Published in final edited form as:

J Am Med Dir Assoc. 2012 July ; 13(6): 512–516. doi:10.1016/j.jamda.2012.01.005.

Nursing Homes Appeals of Deficiency Citations: The Informal Dispute Resolution Process

Dana B. Mukamel, Ph.D.,

Department of Medicine, Professor and Senior Fellow, University of California, Irvine, Health Policy Research Institute, 100 Theory Suite 110, Irvine, CA 92697-5800; Telephone: 949-824-8873; Fax: 949-824-3388

David L. Weimer, Ph.D.,

Professor, University of Wisconsin – Madison, LaFollette School of Public Affairs, 1225 Observatory Drive, Madison, WI 53706; Telephone: 608-262-5713, Fax: 608-265-3233, weimer@lafollette.wisc.edu

Yue Li, Ph.D.,

Associate Professor, Community & Preventive Medicine; University of Rochester Medical Center, 601 Elmwood Ave. Room 1-9892, Rochester, NY 14642; Telephone: 585-275-3276; yue_li@urmc.rochester.edu

Lauren Bailey, M.S.,

University of California, Irvine, Health Policy Research Institute, 100 Theory Suite 110, Irvine, CA 92697-5800; Telephone: 949-824-5867; Fax: 949-824-3388; bailey@hs.uci.edu

William D. Spector, Ph.D., and

Senior Social Scientist, Center for Delivery, Organization, and Markets, Agency for Healthcare Research & Quality; 540 Gaither Road, 5th Floor Rockville, MD 20852; Telephone: 301-427-1446; Fax: 301-427-1430; WSpector@AHRQ.GOV

Charlene Harrington, Ph.D., R.N.

Department of Social and Behavioral Sciences, University of California, San Francisco, 3333 California Street Suite 455, San Francisco, CA 94118; Telephone: 415-476-4030; Fax: 415-476-6552; charlene.harrington@ucsf.edu

Abstract

Objective—Nursing homes found to be not meeting quality standards are cited for deficiencies. Before 1995, their only recourse was a formal appeal process, which is lengthy and costly. In 1995, the Centers for Medicare & Medicaid Services (CMS) instituted the Informal Dispute Resolution (IDR) process. This study presents for the first time national statistics about the IDR process and an analysis of the factors that influence nursing homes' decisions to request an IDR.

Design—Retrospective study including descriptive statistics and multivariate logistic hierarchical models.

© 2012 American Medical Directors Association. Published by Elsevier Inc. All rights reserved.

Corresponding Author: dmukamel@uci.edu.

Publisher's Disclaimer: This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

None of the authors have any financial conflicts.

Setting—U.S. nursing homes in 2005 to 2008.

Participant—15,916 Medicaid and Medicare certified nursing homes nationally, with 94,188 surveys and 9,388 IDRs.

Measures—The unit of observation was an annual survey or a complaint survey that generated at least one deficiency. The dependent variable was dichotomous and indicated whether the annual or a complaint survey triggered an IDR request. Independent variables included characteristics of the nursing home, the deficiency, the market, and the state regulatory environment.

Results—Ten percent of all annual surveys and complaint surveys resulted in IDRs. There was substantial variation across states, which persisted over time. Multivariate results suggest that nursing homes' decisions to request an IDR depend on their assessment of the probability of success and assessment of the benefits of the submission.

Conclusions—Nursing homes avail themselves of the IDR process. Their propensity to do so depends on a number of factors, including the state regulatory system and the market environment in which they operate.

Keywords

nursing homes; quality; deficiencies; regulation; appeal

Introduction

Quality of nursing homes in the U.S. has been subject to state and federal regulation for decades. Since 1965, when Medicare and Medicaid were established, the Federal Government has taken the lead in defining and framing the regulatory system, but it has delegated implementation to the states.¹ As a result, the current system consists of a set of federal standards (which many states have chosen to augment with additional standards of their own) and a set of federally defined penalties for those not meeting these standards. The task of ascertaining if a nursing home meets the federal standards is carried out by state surveyors.

