), little is known about what factors may predict greater nursing facility regulatory enforcement. Using some research literature from other studies of regulation, we identified five categories of independent variables that may be important in predicting the variation in enforcement activities across states.

Political Variables

Politics can be an important predictor of public policy and regulation (Kronebusch 1997). The percentage of the population at age eighty-five and above may be a positive predictor because where aged populations are larger, they may represent a political constituency for policy changes (ibid.; Cromwell et al. 1997; Kane et al. 1998), including stronger regulation. An older population can demand more nursing facility care, but it may also be more vulnerable to poor quality, which may encourage states to increase enforcement.

Previous studies have found that liberal politics may predict regulatory initiatives (Harrington et al. 1997 examined political factors and certificate of need regulation; Lanning, Morrisey, and Ohsfeldt 1991 examined hospital regulation; Miller et al. 2001 examined waiver programs). Thus we expected that in cases where the governor of a state was a Democrat, those states would be more supportive of regulation than would be states with Republican or Reform governors.

Facility Characteristics

Facility characteristics can also influence regulation by states. Large multifacility chains may be associated with lower staffing levels and poorer quality of care (Harrington et al. 2001). States may be more enforcement oriented if there are higher percentages of chain facilities in the state. Hospital-based nursing facilities have been found to offer higher staffing and higher quality (Harrington, Zimmerman, and Karon et al. 2000). Thus, it was expected that states with higher percentages of hospital-based facilities would initiate fewer enforcement activities.

Lower occupancy rates in nursing facilities may result in lower revenue and could reduce the quality of care in facilities. This could result in states giving more deficiencies to facilities with lower occupancy rates. At the same time, states with facilities with lower occupancy rates on average may take a stronger regulatory approach because there are other facilities available that could take the residents.

Competition Measure

Nursing facility bed supply should be related to state enforcement activities. Where bed supply is low, less competition may occur and facilities may not be as concerned about quality (Nyman 1988). This could result in the need for states to give more deficiencies to nursing facilities.

State Generosity Measure

States that are more generous in their Medicaid nursing facility reimbursement rate policies may be more likely to institute stronger enforcement because they have higher expectations for quality. In contrast, state survey agency officials in states with low reimbursement rates may be more sympathetic to nursing facility providers trying to provide care and less willing to institute strong enforcement actions.

Quality of Care Indicator

The enforcement activities for nursing facilities may vary across states because of actual differences in quality among the states. No ideal independent measure of differences in quality of care was available beyond the enforcement actions. In an effort to address some of the variation due to quality of care problems, we used the number of consumer complaints per 1,000 nursing home beds in a state as a control variable, representing perceived quality of care. This quality indicator is not ideal because the measure may also reflect some differences in the collecting, recording, and reporting of complaints by state survey agencies. Other unmeasured differences in actual quality across states were expected to be a part of the residual values in our analyses.

Unmeasured Factors

Many other factors may also be important, but we had to limit the variables in the model because we had the fifty-one states for only one year. We conducted a preliminary analysis of the data and found that other factors were not strongly related to enforcement. Two facility characteristics were unrelated to enforcement: (1) the percentage of for-profit facilities and (2) the percentage of Medicaid residents. We also examined other state factors, such as the percentage of the population living in a metropolitan area and the average per capita income of a state. In addition, regional variations were expected because federal oversight of the states is conducted by ten regional offices and considered separately in the analysis.

Data Sources

The data for this study were collected from three sources. First, a telephone and fax survey of state licensing and certification agency directors

or their designees was conducted during the year 2000. All fifty states and the District of Columbia participated in the survey. In the telephone survey, state L&C directors were asked a series of structured questions about their enforcement program. State L&C officials were also asked to provide statistical data for 1999 and 2000 (by fax) on the number of nursing facility complaints and the number and type of enforcement actions taken. Officials were also asked to describe barriers in the use of enforcement actions including intermediate sanctions. Only data for l999 are presented because these were the most recent complete data available at the time of the survey.

Second, statistical data from the CMS OSCAR system, on which state survey agencies record their survey activities, were used. OSCAR data from 15,724 nursing facilities with 1.6 million beds surveyed during the calendar year of l999 were used in the analysis (Harrington, Carrillo, and Thollaug et al. 2000) (not all of the approximately 17,000 nursing facilities are surveyed annually). These data provided information on the average number of deficiencies in facilities, the percentage of facilities with deficiencies, and facilities characteristics (percentages in a chain and in hospitals and occupancy rates). OSCAR data compiled by CMS for the Senate Special Committee on Aging (U.S. HCFA 2000b) provided information on the percentage of facilities causing harm or jeopardy and cited for substandard care. Finally, other data on state characteristics were available from the U.S. Bureau of the Census (1999), the National Conference of State Legislators (NCSL 1999), and a survey of state nursing home bed supply and Medicaid reimbursement measures by Harrington, Swan, and Wellin et al. (2000).

