

Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**NURSING HOME CORPORATIONS
UNDER QUALITY OF CARE
CORPORATE INTEGRITY
AGREEMENTS**



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E X E C U T I V E S U M M A R Y

OBJECTIVE

To review nursing home corporations under quality of care Corporate Integrity Agreements (CIA) to:

1. determine the extent to which they implemented required quality of care structures and processes,
2. determine their responsiveness to quality monitoring, and
3. describe challenges encountered when implementing the requirements of their CIAs.

BACKGROUND

Under quality of care CIAs, nursing home corporations with identified quality of care problems consent to certain requirements in exchange for an agreement by the Department of Health and Human Services, Office of Inspector General (OIG), not to exclude them from participation in Federal health care programs. A nursing home quality of care CIA is a contract that is typically entered into for 3 to 5 years and requires implementation of quality of care structures and processes and monitoring by an independent monitor.

This study examined the 15 nursing home corporations that began quality of care CIAs between June 2000 and December 2005. To review these corporations, we examined corporate documents and reports from corporations and their quality monitors and interviewed corporate representatives and monitors.

FINDINGS

All 15 corporations enhanced quality of care structures and processes while under their CIAs and cited positive effects of the CIAs. Each corporation had written policies and procedures regarding quality of care, codes of conduct, and training required by their CIAs. All 15 corporations monitored their quality of care by using standardized data and internal self-assessment tools and by tracking complaints. They all created or expanded their compliance infrastructure to integrate quality of care. In interviews, corporate representatives cited positive effects that the CIAs had on their corporations.

Despite some initial resistance from 3 corporations, all 15 were ultimately responsive to their quality monitors' guidance and corporate representatives reported that they valued the input.

Quality monitors reported that 12 of the 15 corporations accepted and acted on the monitors' guidance from the start of their CIAs and that 3 initially resistant corporations became responsive (following OIG intervention) while under the CIAs. Our review of quality monitoring reports and corporate annual reports confirmed the monitors' opinions that the 15 corporations were largely responsive to the monitors' guidance. Additionally, corporate representatives cited several benefits of quality monitoring, e.g., monitors offered new ideas and fresh ways of thinking about quality of care structures and processes.

Representatives of all 15 corporations described challenges encountered when implementing CIA requirements.

Corporations with multiple nursing homes encountered challenges to ensuring consistency in quality of care systems across all layers of their organizations and across geographic regions. For example, an analysis of Quality Assessment and Assurance (QAA) committee meeting minutes indicated that nursing homes' implementation of quality of care systems was inconsistent. Other challenges involved organizational disruptions, staff resistance to implementation, use of staff time to implement the requirements of the CIAs, and financial costs associated with CIAs.

Inherent limitations of commonly used quality of care measures prevented our assessment of the quality of care performance of nursing homes under CIAs.

We analyzed data from sources commonly used by the Centers for Medicare and Medicaid Services, quality monitors, and nursing home corporations as indicators of nursing home quality. However, we could not use these data to adequately assess the quality of care performance of nursing homes under CIAs because these measures do not have established benchmarks that set standards for what constitutes quality care.

CONCLUSION

All 15 corporations enhanced quality of care structures and processes to meet the CIA requirements. Corporate representatives from each corporation cited positive effects of their CIAs. Although all corporations were ultimately responsive to their quality monitors' guidance and valued their input, three corporations were initially resistant until OIG intervened. All corporations faced challenges in

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implementing CIA requirements, such as difficulties in implementing quality systems throughout all levels of the corporations, including systems at the nursing home level. Based on these findings, areas that OIG will explore for its oversight of future CIAs include the following:

- Responding swiftly to noncompliant corporations and those that fail to address quality problems by using available enforcement remedies, such as monetary penalties or, if appropriate, exclusion from Federal health care programs. Additionally, a provider's continued failure to address quality of care may warrant opening new investigations by OIG.
- Including specific requirements regarding documentation of nursing home QAA committee activities to ensure that quality of care monitoring and improvement systems are implemented at the nursing home level.
- Sharing lessons learned by corporations and quality monitors with other corporations placed under subsequent CIAs.

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BACKGROUND

Nursing home quality of care problems come to the attention of the Department of Health and Human Services, Office of Inspector General (OIG), through different avenues. For example, quality problems may become apparent when allegations of poor patient care are brought against providers under the False Claims Act.¹ Some quality of care problems are brought to OIG's attention through referrals from State and local law enforcement agencies. Still others come to OIG's attention from other sources, such as media reports or Medicare and the OIG hotline.

As part of the resolution of quality of care cases, OIG may agree not to exclude a nursing home corporation from participation in Federal health care programs if the corporation enters into a quality of care CIA with OIG.² A quality of care CIA typically lasts 3 to 5 years and includes requirements that the corporation:

- contract with an independent quality monitor authorized by OIG and provide the monitor with relatively unfettered access to facilities, staff, residents, documents, and management at all levels of the organization;
- designate a compliance officer and appoint a corporate-level Quality Assurance Committee to oversee clinical improvement and compliance issues throughout the corporation;

¹ 31 U.S.C. §§ 3729–3733.

² 42 U.S.C. § 1320a-7 provides the authority for excluding entities from participation in Medicare, Medicaid, and other Federal health care programs.

- implement internal monitoring of quality of care;
- establish a confidential disclosure program, e.g., a hotline;
- develop written standards, policies, and procedures;
- screen to ensure that ineligible persons are not hired;³
- implement competency-based employee training programs; and
- submit status reports to OIG and report certain events, e.g., serious quality of care problems, to the quality monitor and OIG within specific timeframes.

If the corporation fails to comply with the CIA, OIG may impose monetary penalties or, in the case of a material breach by the corporation, OIG may exclude one or more of the corporation’s nursing homes from participation in Federal health care programs.

Nursing Home Quality of Care Corporate Integrity Agreements

The first nursing home quality of care CIA went into effect in June 2000. By June 2008, 35 nursing home corporations had entered into such agreements, 16 corporations under original CIAs and 19 corporations under “successor agreements.” A successor agreement is initiated when a corporation under a CIA sells nursing homes, splits into two or more corporations, or reorganizes to form a new corporation. Nursing homes that are sold, or those that are under the newly formed or reorganized corporation, are sometimes placed under successor agreements to ensure that they fulfill the original CIA requirements.

This is the first review of nursing home corporations under CIAs since OIG began entering into quality of care CIAs.

³ An “ineligible person” is any individual or entity who: (1) is currently excluded, suspended, debarred, or otherwise ineligible to participate in the Federal health care programs or (2) has been convicted of a criminal offense related to the provision of health care items or services that falls within the ambit of 42 U.S.C. § 1320a-7(a) but has not yet been excluded.

Quality of Care Structures and Processes

Quality of care CIAs include requirements about the structures and processes of corporations related to quality of care.

- Quality of care is “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”⁴
- Quality of care “structures” are the framework of policies and rules within which the corporation arranges its lines of authority and communication, division of labor, and formal powers that direct organizational activities affecting quality of care.
- Quality of care “processes” are the activities that take place within these structures.

For example, a structural change to address quality of care problems in a nursing home where residents have a higher than normal number of falls may involve writing a new policy for fall prevention. The associated process change would be the activities undertaken to implement the new policy.