Statistics show that most nursing homes do not meet the federal standards. In 2008 the average nursing home had 7 deficiencies and only 7.6% had none.² While these numbers vary slightly over time, by and large they remain fairly constant. Despite this seeming acceptance of deficiencies as part of normal operations, nursing homes may wish to appeal their citations and the associated penalties, in particular because the appeal defers payments of fines until the appeals are resolved.³

Until 1995 nursing homes were only able to submit a formal appeal. The formal appeal process is costly, cumbersome, and lengthy. The first step is adjudicated before an administrative law judge (ALJ) in a court-like hearing, requiring extensive documentation, and involving lawyers. The ALJ's decision can then be appealed to the Departmental Appeals Board (DAB), a board of the Department of Health and Human Services, after which the matter can be litigated in the courts.⁴

The Administrative Dispute Resolution Act of 1990 followed in 1995 by provisions of the Omnibus Budget Reconciliation Act⁵ introduced another, more speedy and less costly appeal process, called the Informal Dispute Resolution, or IDR. The IDR process offers nursing homes an opportunity to appeal deficiencies and resolve disagreements with state surveyors prior to the formal appeal at the federal level. The IDR request may have any of the following outcomes: withdrawing of the deficiency, changing its scope or severity, withdrawing specific examples, or no change. It cannot be used to delay the imposition of

remedies of the survey process. However, the disputed deficiency does not get recorded in the Online Survey, Certification and Reporting (OSCAR) data system and is not reported in the Nursing Home Compare web-based report card until it is resolved.⁶ The IDR process substitutes for the formal appeal but it does not prevent nursing homes from requesting a formal appeal if they are not satisfied by the outcome of the IDR.

Similar to the survey process, the IDR process also varies by state, as the Centers for Medicare & Medicaid Services (CMS) left states to determine the specifics of the process.⁶ In some states the appeal is reviewed by the same surveyors who issued the initial deficiencies and in others the review is performed independently by an outside entity. In some states an appeal requires a payment of a fee, while in others it does not. It typically does not require legal representation although nursing homes that choose to have a lawyer assist may do so. Most recently, the Patient Protection and Affordable Care Act of 2010⁷ and subsequent regulations⁸ have required facilities faced with Civil Monetary Penalties (CMPs) to place those in escrow account, while giving nursing homes the right to request an independent IDR.

As the IDR process is relatively new, little is known about it. To our knowledge, the only study of the IDR process was done by the Office of the Inspector General.⁹ That study concluded that 48 states have written policies as required, but that these policies vary. The 14 states reviewed were found to be generally in compliance with CMS's guidelines and most of the IDR requests submitted by nursing homes were found to meet the federal requirements.⁹

The study we present here offers, for the first time, national statistics on IDR requests by nursing homes, examines their variation longitudinally and cross-sectionally, and investigates the factors that contribute to nursing homes' decisions to submit an IDR request.

Conceptual framework: Nursing homes decisions to request an IDR

Nursing homes are likely to request an IDR if they determine that the expected benefits outweigh the expected costs. Several factors likely contribute to these considerations:

Number of deficiencies and their type

Nursing homes are likely to have stronger incentives to appeal the more deficiencies they have and the more severe they are, because more severe deficiencies entail more severe consequences, ranging from civil monetary penalties to other corrective actions, up to and including change in management and closure. In addition, the number of deficiencies and the type are reported in the Nursing Home Compare website and impacts the nursing home's quality rating. Hence, the gain from a successful appeal of severe citations is much larger than the gain from a successful appeal of less serious deficiencies.

Probability of success of the appeal

Nursing homes are less likely to appeal if their assessment of the probability that the appeal will be successful is low. To operationalize this hypothesis, we included in our analyses a variable measuring the stringency of the regulatory system of the state. We assume that states that have more stringent regulatory systems would be less likely to repeal deficiencies, a fact likely to be recognized by nursing home operators in those states, who will factor it into their decision process, and will be less likely to request an IDR.