Data Analyses

Qualitative data from the interviews with state survey agency officials were presented by subject category. Descriptive statistics were compiled to examine overall rates and distributions of enforcement actions and to explore differences between states on selected indicators of enforcement stringency. We transformed two dependent measures to normalize their distribution: we used the log of the average number of civil monetary penalties per facility and the square root of the percentage of facilities cited for substandard care.

We created an overall index of enforcement activities per state by summing the five measures of state enforcement activities after standardizing each one using the following formula: (X – mean) / Standard Deviation.

The five standardized values were then added to create a summary score for each state. Pearson correlation coefficients among the five dependent variables were all positive indicating that they were measuring aspects of regulatory enforcement. The alpha for the five measures in the summary score was .75.

Eight independent variables were selected for the model as described above. A correlation matrix was produced to check for collinearity, but the correlations among independent variables were modest (none above .6), and in the subsequent regression analyses, tolerance tests showed that collinearity was not a problem. To examine the predictors of enforcement indicators and the summary score across states, an ordinary least squares regression analysis was conducted in SAS. This analysis used the state as the unit of analysis for l999.

Findings

In 1999, 15,724 facilities were surveyed in the United States by state agencies and 82 percent of these facilities received a total of almost 85,000 deficiencies for failure to meet federal regulations (not shown). Thirty-one percent of facilities (4,880) were given citations for violations that could or did cause harm or jeopardy to residents, and 811 facilities were classified by survey agencies as providing substandard care based on the number and type of deficiencies the facilities received. Overall, these nursing facilities had about 80,489 complaints lodged against them during 1999. These findings indicate that quality problems are substantial.

Use of Intermediate Sanctions

In response to the identified quality problems in nursing facilities, state survey agencies have a wide range of intermediate sanctions that they may issue. This section shows the combined state and federal intermediate sanctions used in 1999, and that state sanctions represent a large part of the total sanctions.

Civil Monetary Penalties

As seen in Table 1, a total of 3,316 state and federal CMPs were issued in 1999. Of the total CMPs, 61 percent were issued by sixteen states under their own state CMP regulations, 3 percent of CMPs were issued by states for Medicaid-only facilities, and 36 percent were issued by CMS for

Table 1 Total State and Federal Complaints Enforcement Actions Reported for 1999

State	Total Federal and State Civil Monetary Penalties	Total Denial of Payments for New Admissions	Federal or State Temporary Manager or Receiver	Federal or State Decertification Notification	State License Revocation Action
AK	0	0	0	0	0
AL	56	26	0	1	0
AR	68	105	0	8	0
AZ	11	2	1	0	0
CA	835	5	0		0
CO	8	0	0	0	0
CT	0	0	6	0	0
DC	0	1	1	2	0
DE	2	0	0	0	0
FL	37	37	0	1	1
GA	36	31	0	0	0
HI	0	0	0	0	0
IA	30	2	0	0	0
ID	8	0	0	0	0
IL	691	468	1	1	1
IN	240	83	1	1	1
KS	64	27	0	0	
KY	28				
LA	0	0	0	0	0
MA	9	0		0	2
MD	11	8	0	7	0
ME	61	0	1	0	0
MI	22	45	5	7	4
MN	13	195	0	0	1
MO	30	0	0		11
MS	18	0		0	
MT	2	4		0	
NC	68	20	0	1	0
ND	1	5	0	0	0
NE	2	7	0	0	0
NH	8	0	0	0	0
NJ	6	6	0	0	0
NM	9	65	1	0	0
NV	10	5	0	1	0
NY	31	14	0	0	1
OH	118	35	0	2	0
OK	29	1	12	2	0

Table 1 (Continued)

State	Total Federal and State Civil Monetary Penalties	Total Denial of Payments for New Admissions	Federal or State Temporary Manager or Receiver	Federal or State Decertification Notification	State License Revocation Action
OR	134	34	0	1	0
PA	70	12	0	0	1
RI	0	0	0	0	0
SC	18	92	0	1	0
SD	0	0	0	0	0
TN	63	0	0	0	0
TX	114	68	15	6	19
UT	9	6	0	0	0
VA	8	0	0	3	0
VT	5	3	1	0	0
WA	44	31	0	0	0
WI	284	11	1	0	0
WV	5	0	0	1	0
WY	0	0	1	0	0
Entire U.S.	3,316	1,454	47	46	42

Note. Data provided by state survey agencies. Blanks indicate the state did not provide data.