Quality Monitoring

In addition to undergoing monitoring by OIG, each corporation under a quality of care CIA is required to contract and pay for the services of an independent quality monitor, which is selected by OIG.⁵ CIAs require corporations to give monitors relatively unfettered access to nursing home records and staff. Quality monitors set their own fees with the corporations, and corporations pay for the monitors’ services.⁶ OIG expects that the monitors will work with the corporations so that the corporations can learn to identify and resolve quality of care concerns.

Quality monitors employ a variety of strategies to identify quality of care problems. They discuss quality of care issues with key personnel at

⁴ “Measuring the Quality of Health Care: A Statement of the National Roundtable on Healthcare Quality Division of Healthcare Services,” National Academy Press, 1999.

⁵ Monitors are individuals or entities that OIG has determined have competency in key areas, including knowledge and experience with long-term care quality, clinical practice, data technology, data analysis, monitoring of quality of care, and general management.

⁶ Testimony of Lewis Morris, Office of Counsel to the Inspector General, U.S. Department of Health and Human Services, to the U.S. House of Representatives Committee on Energy and Commerce, Subcommittee on Oversight and Investigations. May 15, 2008. Available online at <http://oig.hhs.gov/testimony/docs/2008/testimony051508.pdf>. Accessed on June 20, 2008.

the corporate level, conduct site visits to individual nursing homes, review structures and processes related to the delivery of resident care, and analyze relevant data. Monitors provide periodic reports to OIG and the corporations with findings from their monitoring activities. These reports include guidance for corporations presented as recommendations, observations, or suggestions. The findings and guidance reflect systemic issues noted by monitors rather than problems encountered in each individual nursing home.

One indicator of whether systemic solutions are being applied at the nursing home level is reflected in the individual nursing home's Quality Assessment and Assurance (QAA) committee activities. Federal regulations require a QAA committee at each nursing home.⁷ The committee must meet at least once each quarter, and membership must include the Director of Nursing Services, a physician, and at least three other members of the nursing home's staff.⁸ The role of the QAA committee in a nursing home includes identifying quality problems by analyzing quality of care data, identifying the root causes of quality problems,⁹ developing and implementing action plans to correct quality problems, monitoring the effect of implemented changes, and revising the action plans if needed.¹⁰

Quality of care CIAs have requirements that corporations appoint Quality Assurance Committees at the corporate level but do not have particular requirements for QAA committees in individual nursing homes. However, the CIA quality monitors assess quality assurance activities and review quality-assurance-related documents during site visits to nursing homes under CIAs. Further, monitors consider QAA committees as vehicles through which corporate-level quality of care

⁷ 42 CFR § 483.75(o)(2)(i). Nursing homes sometimes refer to these committees as "quality improvement committees," "performance improvement committees," and "quality assurance committees."

⁸ 42 CFR § 483.75(o)(2)(i).

⁹ Often referred to as "root cause analysis," a method for exploring underlying issues that result in quality of care problems. U.S. Department of Veterans Affairs, National Center for Patient Safety, Root Cause Analysis. Available online at <http://www.patientsafety.gov/rca.html>. Accessed on June 20, 2008.

¹⁰ "State Operations Manual," Appendix PP, "Interpretive Guidelines for Long Term Care Nursing Homes," guidance for 483.75(o). Available online at http://cms.hhs.gov/manuals/Downloads/som107ap_pp_guidelines_ltcf.pdf. Accessed on June 20, 2008.

structures and processes can be integrated into care practices at the nursing home level.

METHODOLOGY

Scope

This study examines the 15 nursing home corporations under quality of care CIAs with start dates between June 2000 and December 2005.

These 15 were the only nursing home corporations that were under quality of care CIAs for at least a year prior to December 2006, when we began this review. Ten corporations were under their original CIAs and five were under successor agreements. The 15 corporations collectively operated 1,104 nursing homes nationwide as of December 31, 2006.

These included four corporations with 100 or more nursing homes, three corporations with 10 to 99 nursing homes, four corporations with 2 to 9 nursing homes, and 4 individual nursing homes. Three of the individual nursing homes were owned by parent corporations and one was independently owned. Additional information about the 15 corporations is in Appendix A.

Data Collection and Analysis

Implementation of required quality of care structures and processes. To determine the structures and processes that corporations had in place to meet the CIA requirements, we reviewed documents from each of the 15 corporations. These included copies of organizational charts, policies and procedures, codes of conduct, information publicizing corporations' complaint hotlines, logs of complaints received, training materials and training attendance logs, internal quality assessment instruments and reports, and implementation and annual reports that corporations submitted to OIG.

We also conducted structured interviews with representatives of corporations, e.g., compliance officers and chief executive officers (CEO). We inquired about corporate quality of care structures and processes; the way in which the corporation addressed each of the requirements of the CIA; and the corporation's experiences under the CIA, including the positive and negative aspects. We interviewed representatives of corporations with 10 or more nursing homes in person and

representatives of corporations with 2 to 9 nursing homes and the individual nursing homes by telephone.¹¹

Responsiveness to quality monitoring. To determine corporations' responsiveness to quality monitoring, we used all 168 quality monitor reports submitted to OIG, covering the period between June 2000 and December 2006 (the end date for our document requests), by the five entities that conducted quality monitoring for the 15 nursing home corporations. We requested monitors' protocols and conducted structured interviews with each quality monitor by telephone. We inquired about their monitoring activities and protocols and their experiences with each corporation.

To assess corporations' responsiveness to guidance provided by quality monitors, we identified 611 recommendations, suggestions, or concerns (hereinafter referred to as "guidance items") that the five monitors provided to corporations in the 168 quality monitor reports submitted to OIG from June 2000 through December 2006. We then examined subsequent reports issued by monitors and the corporations' reports to OIG to find evidence that the corporations responded to the quality monitors' guidance. We determined that the corporation was responsive if there was evidence in a subsequent monitoring report or annual report that the corporation had acted on the quality monitor's guidance. Follow-up information was available for 485 (79 percent) of the 611 guidance items identified. We had no subsequent monitoring or annual reports to review for the other 126 guidance items and could not assess corporate responsiveness to them. We based our findings on the 485 guidance items for which follow-up information was available.

Challenges encountered when implementing CIA requirements. In conducting interviews, we included questions about challenges that corporations encountered when implementing CIA requirements.

To assess the extent to which quality systems were consistently implemented at the nursing home level of the corporation, we examined the corporations' use of quality assurance processes at that level. We requested written minutes from QAA committee meetings for a random sample of 407 nursing homes. We determined whether the minutes documented that QAA committees met quarterly, as required, for each

¹¹ We were not able to interview representatives from one corporation with two to nine nursing homes because the CIA had expired and all individuals who had been involved were no longer with the corporation.

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quarter from July 2005 through December 2006.¹² We also determined whether minutes reflected that nursing homes used data to identify problems, conducted root cause analysis, developed action plans to address identified problems, and followed up on those action plans. Additional information about the QAA committee analysis is presented in Appendix B.

Limitations

Our analysis of nursing home QAA committees relies on the written minutes of meetings that corporations submitted to us. It is possible that some QAA committees held meetings but did not document their activities or that nursing homes did not retain the meeting minutes, and we would not be aware of these meetings or the committees' activities.