Deficiency is based on survey or complaint

A factor potentially related to the probability of a successful appeal might be whether the deficiency originated with the annual survey versus a survey in response to a resident or family complaint. It is likely that deficiencies that were triggered by a complaint will not only be more specific, but will also have a strong constituency behind them, which might make it more difficult for the state surveyors to reverse a prior finding. Hence, nursing homes might anticipate that success is less likely when the deficiency was triggered by a complaint.

Market demand variables

An added benefit to nursing homes from eliminating deficiencies (or lowering their scope and severity levels) is the improvement in their perceived quality in their local market. We hypothesize that nursing homes located in markets with stronger demand for quality would be more likely to submit IDR requests. We measure the strength of the demand for quality in several ways. We include a variable for overall competition, and variables measuring income and education at the market level. Higher values of the latter two suggest higher demand sensitivity to quality.

Nursing home ownership

We also include facility ownership, hypothesizing that for-profit facilities will be more likely to request an IDR because they are more sensitive to demand for quality, as was shown previously in their stronger response to quality report cards.¹⁰

Methods

Data

We obtained from CMS data about all IDR requests submitted between 2005 and 2008 by all nursing homes in the United States. These data identify the facility submitting the request, the original deficiency being disputed, and its scope and severity.

We matched the IDR data to the 2004–2008 OSCAR data and to a data file containing complaints filed against nursing homes from 2004 to 2008. We matched IDRs to surveys or complaints by facility ID and date. In some instances, the survey team investigates the complaint during an annual survey. In those instances we were unable to determine if the IDR was associated with a complaint or a survey deficiency. The OSCAR data also provided information about the total number of beds in the facility and ownership status. We augmented these data with United States Census data to obtain information about zip code level education and income and Minimum Data Set (MDS) and Medicare enrollment files data to calculate nursing home market boundaries and competition values.

Sample

The unit of observation was a survey or a complaint that resulted in at least one deficiency during the period 2005–2008, whether or not it resulted in an IDR request. There were a total of 95,985 annual and complaint surveys and 10,319 IDR requests. We were unable to match 9.1% of the IDRs with either a survey or a complaint and 1.9% of matched observations had missing data. The final sample included 94,188 surveys and complaints, and 9,383 IDRs requests from 15,916 nursing homes.

Variables

The dependent variable was defined as dichotomous, with the value of 1 if the annual or complaint survey triggered an IDR request, 0 otherwise. Independent variables included

three variables measuring the severity of the survey or complaint. The first was the total number of deficiencies on the survey or complaint. The second was the total number of deficiencies with scope and severity level G or higher. G level corresponds to severity of “actual harm that is of no immediate jeopardy” and “isolated scope” and is typically considered the cutoff for the more serious levels of deficiencies. The third variable measuring severity was the number of deficiencies for abuse or neglect. This is a subset of the standards that deal specifically with abuse and neglect issues that are considered to be of a more serious nature.⁶ We included two dichotomous variables indicating if the IDR pertained to deficiencies resulting from a complaint, or survey combined with a complaint investigation. IDRs triggered by a survey were the reference category. To capture the perception of the facility about the stringency of the state regulatory system we calculated a variable based on the average number of complaints and surveys per facility, standardized across all states.¹¹ This variable was lagged one year based on the assumption that nursing homes’ perceptions are influenced by their observation of behavior of surveyors in the past year. Higher values of this variable indicate more stringent state regulation of nursing homes, as has been shown in previous studies.¹¹⁻¹³

Market boundaries for each nursing home were determined based on admission patterns by zip code.¹⁴ Additional independent variables included number of beds and ownership type, defined as two dichotomous variables for non-profit and government-owned facilities with for-profit nursing homes as the reference category. We also included dichotomous variables for years to control for secular time trends.

Analyses

We performed analyses to describe cross-sectional and longitudinal trends in IDR requests. We calculated the percent of annual and complaint surveys that resulted in a request each year, nationally and by state, and examined the variation across states.

To investigate the factors that are associated with the probability of an IDR request, we estimated a multivariate logistic model in which the dependent variable was the log odds of a request and the independent variables included all the variables described in the previous section as well as facility random effects. We present two models, one including state fixed-effects and one excluding them.