Medicare and/or Medicaid certified facilities (not shown). Table 1 shows that eight states did not issue any CMPs (Alaska, Connecticut, District of Columbia, Hawaii, Louisiana, Rhode Island, South Dakota, and Wyoming) and four states (Delaware, Montana, Nebraska, and North Dakota) only issued one to two CMPs in 1999. Wyoming had a statute that prohibited the use of CMPs, and the Virginia attorney general did not allow the state to impose sanctions. State officials in some of these states reported that they were philosophically opposed to CMPs. For example, one official stated it is better to have facilities with poor care use their funds to improve resident care rather than to pay fines. Minnesota had a moratorium on CMPs in 1998–1999 because of a reported political backlash by state politicians against CMPs, but they issued thirteen CMPs in 1999. Other states reported a reluctance to use CMPs with bankrupt facilities, either because state Medicaid reimbursement rates were not adequate or because enforcement would have a negative impact on the nursing facility industry and/or the facility staff.

Surprisingly only eight states (16 percent) considered CMS CMPs effective in bringing facilities into compliance, and nineteen states (37 percent) reported that CMS CMPs were not effective. The remaining states either did not use CMPs or used their own state systems for issuing CMPs. Almost every one of the sixteen states that had state CMP systems considered their state system to be more effective than the federal CMPs because it was easier and faster to use. Other problems reported by states with the federal CMP remedy were that CMS settles the fines at too low a level, CMS regional offices do not pursue collecting the fines or deny proposed CMPs, and the CMS process takes too long, especially delays in the appeal process. Most states were unable to report the number of federal intermediate sanctions issued or under appeal, including CMPs, because CMS did not keep them informed.

Denial of Payment for New Admissions

Table 1 shows that thirty-two states used denials of payment for new admissions in 1,454 facilities in 1999. Of the total states using these sanctions, 57 percent of facilities were sanctioned under state regulations and 43 percent of facilities were sanctioned under the federal regulations (not shown). All states (except Utah) rated the denial of payments as an effective intermediate sanction, primarily because it protects the residents while it is imposed and facilities respond quickly to make corrections. States, however, reported delays when CMS was asked to implement a denial of new admissions sanction. The major drawback of this sanction was that facilities are not allowed to conduct their own internal training programs for nursing assistants, which can have a negative effect on hiring staff. Some state officials recommended removing the link between using the sanction and the loss of internal nursing assistant training. A few other states reported that they did not impose the sanction because of the thirty-day follow-up visit requirement when they had limited resources.

Temporary Management and Receivership

Only thirteen states used either the federal or the state temporary management or receivership regulations to sanction a total of forty-seven facilities in 1999 (Table 1). Of these sanctions, only six facilities were sanctioned under the federal temporary manager provisions in 1999, and the remainder was under state provisions (not shown). Twenty-eight states (55 percent) never had used this federal sanction, while most other states had

tried to use it one or two times but were unsuccessful (four states did not report). Seventeen states (33 percent) had used their own state receivership or management program in the past, but only seven states reported using it in 1999 (not shown).

Decertification or Revocation

Decertification (termination from the Medicare and Medicaid program), as the ultimate sanction against a facility, was seldom used. In 1999, seventeen states reported issuing forty-six decertification or termination notices for the Medicare and/or Medicaid program (Table 1). Of these, thirty-nine facilities were later certified to return to the program (not shown). Fourteen states had never used decertification or had not used it for many years. Other states issued decertification notices to facilities that came back into compliance before the sanction was imposed. Some state officials recommended that decertified facilities should be kept from reentering the federal program for a specified time period, such as six months. In 1999, ten states revoked the state licenses of forty-two facilities because of poor quality of care (Table 1).

State officials expressed strong frustration with the CMS regulatory process. Most states (thirty-seven or 72.5 percent) reported inadequate federal funds to carry out their regulatory activities, while 45 percent reported inadequate state funds. They wanted additional federal funds or reductions in some state survey agency activities, such as limiting informal dispute resolution to the most serious deficiencies, shorter and more streamlined surveys, and a complaint-driven survey process. Other states described the federal system as an administrative nightmare and said they were drowning in paperwork and documentation.

State Enforcement

State Enforcement Indicators

Table 2 shows five indicators of state enforcement activities from the 15,724 annual surveys in 1999. The average number of deficiencies issued per facility in a state in 1999 was 5.7. A closely related measure is the percentage of facilities that received a deficiency (82.5 percent) compared to those facilities that received no deficiencies in 1999 (17.5 percent). A third measure showed that 31 percent of facilities received a deficiency at the G level or above, indicating that the facilities were judged to have

Table 2 Five Selected Enforcement Indicators, Average Rank Score, and Overall Rank, by State, in 1999