Standards

This study 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.

¹² We selected the most recent 18-month period because many nursing homes did not have minutes available for a longer period of time.

► FINDINGS

All 15 corporations enhanced quality of care structures and processes while under their CIAs and cited positive effects of the CIAs

Each of the 15 corporations developed new, or improved existing, quality of care structures and processes as they implemented

the requirements of the CIA. For purposes of this review, we grouped these structures and processes into three areas:

(1) written policies and procedures, codes of conduct, and training related to quality of care; (2) tools and activities to monitor quality of care; and (3) the organizations' infrastructure related to quality of care.

The 15 corporations had written policies and procedures regarding quality of care, codes of conduct, and training required by their CIAs

Corporate representatives reported that their organizations revised and updated many policies and procedures to comply with the CIA requirements and to align them with the nursing home compliance program guidance issued by OIG in 2000.¹³ As of January 2007, each corporation had written policies and procedures that specifically addressed quality of care issues. These materials contained information relating to corporate structures, such as the QAA committee membership and responsibilities. Other topics dealt with clinical procedures, staff training, procedures for handling complaints, and screening of employees or contractors to identify persons ineligible for participation in Federal health care programs.

Each corporation also had a written code of conduct that described the organization's principles and values and set general expectations for all employees. The levels of detail and presentation of the codes varied across corporations, ranging from brief statements that fit on a single sheet of paper to more detailed booklets. All corporations provided codes of conduct to employees during orientation and training sessions, as required by their CIAs.

Corporations also trained employees on the CIA requirements and various aspects of providing coordinated interdisciplinary care to residents. Corporations reported that they identified training needs through their internal monitoring systems. Although each corporation approached employee training differently, they all developed systems to ensure that each employee took the required training when initially hired and annually thereafter. Notably, staff from one corporation

¹³ 65 Fed. Reg. 14289 (Mar. 16, 2000).

reported that an Internet-based training system developed to facilitate and track training required by the CIA was eventually turned into a separate product that it markets to other corporations and nursing homes.

The 15 corporations monitored quality of care by using standardized data and internal self-assessment tools and by tracking complaints

Each corporation had methods for identifying quality of care problems and monitoring quality improvement progress. Some of these tools were in use before the CIA, and each corporation either developed or adopted additional assessment tools or expanded upon existing tools to meet the CIA requirements.

Standardized data. Corporations reported that they routinely used readily available, standardized data to monitor each nursing home's performance. For example, corporations used the Centers for Medicare and Medicaid Services' (CMS) Quality Indicators/Quality Measures (QI/QM) to identify trends in specific care areas, such as pressure sores and urinary tract infections.¹⁴ The QI/QMs are 28 prevalence or incidence measures derived from information recorded during periodic assessments of residents performed by nursing home staff and contained in the Minimum Data Set (MDS).¹⁵

Corporations also used State survey deficiency citations to gauge compliance with Federal standards. State survey deficiencies are generated during surveys of each nursing home, which must be conducted every 9 to 15 months.¹⁶ CMS contracts with States to conduct these surveys to verify whether nursing homes maintain Federal quality of care standards. Corporations used these data to identify recurring problems across nursing homes that would suggest the need for systemic solutions and specific nursing homes or areas needing targeted attention. Corporate compliance officers explained

¹⁴ The initial Quality Indicators were developed, under a contract with CMS, by the Center for Health Systems Research and Analysis at the University of Wisconsin – Madison. D. Zimmerman, “Improving nursing home quality of care through outcomes data: the MDS quality indicators,” *International Journal of Geriatric Psychiatry*, Volume 18, 2003. They were later revised to include Quality Measures.

¹⁵ Section 1819(f)(6)(A) of the Social Security Act, added by the Omnibus Budget Reconciliation Act of 1987, 42 CFR § 483.20(b-c), and CMS, “Resident Assessment Instrument Version 2.0 Manual.”

¹⁶ Social Security Act §§ 1819 (g) and 1919(g).

how identified problems prompted the development of action plans to address them.

Internal self-assessment tools. To supplement information from standardized data, all 15 corporations developed their own self-assessment tools or adapted existing tools used by others in the nursing home industry. One type of self-assessment tool involved onsite nursing home reviews, known as quality control reviews or mock surveys, conducted by internal teams. The review results took various forms, e.g., “scorecards,” and provided nursing home administrators and other corporate employees with in-depth information about aspects of quality of care.

Corporations also reported using satisfaction surveys, chart audits, and staffing measures to monitor quality of care. Satisfaction surveys were used to provide nursing homes with direct feedback from residents and family members. Chart audits enabled homes to monitor compliance with established resident care standards and guided training when staff deviated from established care standards. Monitoring of each nursing home’s staffing levels and turnover identified nursing homes with insufficient staff to deliver quality care.

Complaints. Another form of internal monitoring used by corporations was reviewing complaints from residents, family members, nursing home staff, and others. All 15 corporations had some type of telephone complaint “hotline” that satisfied the confidential disclosure program requirement of the CIAs. All corporations also took steps to protect caller confidentiality, such as removing identifiable information before sending a record of the complaint to a nursing home’s administrator. Corporate representatives described a variety of methods used to track and follow up on complaints to ensure that issues were resolved. One of the more elaborate examples involved a corporation whose vendor uploads complaint information to a limited-access Internet Web site. Each complainant is provided an access code to track the status and eventual resolution of the complaint. In addition to tracking each complaint, corporate staff use the tracking system to monitor the number and nature of complaints lodged against each nursing home and to identify recurring or widespread problems. Corporations also received complaints through other mechanisms, including anonymous complaint boxes at individual nursing homes and in-person complaints made to social workers and other staff.

The 15 corporations created or expanded their compliance infrastructure to integrate quality of care

Six corporations created new compliance programs that included quality of care as part of the new programs' responsibilities, including the four new corporations that were formed when larger corporations under CIAs reorganized. The other nine corporations expanded the scope of their existing compliance programs. Representatives of these nine corporations reported that prior to their CIAs, quality of care was primarily within the purview of clinical operations and their compliance departments generally focused on other aspects, such as financial integrity. Because their CIAs explicitly identified quality of care as a compliance issue, these corporations integrated quality of care into their corporate compliance infrastructure.

As required by the CIA, each corporation had a compliance program led by a designated compliance officer. All compliance officers whom we interviewed expressed that they had sufficient authority and support to perform their duties to address quality of care issues. Several also explained that their approach to quality assurance was less a matter of exerting authority than a process of collaborating with clinical managers and others throughout their corporations.

Corporate representatives cited positive effects that the CIAs had on their corporations

Corporate representatives from each corporation named at least one positive effect that the CIA had on their corporations, and many named more than one. The most frequently cited positive effect was that the CIA helped guide the development of more standardized processes and quality systems. It made the corporation examine itself and its systems and track quality of care more closely. Corporate leaders indicated that the CIAs helped them to focus the corporations' attention on quality of care and communicate to employees a clear message about its importance. Some corporate representatives described the CIA as a useful "hammer" or stated that it provided the "ammunition" needed to make the necessary changes. Four corporations attributed improvements in quality of care directly to implementation of the CIAs. Additionally, a representative of one individual nursing home reported that the nursing home now had a better standing in its community and among local physicians because of CIA-related improvements.