Results

Descriptive statistics

Over the 2005–2008 period, 10% of all annual and complaint surveys resulted in an IDR request. Both the number and percent of surveys and complaints triggering an IDR declined during the period, from 2,685 (11.5%) in 2005 to 2,056 (8.8%) in 2008 (see Fig. 1). Nursing homes were less likely to request an IDR when the deficiency resulted from a complaint rather than an annual survey. Over the whole period, 9.8% of surveys triggered an IDR compared with 9.1% of complaints (see Fig. 2).

There was large variability across states in the propensity of nursing homes to submit an IDR request (see Fig. 3). The coefficients of variation ranged between 0.59 and 0.68 during the period, with some states having no IDRs submitted and some having as many as 30% of surveys and complaints triggering an IDR. There seems, however, to be stability over time in the percent of nursing homes submitting IDRs by state. The correlations of these percents between successive years over the 2005-2008 period ranged from 0.85 to 0.91, suggesting stable patterns within states.

Table 1 shows descriptive statistics for all the variables used in the multivariate analyses. Of the 94,188 surveys and complaints, 10% were appealed. They averaged 5.74 deficiencies, of which 0.42 were G and above in scope and severity and 0.36 were abuse and neglect deficiencies.

Factors influencing IDR requests

Table 2 reports the results of the multivariate analyses. We present models with and without state fixed-effects. We discuss results based on the state fixed-effects model and note where their exclusion results in substantive differences. The probability of IDR submission increased with the number of deficiencies the facility received (OR=1.038, $p<0.01$), and increased even more if those included severe deficiencies—either a G and above (OR=1.402, $p<0.01$) or abuse and neglect deficiencies (OR=1.092, $p<0.01$). Facilities in states with more stringent quality regulations were less likely to request an IDR (OR=0.939, $p<0.01$). Deficiencies associated with complaints were less likely to trigger an IDR (OR=0.895, $p<0.01$) compared with those associated with the annual survey (the reference category). Among the market variables, in the model with state fixed-effects higher market income (OR=1.085, $p<0.01$) and higher percent of high school graduates (OR=1.005, $p<0.1$) significantly increased the likelihood of an IDR request. Competition, while it has an odds ratio of 1.128, reached significance only in the model without state-fixed effects (OR=1.394, $p<0.01$). Finally, non-profit and government facilities were less likely to request an IDR compared with for-profit nursing homes, although the non-profit finding was also only significant in the model without state-fixed effects.

Discussion

The IDR process was introduced over a decade ago by CMS to alleviate the legal burden nursing homes faced if they wish to appeal the findings of state surveyors resulting from an inspection of their facility. The objective of the IDR process is to make appeals easier and less costly.

The analyses we present suggest that nursing homes' decisions to request an IDR are rational, consistent with an assessment of the costs and benefits associated with it. While it is difficult to compare the impact of the various factors contributing to the decision because each is measured in different units, the results do suggest that designation as G and above deficiencies is by far the most important factor, with an odds ratio substantially exceeding all other factors. This is not surprising because it is at this level of deficiency that serious penalties begin to apply. In key informant interviews, conducted prior to the analyses with directors of State Offices of Licensing and Certification, interviewees indicated that nursing homes viewed G deficiencies as a threshold for taking action.

We also find that IDR request rates vary substantially across states and the pattern of variation persists over time. Yet, the survey, facility, and market characteristics that we investigated as explaining nursing homes propensity to submit an IDR do not seem to vary much across states—the coefficient values in the multivariate models, for the most part, do not change much between the models with and without state-fixed effects. This suggests that other state level variables that we have not accounted for explicitly might be at play, including possibly the state regulatory process and climate. As variation in regulation has been a source of concern for decades for both policy makers and advocates,¹ CMS and states may wish to examine the IDR process and further investigate the implications of this variation. It no doubt contributes to the overall effectiveness, or lack thereof, of the regulation of quality of nursing homes. More research is needed to determine if the variation in appeals results from differences across states in the accuracy of their initial assessments of quality.