	Enforcement Indicators					Rank Scores	
State	Average No. Deficiencies per Facility 1999 OSCAR	% Facilities with Deficiencies 1999 OSCAR	% Facilities Cited for Harm or Jeopardy 1999 HCFA	% Cited for Substandard Care 1999 HCFA	Average CMPs Issued per Facility Surveyed 1999 HCFA	Average Rank Score for All 5 Measures	Overall Rank
WA	9.7	98.5	59.8	6.3	0.16	7.3	1.0
AR	7.4	93.5	31.4	14.1	0.32	8.2	2.0
CA	11.3	95.8	31.3	6.4	0.73	9.1	3.0
OR	6.8	81.0	58.8	17.6	0.98	9.4	4.0
ID	7.3	91.0	57.3	8.5	0.10	10.5	5.0
SC	8.3	95.2	29.7	8.8	0.12	11.0	6.0
MI	9.9	97.0	47.4	6.7	0.06	11.6	7.0
AL	7.4	92.9	43.0	4.0	0.28	11.9	8.0
IN	7.4	89.7	24.5	7.5	0.45	14.6	9.0
KY	7.3	91.1	29.1	8.4	0.10	15.7	10.0
KS	6.1	85.7	43.0	6.3	0.15	16.0	11.0
NV	11.4	92.5	23.8	4.8	0.25	16.4	12.0
AZ	7.1	90.8	39.3	3.6	0.13	17.0	13.0
IL	6.1	89.5	32.3	3.7	0.79	17.2	14.0
AK	6.1	92.9	37.5	12.5	0.00	17.3	15.0
DE	7.2	82.3	50.0	5.6	0.06	18.1	16.0
NC	5.7	81.4	47.4	3.1	0.17	20.3	17.0
OH	5.3	79.7	30.3	7.1	0.14	20.6	18.5
FL	6.5	89.1	30.1	7.3	0.05	20.6	18.5

Table 2 (Continued)

State	Enforcement Indicators					Rank Scores	
	Average No. Deficiencies per Facility 1999 OSCAR	% Facilities with Deficiencies 1999 OSCAR	% Facilities Cited for Harm or Jeopardy 1999 HCFA	% Cited for Substandard Care 1999 HCFA	Average CMPs Issued per Facility Surveyed 1999 HCFA	Average Rank Score for All 5 Measures	Overall Rank
MS	5.6	86.8	31.3	5.5	0.10	21.1	20.0
NM	5.1	79.2	29.5	7.7	0.11	22.1	21.0
TN	4.6	85.3	23.9	4.3	0.18	25.2	22.0
MT	5.4	92.8	43.7	1.0	0.02	25.6	23.0
NH	3.9	66.7	35.3	7.4	0.12	26.0	24.0
GA	4.4	81.3	30.0	4.2	0.10	26.3	25.0
MO	5.1	79.3	25.7	6.7	0.06	27.2	26.0
HI	6.7	92.3	17.1	4.9	0.00	27.5	27.0
ND	5.0	87.4	37.6	3.2	0.01	27.6	28.0
ME	3.3	75.4	20.5	7.6	0.47	28.1	29.0
WV	5.5	89.5	27.0	2.9	0.04	28.6	30.0
CT	4.0	87.4	60.1	3.2	0.00	28.7	31.0
TX	4.5	77.6	23.9	5.4	0.09	30.3	32.0
SD	4.7	89.4	37.5	1.1	0.00	30.7	33.0
PA	4.1	81.2	32.3	1.9	0.09	31.0	34.0
MN	3.7	78.4	34.2	3.8	0.03	31.9	35.0
MD	2.8	58.2	29.2	7.6	0.08	32.6	36.0
WY	4.7	88.9	26.3	2.6	0.00	33.6	37.0
MA	4.1	67.5	33.2	3.4	0.02	35.2	38.0

Table 2 Five Selected Enforcement Indicators, Average Rank Score, and Overall Rank, by State, in 1999 (Continued)

	Enforcement Indicators					Rank Scores	
State	Average No. Deficiencies per Facility 1999 OSCAR	% Facilities with Deficiencies 1999 OSCAR	% Facilities Cited for Harm or Jeopardy 1999 HCFA	% Cited for Substandard Care 1999 HCFA	Average CMPs Issued per Facility Surveyed 1999 HCFA	Average Rank Score for All 5 Measures	Overall Rank
IA	4.1	79.4	24.2	2.3	0.07	35.2	39.0
UT	3.5	77.0	16.5	3.8	0.11	35.2	40.0
WI	3.4	73.5	17.9	1.9	0.68	36.0	41.0
OK	4.2	68.7	14.4	4.2	0.08	36.3	42.0
NY	3.4	75.1	27.0	3.5	0.05	36.8	43.0
LA	4.5	72.6	22.6	3.9	0.00	38.0	44.0
NE	3.5	76.1	29.6	2.2	0.01	38.9	45.0
NJ	2.0	51.5	26.5	4.7	0.02	39.8	46.0
VT	2.1	54.8	14.3	2.0	0.10	40.8	47.0
VA	3.6	69.2	19.6	2.5	0.03	41.8	48.0
RI	3.1	71.7	15.0	4.0	0.00	42.6	49.0
DC	4.3	78.6	0.0	0.0	0.00	43.1	50.0
CO	2.8	72.1	10.3	1.7	0.03	45.1	51.0
Entire U.S.	5.7	82.5	31.0	5.1	0.21		

caused residents either harm or serious jeopardy (ranging from an isolated event, a pattern, or a widespread problem). The percentage of facilities that were cited for substandard care overall was 5.1 in l999. Finally, the average number of CMPs issued to facilities under state or federal regulations was .21 per facility surveyed in 1999.