Despite some initial resistance from 3 corporations, all 15 were ultimately responsive to their quality monitors' guidance and corporate representatives reported that they valued the input

Although 12 of the 15 corporations seemed to readily accept and act on the quality monitors' guidance, monitors reported that the other

3 corporations were initially resistant to the added oversight. For example, one monitor reported that the owners of an individual nursing home tried to replace her. According to the monitor, after OIG refused the nursing home's request, the nursing home staff and owner began working effectively with the monitor. The other two of these three corporations delayed executing their quality monitor agreements. One of the two refused to pay the quality monitor. Only when OIG issued a demand letter for monetary penalties did the corporation comply. The other corporation did not execute its agreement until 10 months after the CIA went into effect. Also in this case, OIG had to levy a monetary penalty to gain the corporation's compliance. Both were under successor agreements and OIG extended the end dates for the quality monitoring because of the corporations' delays. Quality monitors reported that all three of these corporations eventually were cooperative and responsive to guidance.

Guidance provided to the 15 corporations by the quality monitors, presented as recommendations, suggestions, or concerns, often identified specific areas needing improvement and suggested actions that the corporations could take. Quality monitors' reports most frequently called for improvements related to resident assessments, care planning, residents' physical functioning (also referred to as activities of daily living), skin care, nutrition/eating, and activities for residents to engage in. Monitors most frequently recommended that corporations conduct assessments or evaluations of the areas needing improvement and/or conduct staff training on the topic. Monitors' guidance also frequently stressed corporations' implementation of a system, program, or protocol to spur improvement; making better use of the QAA process in individual nursing homes; and/or creating an action plan.

Our review of quality monitoring reports and corporate annual reports submitted to OIG confirmed the monitors' opinions that corporations were largely responsive to monitors' guidance

We found that subsequent reports from the monitors and/or corporations indicated that corporations had responded to 75 percent of

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the 485 guidance items provided by monitors to the corporations in their reports. Examples of corporate responses included developing corrective action plans and implementing policy or practice changes. For another 18 percent of the guidance items provided by quality monitors, no subsequent monitor or corporation reports mentioned the problems that prompted the guidance. According to the monitors, this was an indication that corporations had addressed or resolved the concerns. However, for 6 percent of written guidance, quality monitors repeated concerns or recommendations in subsequent reports, suggesting that the corporations had not yet sufficiently responded to the original guidance.¹⁷

Corporate representatives cited several benefits of quality monitoring

Corporate representatives described the monitors as valuable experts who brought in new ideas and fresh ways of thinking about quality of care processes. Several representatives mentioned that their corporations benefited from the monitors' educational efforts to help nursing home staff identify and address the root cause of problems. Additionally, corporate representatives commented that the quality monitors helped emphasize the importance of quality of care within the organizations and helped garner support for quality improvement initiatives that otherwise might not have been undertaken. Finally, representatives expressed that the monitors provided a "second set of eyes" that were focused on improving quality of care.

Representatives of all 15 corporations described challenges encountered when implementing CIA requirements

During interviews, corporate representatives identified several challenges to implementing the CIA requirements. The most common

challenges identified were: ensuring consistency across their organizations, organizational disruptions, staff resistance to implementation, use of staff time to implement the requirements of the CIAs, and financial costs.

Ensuring consistency. Corporations with multiple nursing homes encountered challenges to ensuring consistency in quality of care systems across all layers of their organizations and across geographic regions. For example, each of the four corporations with more than

¹⁷ Percentages do not add to 100 percent because of rounding.

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100 nursing homes was structured with multiple organizational levels between corporate headquarters and its nursing homes. For these organizations, new quality of care systems and policies developed in headquarters often had to be implemented at district and regional levels before finally reaching local nursing homes. Corporate representatives and quality monitors reported that it was a challenge to ensure that systems and policies were consistently passed through each organizational level and to all nursing homes. Representatives from four corporations with fewer than 100 nursing homes reported that the geographic dispersion of the corporations' nursing homes created a similar impediment to ensuring consistency.

Further, our analysis of individual nursing home QAA committee meeting minutes indicated that nursing home implementation of quality of care processes was inconsistent. QAA committee meeting minutes suggest that not all nursing homes' committees met at least once per quarter, as required. Specifically, six corporations provided us with meeting minutes for less than half of the quarters reviewed and for only some portion of their nursing homes.¹⁸ Further, meeting documentation did not support that the committees always identified or addressed quality of care problems. For example, seven corporations had nursing homes with no documentation that they had followed up on their action plans. Finally, across the nursing homes of all corporations, we found little documentation confirming efforts to identify the root cause of problems, which leaves open the possibility that action plans developed by QAA committees might address only the symptoms of problems and not the underlying causes. For statistics about QAA committee meetings for each corporation, see Appendix B.

The lack of consistent documentation could indicate inattention to required QAA processes and inconsistency among nursing homes in implementing corporate-level quality improvements. However, the absence of QAA meeting minutes or documentation of specific committee activities does not always mean that the committees did not meet, as required by regulation, or did not undertake activities such as developing corrective action plans. Alternatively, nursing homes may

¹⁸ We did not obtain any QAA committee meeting minutes from two additional corporations, but that does not necessarily indicate that the committees did not meet. Rather, one of the two corporations had been sold by the time of our data request, and the other corporation had hired a new management team that reported not having access to prior QAA committee meeting minutes.

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have performed these activities but not have documented the meetings or retained the minutes.

Organizational disruptions. Another reported challenge was that corporations experienced disruptions because of changes to their organizations after the CIAs began. For example, 4 of the 15 corporations were formed as new companies when larger corporations split or sold nursing homes, and the new corporations were placed under successor agreement CIAs. These corporations had to design and implement quality of care systems to meet requirements of the CIAs as they grappled with establishing new companies. Other disruptions occurred when corporations purchased or sold nursing homes, restructured their organizations, or had significant changes in management.

Staff resistance. Corporate representatives reported challenges involving staff resistance to the CIAs, and noted that these sometimes required making personnel changes. For example, representatives of one corporation reported replacing a nursing home administrator who, rather than implementing new procedures, stored new corporate procedural manuals in her personal car because she did not agree that changes were needed. Several corporate representatives described key personnel changes made during the CIAs, including replacing a CEO, a compliance officer, and a president of a nursing home division; two corporations replaced all of their corporate officers. Another corporation described high turnover and recruiting difficulties encountered because it was under the CIA. Representatives of this corporation perceived that the CIA created a stigma that may have deterred potential applicants from seeking employment with the corporation or its nursing homes.

Staff time. Another challenge reported by corporate representatives was the time required to implement the CIA requirements. Implementation required staff to spend time on activities outside their regular duties. These activities included implementing quality systems, developing new policies and procedures, tracking quality outcomes, and attending training sessions. Corporate representatives reported that these activities, while beneficial, also diverted staff from providing resident care.

Financial costs. Several corporate representatives reported that they were challenged by the financial costs associated with the CIA. Specifically, although they recognized certain benefits of quality

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monitoring, they also expressed that the money spent to hire the monitors could have been spent for other purposes related to quality improvement, such as increasing staff or improving facilities.