Finally, the variables that we have identified as influencing nursing homes' decisions to request an IDR offer insights into the factors that are of importance to them. The impact of deficiencies of level G and above and those related to abuse and neglect suggest that nursing homes attach particular importance to these types of deficiencies and view them as particularly offensive and worth fighting against. The dependence of the decision on the state regulatory variable indicates that nursing homes are cognizant of the regulatory climate in their state and its impact on their operation. The market variables that tend to increase the sensitivity of demand to quality suggest that nursing homes respond to market incentives. They are more likely to request an IDR in more competitive markets, markets in which the population is more highly educated, or has higher income. All of these indicate market environments in which consumers are more likely to shop for quality, perhaps are more likely to be aware of the Nursing Home Compare quality report card (which includes information about deficiencies), and are more likely to demand and afford better quality. This suggests that nursing homes seem to assume that their clientele interpret deficiencies as either signals for or direct markers for quality, or both.

In summary, this is the first paper to examine national data about IDRs, their variation, and the factors that influence nursing homes decisions to submit them. It finds that requests can be explained by a rational decision process by nursing homes and yet prevalence varies substantially across states, raising questions about the effectiveness of IDRs.

Acknowledgments

The authors gratefully acknowledge funding from the National Institutes of Aging, Grant# AG027420 and State Directors of Licensing and Certification Offices for insightful comments.

References

1. Winzelberg GS. The quest for nursing home quality: learning history's lessons. *Archives of Internal Medicine*. 2003; 163(21):2552–2556. [PubMed: 14638554]
2. Centers for Medicare & Medicaid Services. [Accessed 3/15/11] Nursing Home Data Compendium. 2009. http://www.cms.gov/CertificationandCompliance/Downloads/nursinghomedatacompendium_508.pdf
3. California State Auditor, Bureau of State Audits. [Accessed June 16, 2011] Independent Nonpartisan Transparent Accountability, June 2010 Report 2010-108. 2010. <http://www.bsa.ca.gov/pdfs/reports/2010-108.pdf>
4. Abrams Fensterman Law Firm. The "Step-Up" in Enforcement of Nursing Homes. Recent Survey Trends; <http://www.abramslaw.com/CM/Articles/Articles160.asp>
5. Subpart, F. Enforcement of Compliance for Long-Term Care Facilities with Deficiencies and "State Operations Manual". Survey and Enforcement Process; 42 CFR Part 488Chapter 7
6. Centers for Medicare & Medicaid Services. [Accessed May 5, 2011] State Operations Manual Chapter 7 – Survey and Enforcement Process for Skilled Nursing Facilities and Nursing Facilities [Section 7212]. 2011. <http://www.cms.gov/manuals/downloads/som107c07.pdf>
7. Patient Protection and Affordable Care Act of 2010; 111th Congress; March 23, 2010; Public Law 111-148Section 6111]2010
8. Mar 18. 2011 Federal Register 76 FR 15106<http://edocket.access.gpo.gov/2011/pdf/2011-6144.pdf>
9. Office of Inspector General, Department of Health. Informal Dispute Resolution for Nursing Facilities. Mar.2005 OEI-06-02-00750.
10. Mukamel DB, Spector WD, Zinn JS, Weimer DL, Ahn R. Changes in clinical and hotel expenditures following publication of the Nursing Home Compare report card. *Medical Care*. Oct; 2010 48(10):869–874. [PubMed: 20733531]
11. Harrington C, Mullan JT, Carrillo H. State nursing home enforcement systems. *J Health Polit.Policy Law*. Feb; 2004 29(1):43–73. [PubMed: 15027837]

12. Li Y, Harrington C, Spector WD, Mukamel DB. State regulatory enforcement and nursing home termination from the Medicare and Medicaid programs. *Health Services Research*. Dec; 2010 45(6 Pt 1):1796–1814. [PubMed: 20819106]
13. Mukamel DB, Li Y, Harrington C, Spector WD, Weimer DL, Bailey L. Does state regulation of quality impose costs on nursing homes? *Medical Care*. Jun; 2011 49(6):529–534. [PubMed: 21558967]
14. Zwanziger J, Mukamel DB, Indridason I. Use of Resident-Origin Data to Define Nursing Home Market Boundaries. *Inquiry*. 2002; 39(1):56–66. [PubMed: 12067076]