Table 2 shows the summary ranking of all states across the five indicators. A summary score was created by standardizing each of the five dependent variables and then adding them together. The average correlation coefficient among the five variables was 0.368 (not shown). The average number of deficiencies and the percentage of facilities that received a deficiency had the highest correlation (0.79). The deficiencies at the G level or higher (rated as causing harm or jeopardy) had the lowest correlation with the number of CMPs issued (.139). The overall alpha level was .75 for the five indicators in the summary score (not shown). In Table 2, the first thirteen states are in the highest quartile on enforcement and the bottom thirteen states are in the lowest quartile on enforcement. Using the five indicators, Washington, Arkansas, California, Oregon, and Idaho were ranked as the top five enforcement states. The five states ranked as the lowest were Colorado, the District of Columbia, Rhode Island, Virginia, and Vermont.

Predictors of Enforcement Stringency

Table 3 shows the means and the standard deviations for the five dependent and the eight independent variables used in the analysis of enforcement stringency. During 1999, the average number of complaints per 1,000 nursing home beds was 43.87 (Table 3), with a range from .42 complaints in Pennsylvania to 181.9 in Nevada (not shown). The number of complaints represents perceived quality by the public or residents and was used as a control variable in the regression model.

Table 4 shows the results of separate ordinary least square (OLS) regressions for each of the enforcement indicators and for the summary score for all five measures. Controlling for the number of nursing home complaints per 1,000 nursing home beds as a proxy for quality, states with higher percentages of the population age eighty-five and over gave more facilities at least some deficiencies. States with Democratic governors had higher summary scores on enforcement stringency.

In terms of facility characteristics, states with higher percentages of facilities with chains and higher percentages of hospital-based facilities gave higher percentages of facilities deficiencies. Higher percentages of hospi-

Table 3 Means and Standard Deviations of Dependent and Independent Variables for 1999

	Mean	Standard Deviation	Data Source
Dependent Variables			
Average number of deficiencies per facility	5.41	2.16	OSCAR[a]
Percentage of facilities with deficiencies	81.85	10.81	OSCAR[a]
Percentage of facilities causing harm or jeopardy	31.02	12.78	HCFA[b]
Percentage of facilities cited for substandard care	5.16	3.29	HCFA[b]
Average number of civil money penalties per facility	15.18	21.79	Survey[c]
Independent Variables			
Political Variables			
Percentage state population age 85 and over	1.56	0.36	USBOC[d]
Democratic governor (Yes = 1)	34.00%	47.80%	NCSL[e]
Facility Characteristics			
Percentage facilities in a chain	53.75	14.10	OSCAR[a]
Percentage of facilities in hospitals	16.35	11.34	OSCAR[a]
Percentage occupancy rate of facilities	83.69	7.55	OSCAR[a]
Competition Measure			
Nursing facility beds per 1,000 aged population (1998)	54.77	17.39	Harrington[f]
State Generosity Measure			
Average state Medicaid nursing facility reimbursement rate	$98.14	$29.90	Harrington[f]
Quality indicator			
Number of complaints per 1,000 nursing home beds	43.87	35.35	Survey[c]

[a]Harrington, Carrillo, and Thollaug et al. 2000.
[b]U. S. Health Care Financing Administration 2001.
[c]Survey of State Licensing and Certification Officials. 2000. Author's telephone survey from Table 2.
[d]U.S. Bureau of the Census 1999.
[e]National Conference of State Legislatures 1999.
[f]Harrington, Swan, and Wellin et al. 2000.

tal-based facilities led to lower average numbers of civil monetary penalties. States with more chain facilities also had higher percentages of facilities that received deficiencies for causing harm or jeopardy. States with lower facility occupancy rates gave citations to a higher number of facilities for substandard care and had higher summary scores on enforcement.