Inherent limitations of commonly used quality of care measures prevented our assessment of the quality of care performance of nursing homes under CIAs

We initially sought to assess nursing home quality of care performance by analyzing data from two sources: QI/QMs and State survey deficiencies. Although neither QI/QMs nor State survey deficiency data

were designed as a measure of quality, CIA quality monitors, CMS, and nursing home corporations commonly use them as indicators of nursing home quality.¹⁹ However, we could not use these data to determine the quality of care performance of nursing homes under CIAs because these measures lack established benchmarks that set standards for what constitutes quality care. For example, there is no agreement within the nursing home industry as to what would be an acceptable level of the incidence of cognitive impairment, which is measured by one of the QIs. Although we do not utilize available data to draw conclusions about the quality of care performance of nursing homes under CIAs, we do provide basic QI/QM and State survey deficiency data for the reader. See Appendixes C and D for these data from 1999 through 2007.

¹⁹ For example, CMS's Nursing Home Compare Web site contains information about Quality Measures, a variant of the QI that data we used, and State survey deficiencies for each nursing home in the country. Available online at: <http://www.medicare.gov/NHCompare/Static/Related/DataCollection.asp?dest=NAV|Home|DataDetails|DataCollection#TabTop>. Accessed on November 21, 2008.

► C O N C L U S I O N

CIA are entered into to improve quality of care in nursing homes by imposing certain requirements to build the corporations' and their nursing homes' internal quality assurance capabilities. The CIA-covered entities must develop, improve, and sustain their internal capacity to monitor their own quality and take corrective actions where indicated. We found that each of the 15 corporations enhanced quality of care structures and processes to meet the CIA requirements. Each corporation had written policies and procedures, codes of conduct, and training as required by the CIA; used tools and performed activities to monitor quality of care; and created or expanded its compliance infrastructure to integrate quality of care. Corporate representatives from all corporations cited positive effects of their CIAs.

Although all corporations were ultimately responsive to their quality monitors' guidance and valued their input, three corporations were initially resistant until OIG intervened. All corporations faced challenges in implementing CIA requirements, such as difficulties in implementing quality systems throughout all levels of the corporations, including systems at the nursing home level. Additionally, we found that lack of agreed-upon benchmarks for quality of care outcome measures throughout the nursing home industry limited our ability to assess the quality of care performance of nursing homes under CIAs. Based on our findings, areas that OIG will explore for its oversight of future CIAs include the following:

- Responding swiftly to noncompliant corporations and those that fail to address quality problems by using available enforcement remedies, such as monetary penalties, or, if appropriate, exclusion from Federal health care programs. Additionally, a provider's continued failure to address quality of care may warrant opening new investigations by OIG.
- Including specific requirements regarding documentation of nursing home QAA committee activities to ensure that quality of care monitoring and improvement systems are implemented at the nursing home level.
- Sharing lessons learned by corporations and quality monitors with other corporations placed under subsequent CIAs.

NURSING HOME CORPORATIONS INCLUDED IN THIS REVIEW

This study examined the 15 nursing home corporations that entered into quality of care Corporate Integrity Agreements (CIA) between June 2000 and December 2005. Table 1 provides information on the corporation size and start and end dates of the CIAs and indicates whether each was an original CIA or a successor agreement.

Table 1: Corporations Under Quality of Care CIAs

Corporation Size	CIA Start Date	CIA End Date	Type of CIA
100 or more nursing homes	April 1, 2001	April 1, 2006	Original CIA
100 or more nursing homes	February 28, 2002	February 28, 2007	Original CIA
100 or more nursing homes	April 2, 2002	April 2, 2007	Successor Agreement
100 or more nursing homes	April 1, 2004	April 1, 2007	Original CIA
10 to 99 nursing homes	April 2, 2002	April 2, 2007	Successor Agreement
10 to 99 nursing homes	September 9, 2003	September 9, 2008	Successor Agreement
10 to 99 nursing homes	November 1, 2003	October 1, 2005	Successor Agreement
2 to 9 nursing homes	June 9, 2000	June 9, 2005	Original CIA
2 to 9 nursing homes	March 1, 2002	March 7, 2005	Original CIA
2 to 9 nursing homes	September 9, 2003	September 9, 2008	Successor Agreement
2 to 9 nursing homes	November 22, 2004	November 22, 2009	Original CIA
Individual nursing home	October 29, 2001	October 29, 2006	Original CIA
Individual nursing home	December 21, 2001	November 15, 2005	Original CIA
Individual nursing home	December 13, 2002	December 13, 2005	Original CIA
Individual nursing home	October 25, 2005	October 25, 2008	Original CIA

Source: Office of Inspector General, 2008.



QUALITY ASSESSMENT AND ASSURANCE COMMITTEE METHODOLOGY AND RESULTS

Table 2 provides information on the nursing homes' Quality Assessment and Assurance (QAA) committee meeting minutes' sample sizes and response rates. We requested minutes for all nursing homes from corporations with two to nine homes and the four individual nursing homes. We randomly selected a sample of nursing homes from corporations with 10 or more nursing homes. We received at least some QAA committee minutes for 350 of the sample of 407 nursing homes that we requested to send minutes, representing an overall response rate of 86 percent. Response rates by corporation ranged from 0 to 100 percent. Two corporations were unable to provide minutes because their nursing homes were under new ownership and the meeting minutes were no longer accessible.

Results of analyses of QAA minutes are presented in Tables 3 and 4.

Table 2: QAA Committee Meeting Minutes Request and Response Rates			
Corporation Size	Number of Nursing Home Minutes Requested (Sample Size)	Number of Nursing Home Minutes Received	Response Rate
More than 100 nursing homes	72	62	86%
More than 100 nursing homes	58	57	98%
More than 100 nursing homes	65	65	100%
More than 100 nursing homes	77	77	100%
10 to 99 nursing homes	34	13	38%
10 to 99 nursing homes	43	41	95%
10 to 99 nursing homes	21	17	81%
2 to 9 nursing homes	8	0	0%
2 to 9 nursing homes	9	9	100%
2 to 9 nursing homes	9	0	0%
2 to 9 nursing homes	7	5	71%
Individual nursing home	1	1	100%
Individual nursing home	1	1	100%
Individual nursing home	1	1	100%
Individual nursing home	1	1	100%
Total	407	350	86%

Source: Office of Inspector General, 2008.