Figure 1. IDR Requests: 2005 - 2008

Figure 2. IDR requests as % of surveys or complaints: 2005 - 2008

Figure 3. Requested IDRs as % of total surveys and complaints by state - 2008

Table 1

Descriptive Statistics

Variable	Average	Standard Deviation
IDR requests (1=yes, 0=No)	0.100	0.30
Number of deficiencies on the survey/complaint	5.738	5.99
Number of deficiencies on the survey/complaint that are G and above	0.421	1.16
Number of deficiencies on the survey/complaint for abuse/neglect	0.355	0.71
State regulatory stringency	8.331	2.45
IDR associated with survey only	0.507	0.50
IDR associated with complaint only	0.400	0.49
IDR associated with both survey and complaint	0.093	0.29
Percent of high school graduates in the market	77.964	9.48
Median income in the market (in \$10,000)	3.980	1.16
Competition (range: 0 - 1)	0.696	0.19
For-Profit	0.720	0.45
Non-profit	0.230	0.42
Government owned	0.050	0.22
Total beds in the facility (divided by 10)	11.837	6.81
year= 2005	0.249	0.43
year= 2006	0.253	0.43
year= 2007	0.251	0.43
year= 2008	0.247	0.43

N= 94188

Table 2

Logistic regression predicting if nursing homes will submit an IDR request

Variables	Without state fixed-effects ^a	With state fixed-effects ^a
	Odds Ratio ^b	Odds Ratio ^b
Number of deficiencies on the survey/complaint	1.033 ***	1.038 ***
Number of deficiencies on the survey/complaint that are G and above	1.424 ***	1.402 ***
Number of deficiencies on the survey/complaint for abuse/neglect	1.119 ***	1.092 ***
State regulatory stringency	0.935 ***	0.939 ***
IDR request associated with survey or complaint:		
Survey only (reference category):	—	—
Complaint only	0.942 *	0.895 ***
Both survey and complaint	0.797 ***	0.720 ***
Percent of high school graduates in the market	1.016 ***	1.005 *
Median income in the market (in \$10,000)	1.053 ***	1.085 ***
Competition (range 0-1)	1.394 ***	1.128
Profit status		
For-profit (reference category):	—	—
Non-profit	0.836 ***	0.953
Government owned	0.718 ***	0.801 ***
Total beds in the facility (divided by 10)	1.050 ***	1.053 ***
Total beds in the facility(divided by 10) <i>squared</i>	0.999 ***	1.000 ***
Year of the survey/complaint		
2005 (reference category):		
2006	0.838 ***	0.833 ***
2007	0.820 ***	0.808 ***
2008	0.762 ***	0.755 ***
Number of surveys/complaints	94,188	94,188
Number of nursing homes	15,916	15,916
Model Chi-squared	$\chi^2(16)= 2809$ ***	$\chi^2(66)= 4226$ ***

p < 0.01**
0.01 p < 0.05*
0.05 p < 0.01

^aState fixed-effects refer to dummy variables included in the estimated regression model, but not shown in the table. They control for time invariant state effects, such as local culture and practices, litigation and court system, and other factors that may influence nursing homes' decisions to submit an IDR request but cannot be included in the model explicitly. As can be seen in the table, including state fixed-effect in the estimated models does not change most of the conclusions.

^bThe odds ratio can be interpreted as an indication of the relative likelihood that a particular variable would lead to an IDR request. An odds ratio above 1 indicates that the variable increases the odds of the IDR request while an odds ratio of less than 1 lowers the odds. For example, an odds ratio of 1.033 for the number of deficiencies indicates that each additional deficiency increases the odds that a nursing will request an IDR by 3.3%, while an odds ratio of 0.942 for a deficiency based on complaint indicates that compared with deficiencies based on surveys the odds are lower by 5.8%.