Table 4 OLS Regressions Predicting Enforcement Indicators and Summary Enforcement Score

	Average Number of Deficiencies	% Facilities with Deficiencies	% Facilities Causing Harm or Jeopardy	% Facilities Cited for Substandard Care (square root)	Average Number of CMPs per Facility (log)	Standard Summary Score for All 5 Measures
Political Variables						
% Age 85+	1.43	12.53*	15.92*	0.12	−0.07	3.19*
	(0.98)	(5.27)	(6.65)	(0.34)	(0.77)	(1.58)
Democratic governor[a]	1.07	.58	3.96	0.36	0.64	1.85*
	(0.54)	(2.88)	(3.64)	(0.19)	(0.42)	(0.86)
Facility Characteristics						
% Chain facilities	0.02	0.31*	0.43*	0.01	0.02	0.09*
	(0.03)	(0.14)	(0.18)	(0.01)	(0.02)	(0.04)
% Hospital facilities	0.04	0.56**	0.04	0.00	−0.05*	0.03
	(0.03)	(0.14)	(0.17)	(0.01)	(0.02)	(0.04)
% Occupancy rate	−0.08	−0.05	−0.28	−0.03*	−0.04	−0.13*
	(0.04)	(0.22)	(0.28)	(0.01)	(0.03)	(0.07)
Competition Measure						
Nursing home beds/	−0.06**	−0.07	−0.03	−0.01	−0.02	−0.06
1,000 aged	(0.02)	(0.11)	(0.14)	(0.01)	(0.02)	(0.03)
State Generosity Measure						
State Medicaid nursing	−0.01	0.01	0.19*	0.01	−0.01	0.01
facility rate	(0.01)	(0.07)	(0.08)	(0.00)	(0.01)	(0.02)

Table 4 OLS Regressions Predicting Enforcement Indicators and Summary Enforcement Score (Continued)

	Average Number of Deficiencies	% Facilities with Deficiencies	% Facilities Causing Harm or Jeopardy	% Facilities Cited for Substandard Care (square root)	Average Number of CMPs per Facility (log)	Standard Summary Score for All 5 Measures
Quality Indicators						
NH complaints	0.13	0.80	−0.12	−0.01	0.02	0.13
(per 1,000 NH beds)	(0.08)	(0.44)	(0.56)	(0.02)	(0.07)	(0.13)
F-value ($N = 50$)	4.74***	3.49**	1.54	2.39*	3.49**	4.03***
Adjusted *R*-square	0.377	0.305	−0.008	0.162	0.285	0.340

Note. Standard errors in parentheses. SAS OLS regression procedure.
[a]Comparison group—Republican and Reform governors
*Significant at the 0.05 level
**Significant at the 0.01 level
***Significant at the 0.001 level

In terms of competition for beds, states with fewer nursing facility beds per 1,000 aged population gave more deficiencies per facility on average, but they did not have high summary scores on enforcement. States that had more generous Medicaid reimbursement rates had a higher percentage of facilities cited for causing harm or jeopardy to residents but did not have higher overall summary scores.

The model predicted 37.7 percent of the variance for the average number of deficiencies, 28.8 percent for the percentage of facilities that received deficiencies, 18.5 percent cited for substandard care, and 28.9 percent for the average number of CMPs per facility surveyed. But the model did not predict significant differences for the percentage of facilities causing harm or jeopardy. The model predicted 32.9 percent of the variance for the overall summary score across all measures.

Figure 1 shows a map of the overall rank of all the states on enforcement indicators for 1999 (based on Table 2 column 7). The states in the west and southwest are in the highest quartile on overall rank on enforcement stringency. States in the lowest two quartiles tend to be in the Rocky Mountain area, the central plains (except for Kansas), and the northeastern region of the country. Federal CMS oversight of the states is administered by ten regional offices.

The states in the lowest two quartiles tend to be monitored by the CMS regional offices in the Denver, Dallas, Kansas City (except Kansas and Missouri), Boston, New York, and Philadelphia areas (six of the ten CMS regional offices). Many of the southern states (except Louisiana and Virginia) were in the first and second quartiles on enforcement stringency. Some states reported inconsistencies in procedures, policies, and processing of intermediate sanctions across regional offices as well as poor communications with some regional offices that could account for some variations in enforcement activity.

Discussion

This study showed a substantial number of quality problems as indicated by the total number of deficiencies issued, the almost one-third of facilities with violations that could or did cause harm or jeopardy to residents, the number of facilities (811) classified as providing substandard care, and the large number of complaints made about quality (over 80,000). These findings by state survey agencies suggest serious quality of care violations across the country.