RESULTS OF NURSING HOME QUALITY ASSESSMENT AND ASSURANCE ANALYSIS

Table 3: CIA Nursing Homes' QAA Committee Meeting Minutes Point Estimates and Confidence Intervals for Corporations With 10 or More Nursing Homes*

	100 or more nursing homes								10 to 99 nursing homes*			
	Corporation A		Corporation B		Corporation C		Corporation D		Corporation F		Corporation G	
	Estimate	95-Percent Confidence Interval	Estimate	95-Percent Confidence Interval	Estimate	95-Percent Confidence Interval	Estimate	95-Percent Confidence Interval	Estimate	95-Percent Confidence Interval	Percentage Found in Sample**	
CIA Corporation Documented Meeting Frequency												
All required quarters	46%	35%-57%	60%	50%-70%	68%	58%-77%	90%	83%-96%	48%	37%-58%	71%	
At least half of required quarters but not all	28%	18%-38%	11%	4%-17%	29%	20%-38%	10%	4%-17%	43%	32%-53%	12%	
Less than half of required quarters	26%	16%-36%	30%	20%-39%	3%	0%-11%***	0%	**0%-5%	10%	3%-17%	18%	
CIA Corporation Documented Data Use To Monitor Performance												
Consistent data use	36%	25%-47%	51%	41%-61%	60%	50%-70%	69%	60%-78%	30%	20%-40%	59%	
Inconsistent data use	64%	53%-75%	42%	32%-52%	40%	30%-50%	30%	21%-39%	60%	49%-71%	24%	
No data use	0%	0%-6%***	12%	2%-17%	0%	0%-6%***	1%	0%-7%***	10%	3%-17%	18%	
CIA Corporation Documented Use of Root-Cause Analysis												
Consistent use	2%	0%-9%***	0%	0%-6%***	9%	3%-15%	35%	25%-45%	5%	0%-10%	0%	
Inconsistent use	57%	46%-68%	30%	20%-39%	38%	29%-48%	51%	41%-61%	38%	27%-48%	24%	
No use	41%	30%-52%	70%	61%-80%	52%	42%-62%	14%	7%-21%	58%	47%-68%	76%	
*Confidence intervals were calculated only for corporations with 10 or more nursing homes because their estimates are based on samples. We did not include one corporation with 10 to 99 nursing homes in the analysis of the content of the meeting minutes because the corporation provided minutes for only 38 percent of its nursing homes.												
**We did not compute confidence intervals for this corporation because it had fewer than 20 nursing homes in its population and sample.												
***Confidence interval calculated with an exact method based on the binomial distribution.												

Source: Office of Inspector General analysis of 350 QAA committee meeting minutes for nursing home corporations under Corporate Integrity Agreements.

Table 3 (continued): CIA Nursing Homes' QAA Committee Meeting Minutes Point Estimates and Confidence Intervals for Corporations With 10 or More Nursing Homes*

	100 or more nursing homes								10 to 99 nursing homes			
	Corporation A		Corporation B		Corporation C		Corporation D		Corporation F		Corporation G	
	Estimate	95-Percent Confidence Interval	Estimate	95-Percent Confidence Interval	Estimate	95-Percent Confidence Interval	Estimate	95-Percent Confidence Interval	Estimate	95-Percent Confidence Interval	Percentage Found in Sample**	
CIA Corporation Documented Action Plans												
Consistent action plan	39%	28%-50%	39%	29%-49%	51%	41%-61%	65%	55%-75%	40%	29%-51%	24%	
Inconsistent action plan	57%	46%-68%	54%	44%-65%	48%	38%-58%	35%	25%-45%	43%	32%-53%	41%	
No action plan	3%	0%-11%***	7%	2%-12%	2%	0%-8%***	0%	0%-5%***	18%	9%-26%	35%	
CIA Corporation Documented Followup to Action Plans												
Consistent followup	10%	3%-17%	9%	3%-16%	34%	25%-44%	55%	45%-65%	30%	18%-43%	0%	
Inconsistent followup	76%	66%-86%	77%	68%-86%	45%	35%-55%	42%	32%-51%	58%	44%-71%	73%	
No followup	14%	6%-21%	13%	6%-21%	20%	12%-29%	4%	0%-8%***	12%	3%-21%	27%	
*Confidence intervals were calculated only for corporations with 10 or more nursing homes because their estimates are based on samples. We did not include one corporation with 10 to 99 nursing homes in the analysis of the content of the meeting minutes because the corporation provided minutes for only 38 percent of its nursing homes.												
**We did not compute confidence intervals for this corporation because it had fewer than 20 nursing homes in its population and sample.												
***Confidence interval calculated with an exact method based on the binomial distribution.												

Source: Office of Inspector General analysis of 350 QAA committee meeting minutes for nursing home corporations under Corporate Integrity Agreements.

Table 4: CIA Nursing Homes QAA Committee Meeting Minutes Analyses for Corporations With Nine or Fewer Nursing Homes*

	2 to 9 nursing homes		Individual nursing home			
	Corporation I	Corporation K	Corporation L	Corporation M	Corporation N	Corporation O
CIA Corporation Documented Meeting Frequency						
All required quarters	6	1	1	1	0	0
At least half of required quarters but not all	2	4	0	0	1	1
Less than half of required quarters	1	0	0	0	0	0
CIA Corporation Documented Data Use To Monitor Performance						
Consistent data use	2	4	0	1	1	1
Inconsistent data use	7	1	1	0	0	0
No data use	0	0	0	0	0	0
CIA Corporation Documented Use of Root-Cause Analysis						
Consistent use	0	0	0	0	0	1
Inconsistent use	4	1	0	1	1	0
No use	5	4	1	0	0	0

*Corporations with nine or fewer nursing homes are based on population outcomes. We did not include 2 of the 15 corporations (both with nine or fewer nursing homes) in any analysis of QAA meeting minutes because all nursing homes of 1 corporation had been sold by the time of our data request and another corporation had engaged a new management team that, reportedly, did not have access to prior QAA committee meeting minutes.

Source: Office of Inspector General analysis of 350 QAA committee meeting minutes for nursing home corporations under Corporate Integrity Agreements.

Table 4 (continued): CIA Corporation QAA Committee Meeting Minutes Analyses for Corporations With Nine or Fewer Nursing Homes*

	2 to 9 nursing homes		Individual nursing home			
	Corporation I	Corporation K	Corporation L	Corporation M	Corporation N	Corporation O
CIA Corporation Documented Action Plans						
Consistent action plan	8	2	1	1	1	1
Inconsistent action plan	1	3	0	0	0	0
No action plan	0	0	0	0	0	0
CIA Corporation Documented Followup to Action Plans						
Consistent followup	7	2	0	1	0	1
Inconsistent followup	2	2	1	0	1	0
No followup	0	1	0	0	0	0
*Corporations with nine or fewer nursing homes are based on population outcomes. We did not include 2 of the 15 corporations (both with nine or fewer nursing homes) in any analysis of QAA meeting minutes because all nursing homes of 1 corporation had been sold by the time of our data request and another corporation had engaged a new management team that, reportedly, did not have access to prior QAA committee meeting minutes.						

Source: Office of Inspector General analysis of 350 QAA committee meeting minutes for nursing home corporations under Corporate Integrity Agreements.

QUALITY INDICATORS/QUALITY MEASURES

A number of measures are used as indicators of quality of care in nursing homes. One prominent measure is the Quality Indicators/Quality Measures (QI/QM) developed by the Center for Health Systems Research and Analysis (CHSRA) at the University of Wisconsin – Madison.²⁰

The QI/QMs are incidence or prevalence measures derived from information recorded during periodic assessments of residents performed by nursing home staff and contained in the Minimum Data Set (MDS).²¹ Information from these assessments is aggregated to the nursing home level for each QI/QM. The QI/QMs cover areas of care, such as accidents, behavioral and emotional patterns, quality of life, and skin care. Each QI/QM is calculated quarterly and represents the percentage of residents in the nursing home who meet the criteria for each specific condition.

These nursing home level indicators can be compared to previous indicators for the same nursing home, other nursing homes, or the population of nursing homes. A higher percentage on a QI/QM for a particular nursing home, compared to that of other homes or its own prior performance, indicates a possible need for attention to the area of care measured by the QI/QM. Table 5 lists the 26 QI/QMs analyzed and describes how they are calculated.

Table 5: Quality Indicators/Quality Measures

Quality Indicator/Quality Measure	Calculation
Incidence of new fractures	Residents with new fractures on target assessment divided by residents who did not have fractures on prior assessment.
Prevalence of falls	Residents who had falls within the past 30 days divided by residents assessed.
Residents who have become more anxious or depressed	Residents whose Mood Scale scores are greater on target assessment relative to prior assessment divided by residents with target assessment and prior assessment.
Prevalence of behavioral symptoms affecting others	Residents who have displayed any type of problem behavior toward others on target assessment divided by residents assessed.
Prevalence of symptoms of depression without antidepressant therapy	Residents with symptoms of depression and no antidepressant therapy on target assessment divided by residents assessed.

²⁰ D. Zimmerman, “Improving nursing home quality of care through outcomes data: the MDS quality indicators,” *International Journal of Geriatric Psychiatry*, Volume 18, 2003.

²¹ Section 1819(f)(6)(A) of the Social Security Act, added by the Omnibus Budget Reconciliation Act of 1987, 42 CFR § 483.20(b-c), and CMS, “Resident Assessment Instrument Version 2.0 Manual.”

Table 5: Quality Indicators/Quality Measures (continued)	
Quality Indicator/Quality Measure	Calculation
Use of nine or more different medications	Residents who received nine or more different medications on target assessment divided by residents assessed.
Incidence of cognitive impairment	Residents who are cognitively impaired on the target assessment divided by residents who were not cognitively impaired on previous assessment.
Low-risk residents who lost control of their bowels or bladder	Low-risk residents who were incontinent or frequently incontinent of either bladder or bowel on the target assessment divided by all residents assessed who did not qualify as high risk.
Residents who have/had a catheter inserted and left in their bladder	Residents with indwelling catheters on target assessment divided by residents assessed.
Prevalence of occasional or frequent bladder or bowel incontinence without a toileting plan	Residents with no scheduled toileting plan and no bladder-retraining program on target assessment and with occasional or frequent bladder or bowel incontinence divided by residents assessed.
Prevalence of fecal impaction	Residents with fecal impaction on most recent assessment divided by residents assessed.
Residents with a urinary tract infection	Residents with urinary tract infections on target assessment divided by residents assessed.
Residents who lose too much weight	Residents who have experienced weight loss of 5 percent or more during the last 30 days or 10 percent or more during the last 6 months divided by residents assessed.
Prevalence of tube feeding	Residents with tube feeding on most recent assessment divided by residents assessed.
Prevalence of dehydration	Residents with dehydration on most recent assessment divided by residents assessed.
Residents who have moderate to severe pain	Residents with moderate pain at least daily or horrible/excruciating pain at any frequency on target assessment divided by residents assessed.
Residents whose need for help with daily activities has increased	Residents with late-loss activities of daily living self-performance at target assessment worsening relative to prior assessment divided by residents with a target and prior assessment.
Residents who spend most of their time in a bed or in a chair	Residents who are bedfast on target assessment divided by residents assessed.
Residents whose ability to move in and around their rooms got worse	Residents whose value for locomotion self-performance is greater at target relative to prior assessment divided by residents with a target assessment and prior assessment.
Incidence of decline in range of motion (ROM)	Residents with increased functional limitation in ROM between prior and target assessments divided by residents with a target assessment and prior assessment.
Prevalence of antipsychotic use, in the absence of psychotic conditions	Residents receiving antipsychotics divided by residents assessed without psychotic or related conditions.
Prevalence of antianxiety/hypnotic drug use	Residents who received antianxiety medications or hypnotics divided by residents assessed, except those with psychotic or related conditions.
Prevalence of hypnotic use more than two times in the last week	Residents who received hypnotics more than two times in the last week divided by residents assessed.
Residents who were physically restrained	Residents who were physically restrained daily divided by residents assessed.
Prevalence of little or no activity	Residents with little or no activity divided by residents assessed.
Pressure ulcers	Residents with pressure ulcers (stages 1–4) divided by all residents.

Source: Center for Health Systems Research and Analysis

Analysis of QI/QM data. Our data consisted of QI/QM scores for each quarter from January 1999 through December 2007. We obtained QI/QM data from CHSRA. We computed the means, standard deviations, and medians for each QI/QM by year for the national population from 1999 through 2007. We also computed the means for each QI/QM by year for each of the 15 corporations included in our review. These results are presented in Table 6.

Table 6: Quality Indicator/Quality Measure Annual Four-Quarter Average for 15 Corporate Integrity Agreement Corporations and National Population*

Accidents: Incidence of New Fractures											
	1999	2000	2001	2002	2003	2004	2005	2006	2007		
National Population Average	1.8	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.5		
Standard Deviation	3.7	3.0	3.0	3.1	2.8	2.8	2.5	2.6	2.4		
Median	1.2	1.2	1.2	1.2	1.2	1.0	1.1	1.1	1.1		
Number of Nursing Homes	17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964		
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	1.8	1.6	1.6	1.6	1.6	1.4	1.5	1.5	1.4
Q1 2002	5 Years	138	1.6	1.7	1.6	1.6	1.6	1.5	1.5	1.6	1.6
Q2 2002	5 Years	185	1.8	1.8	2.1	1.9	1.7	1.6	1.6	1.7	1.7
Q2 2004	3 Years	341	1.7	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5
Q2 2002	5 Years	52	1.4	1.6	1.4	1.4	1.4	1.3	1.4	1.4	1.4
Q3 2003	5 Years	74	1.5	1.4	1.4	1.4	1.3	1.2	1.1	1.3	1.3
Q4 2003	2 Years	26	2.0	2.3	2.1	2.5	2.0	1.7	1.9	1.9	1.7
Q2 2000	5 Years	8	1.3	1.7	0.4	5.1	0.8	0.9	1.0	1.6	1.8
Q1 2002	3 Years	9	1.2	1.2	1.8	1.1	1.1	1.4	1.1	0.9	1.0
Q3 2003	5 Years	9	2.0	2.1	1.4	1.0	1.2	1.4	1.4	1.4	1.8
Q4 2004	5 Years	7	2.2	1.7	1.7	1.9	1.3	1.9	1.5	2.0	2.3
Q4 2001	5 Years	1	0.2	3.4	2.0	2.2	0.5	0.3	0.3	1.2	2.3
Q4 2001	4 Years	1	2.3	2.1	3.2	2.1	3.3	0.5	1.4	1.3	1.2
Q4 2002	3 Years	1	1.9	1.8	2.1	1.0	1.9	1.0	1.5	2.4	1.1
Q4 2005	3 Years	1	1.6	0.3	1.6	0.9	0.9	0.2	2.1	0.5	1.3
Accidents: Prevalence of Falls											
	1999	2000	2001	2002	2003	2004	2005	2006	2007		
National Population Average	14.0	13.5	13.4	13.3	13.2	12.4	12.7	12.9	12.9		
Standard Deviation	9.8	9.6	9.0	8.5	8.2	7.8	7.9	7.7	7.6		
Median	13.0	12.7	12.5	12.5	12.5	11.8	12.0	12.3	12.3		
Number of Nursing Homes	17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964		
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	14.8	14.6	14.2	14.1	13.5	13.0	13.5	13.8	13.5
Q1 2002	5 Years	138	14.1	13.5	13.4	13.4	13.6	12.4	12.0	13.2	13.4
Q2 2002	5 Years	185	12.9	12.9	13.4	13.7	13.6	13.0	13.2	13.6	13.7
Q2 2004	3 Years	341	14.2	14.1	14.2	14.2	13.8	12.8	13.5	14.0	14.0
Q2 2002	5 Years	52	10.2	9.9	9.0	9.6	9.9	9.0	9.2	10.1	9.2
Q3 2003	5 Years	74	12.8	12.7	12.3	12.1	11.7	11.1	11.1	11.2	11.1
Q4 2003	2 Years	26	14.2	13.3	13.8	13.1	12.8	12.1	12.6	13.1	12.0
Q2 2000	5 Years	8	21.8	31.2	19.1	7.4	8.5	5.9	5.0	5.9	7.4
Q1 2002	3 Years	9	11.5	10.8	10.5	10.6	10.9	10.4	10.9	10.2	11.2
Q3 2003	5 Years	9	14.6	13.3	12.2	13.1	12.9	10.2	10.4	10.7	11.0
Q4 2004	5 Years	7	15.5	14.0	11.9	12.5	13.7	12.3	15.5	16.3	12.2
Q4 2001	5 Years	1	4.5	8.2	13.0	14.3	14.8	13.5	11.8	11.5	16.7
Q4 2001	4 Years	1	15.3	8.4	18.7	15.4	18.0	17.0	5.1	6.0	6.6
Q4 2002	3 Years	1	14.4	20.5	15.1	14.0	15.0	17.5	14.9	16.1	13.0
Q4 2005	3 Years	1	10.2	8.2	8.0	9.7	14.1	10.1	13.6	14.6	19.2