In spite of the many facilities identified as having serious deficiencies,

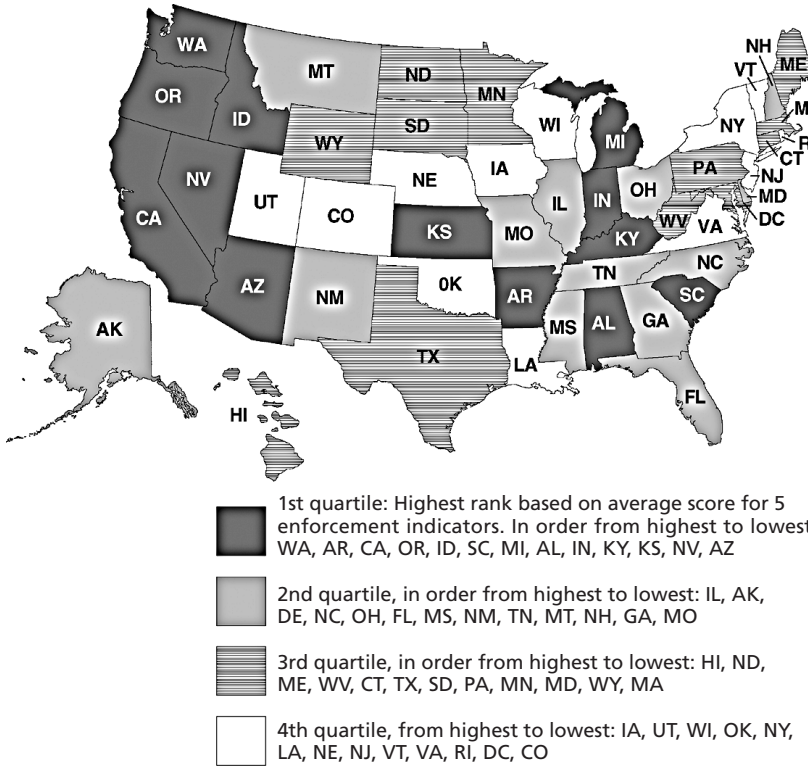

Figure 1 Overall Rank on Selected State Enforcement Indicators, 1999
Source: Table 2.

few facilities had follow-up enforcement actions or sanctions taken against them, even when all state and federal sanctions are combined. Less than 4 percent of violations were issued civil monetary penalties, 9 percent of facilities had a denial of payments issued for new admissions, and less than one-half of one percent of facilities had serious action taken against them (i.e., the imposition of a temporary manager/receiver [forty-seven facilities], the issuance of a decertification notice [forty-six facilities], or the revocation of the facility license [forty-two facilities]). The findings here are consistent with a number of earlier reports that documented the poor enforcement system and the ineffective use of both intermediate and permanent sanctions (U.S. GAO 1998, 1999a, 1999b, 1999c, 1999d; IOM 2001).

Without meaningful sanctions that serve as a deterrence to future vio-

lations, Brown's (1992) general critique of popular decentralized (state) behavioral regulations appears to be relevant. In this situation, the federal–state nursing survey process gives the appearance that government is doing something about the quality of care problems, but in reality, the enforcement system does little to change or improve the system and generally does not remove the most serious violators from the system.

With widespread quality problems identified by state agencies, the variation in enforcement actions taken by states was considered problematic in terms of compliance with federal requirements. A summary of five indicators of enforcement stringency showed the average rank scores were six times higher in the most stringent state (7.3 in Washington) compared to the least stringent state (45.1 in Colorado). Because these variations are not entirely due to quality differences, nursing facility residents do not appear to have equal access to a high quality of care and equal protection from poor quality and abuse.

Recognizing that some of the variance can be attributable to real but unmeasured differences in facility quality across states, there are many other factors that make states more likely to support regulatory enforcement for nursing facilities. Having a large aging population not only may increase the demand for nursing facilities, but it probably creates a political constituency for regulation of nursing facility quality. States with Democratic governors are associated with higher enforcement because their political views are probably more supportive of regulatory activity (Lanning, Morrisey, and Ohsfeldt 1991). The fact that political variables are factors explaining differences across states further suggests that enforcement is not being uniformly applied.

Although the political factors cannot be easily changed, federal policy makers could educate state politicians and officials about the need for and importance of standardized regulatory activity to protect the health and safety of its residents. Recent reports prepared by the U.S. House of Representatives on the poor quality of nursing facility care in local congressional districts may have a motivational impact on improving attitudes toward enforcement (U.S. House 2001).

Higher percentages of facilities in chains predicted stronger enforcement actions in states on the percentage of facilities with deficiencies, the percentage causing potential harm or jeopardy, and the summary score. A previous study found that chains are associated with higher deficiencies (Harrington et al. 2001). It may be that lower quality in chains forces more regulatory action by state surveyors and/or that large chains are more visible targets for regulators.

States with low facility occupancy rates (controlling for beds per 1,000 population) appear to be more active in regulation. Where occupancy rates are low, state L&C officials may be more willing to enforce regulations because residents could be moved to other facilities. If states with high facility occupancy rates were willing to expand the nursing home bed supply or to provide alternatives to nursing homes, perhaps this could create more competition among facilities on quality (Nyman 1988) and encourage more regulatory activity where quality problems are identified.

The generosity of state Medicaid nursing facility reimbursement rates did predict the percentage of facilities found to cause harm or jeopardy but did not predict the overall enforcement score. Perhaps a larger effect was not found because most state Medicaid reimbursement rates are low and appear to contribute to quality problems (IOM 2001; Grabowski 2001). If states had more generous Medicaid nursing facility rates, then state officials may be more demanding in terms of quality standards and/or more willing to enforce quality regulations.

As noted above, there are many unmeasured factors that cannot be examined in this model. The duration of enforcement was not measured in the study. Some states may have had a long history of strong state enforcement, and this may have resulted in improved nursing home quality in the state over time. For example, Wisconsin (in the lower quartile on enforcement stringency) has had a state system of intermediate sanctions for more than twenty years, which may result in fewer sanctions having to be imposed at the present time. Future studies of the impact of sanctions should examine enforcement actions over time.

State officials reported problems in their ability to carry out the federal enforcement activities that are related to limited federal and state resources for regulatory activities. These resources were found to be less than one-half of one percent of the total expenditures on nursing facilities in the United States in l999 (Walshe and Harrington 2002). The federal and state resources vary widely, in part based on historical expenditures for regulation), and some state agencies reported operating under serious financial and personnel constraints. Some states invest greater state resources than others in the regulatory process to make up for limited federal funds (ibid.).

State officials themselves report that they are not all complying with federal regulations adopted under OBRA 1987 and that they have continued problems with the federal survey and enforcement system. In spite of recent CMS efforts to improve its procedures and systems (U.S. GAO 1998, 1999a, 1999b, 1999c, 2000; U.S. OIG 1999; U.S. HCFA 2000a, 2001),

many states identified continued problems that included an ineffective federal CMP system and federal delays and bureaucratic procedures that slow the implementation of all sanctions. Only the CMS denial of payments to new admissions sanction had widespread support as an effective sanction by state officials. Many state officials with state sanctions are clear that they generally prefer state sanctions rather than federal sanctions. These findings call for a close examination of what improvements can be made in the federal intermediate sanctions procedures to address the serious complaints by state officials and to find ways to improve the use and timeliness of CMPs.

CMS could consider new approaches to support those states that have the most stringent enforcement systems. At the same time, CMS should not ignore states that report their reluctance and/or unwillingness to implement enforcement actions against poor performing facilities (IOM 2001). For those states that do not comply with implementing federal standards, perhaps stronger sanctions are needed such as the removal of a state's regulatory authority (and replacement with a contracting organization) or state financial penalties for not meeting minimal performance standards (along with the negative publicity that would be associated with such actions). Without a more uniform approach to the implementation of enforcement policies, it can be argued that the OBRA 1987 deterrence model has been short-circuited.

Some of the states with poorest enforcement records are primarily in the plains, Rocky Mountains, and northeastern states, which are located in six of the ten CMS regional offices. The GAO (1999c) documented disparities in enforcement activities across regions and pointed to the poor oversight activities by some regional offices. In this study, some states in the lowest enforcement quartiles cited a lack of support from CMS regional offices for their failure to implement intermediate sanctions. This suggests the need to consider training and oversight mechanisms that may improve the regional office performance. Alternatively, CMS regional offices could be removed from oversight activities and a centralized federal CMS oversight system established.

Obviously, not all the regional variation should be attributed to CMS regional offices. The predictive factors in the regression analysis probably also predict regional variation. For example, states with high occupancy rates in the northeast (such as Washington, D.C., New York, and Rhode Island) may find that quality regulation is more difficult to enforce. Interestingly, some northeastern states that are low on nursing home quality enforcement have historically been active in using hospital rate regu-

lation (Connecticut, Massachusetts, New Jersey, New York, and Maryland) (Brown 1992) and certificate of need regulation, in contrast to western states. It may be that nursing home quality regulation is viewed differently from other health regulation by states or is seen as a lower priority over other regulatory activities. Or perhaps some of the state and regional variation may be attributable to factors not measured in this study, such as the availability of state alternatives to nursing homes and the political power of the nursing home industry (Kane et al. 1998; Miller et al. 2001). Regional patterns should be given further study to understand the basis for the enforcement differences and the factors that could bring about change.

In summary, CMS needs to develop approaches that bring greater standardization in the survey and enforcement process across states and to identify ways to encourage poor performing state agencies and regions to improve (U.S. GAO 2000). These issues are complex in a system that has been largely devolved to the states, with very different political and philosophical positions on regulation. Moreover, other factors such as reimbursement rates and occupancy rates suggest policy approaches that can be further studied as a means of improving regulation. Finally, ensuring adequate funding for state regulatory programs may also be a way to improve the state enforcement system.

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