*Corporate Integrity Agreements (CIA); shaded areas indicate the years during which the corporation was under the CIA.

Table 6 (continued): Quality Indicator/Quality Measure Annual Four-Quarter Averages for 15 Corporate Integrity Agreement Corporations and National Population

Behavior/Emotional Patterns: Residents Who Have Become More Anxious or Depressed											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			16.5	14.5	14.3	14.5	14.7	14.6	14.7	14.7	14.6
Standard Deviation			10.7	9.9	9.6	9.7	9.8	9.9	9.9	9.9	9.9
Median			15.0	13.0	12.8	12.0	13.1	12.8	13.0	13.0	12.8
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	18.4	16.3	16.2	16.0	15.6	15.6	16.4	17.0	15.7
Q1 2002	5 Years	138	16.2	14.2	12.6	15.5	15.4	15.0	15.0	16.3	15.8
Q2 2002	5 Years	185	15.2	14.3	14.7	14.2	15.1	16.4	17.0	16.9	21.2
Q2 2004	3 Years	341	17.9	15.1	15.6	16.8	17.7	22.1	21.5	22.2	22.1
Q2 2002	5 Years	52	15.0	13.4	13.2	13.2	14.1	15.3	15.6	13.0	11.8
Q3 2003	5 Years	74	15.1	12.7	13.0	13.7	13.7	13.2	13.9	13.7	14.0
Q4 2003	2 Years	26	16.4	15.3	14.5	16.3	13.2	12.7	11.7	12.6	11.7
Q2 2000	5 Years	8	19.3	21.3	21.9	12.2	14.2	13.3	10.9	10.1	11.4
Q1 2002	3 Years	9	11.7	12.6	9.0	11.0	7.1	6.0	5.3	6.8	5.8
Q3 2003	5 Years	9	19.9	20.1	16.3	17.9	16.6	12.7	13.2	19.0	19.8
Q4 2004	5 Years	7	11.6	9.3	6.5	5.9	8.1	7.3	11.1	8.6	11.0
Q4 2001	5 Years	1	11.5	12.1	12.9	11.5	23.9	21.7	5.6	12.6	20.3
Q4 2001	4 Years	1	17.6	11.9	13.8	12.5	15.3	15.0	13.5	14.0	15.9
Q4 2002	3 Years	1	11.0	14.3	17.0	10.3	9.5	8.5	12.0	11.3	8.1
Q4 2005	3 Years	1	18.4	16.9	8.8	7.4	7.8	8.4	6.9	7.9	10.1
Behavior/Emotional Patterns: Prevalence of Behavior Symptoms Affecting Others											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			23.0	21.9	21.0	20.4	19.7	19.5	18.7	18.0	17.6
Standard Deviation			14.5	14.0	13.7	13.6	13.4	13.5	13.5	13.1	13.1
Median			20.8	19.8	18.6	17.9	17.2	16.9	16.0	15.3	14.8
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	21.7	21.7	20.9	20.2	19.7	18.6	17.8	17.7	17.0
Q1 2002	5 Years	138	25.0	24.3	21.9	22.3	22.7	21.4	20.2	19.2	18.1
Q2 2002	5 Years	185	19.2	17.9	16.6	15.6	14.1	15.1	13.9	12.8	12.9
Q2 2004	3 Years	341	22.4	21.0	20.2	19.5	18.7	19.9	17.2	16.1	15.8
Q2 2002	5 Years	52	17.5	16.8	15.6	14.2	13.3	13.9	12.4	10.8	11.4
Q3 2003	5 Years	74	21.6	21.6	20.3	20.4	19.0	19.2	19.1	18.2	17.5
Q4 2003	2 Years	26	13.8	14.6	14.4	14.4	12.0	11.4	10.7	11.8	10.6
Q2 2000	5 Years	8	16.2	21.7	15.4	16.4	15.0	13.8	11.7	12.4	11.4
Q1 2002	3 Years	9	20.5	17.2	15.1	14.2	14.7	11.8	10.0	7.8	7.0
Q3 2003	5 Years	9	19.6	21.2	21.5	22.0	19.4	13.8	12.0	13.5	14.2
Q4 2004	5 Years	7	32.4	29.6	29.9	28.1	24.8	23.0	27.2	29.3	30.9
Q4 2001	5 Years	1	19.7	10.1	10.6	27.5	24.7	19.3	8.7	10.7	21.3
Q4 2001	4 Years	1	18.2	17.1	17.3	20.2	25.4	32.0	24.6	24.3	22.8
Q4 2002	3 Years	1	15.9	24.6	26.1	19.0	10.1	7.6	14.3	14.4	13.7
Q4 2005	3 Years	1	11.8	19.6	19.1	18.8	19.5	23.1	15.7	19.4	20.8

Table 6 (continued): Quality Indicator/Quality Measure Annual Four-Quarter Averages for 15 Corporate Integrity Agreement Corporations and National Population

Behavior/Emotional Patterns: Prevalence of Symptoms of Depression Without Antidepressant Therapy											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			7.9	6.8	6.1	5.6	5.5	5.2	5.2	4.9	4.7
Standard Deviation			9.2	8.2	7.6	6.8	6.8	6.7	6.8	6.4	6.2
Median			5.4	4.5	4.0	3.7	3.6	3.2	3.2	2.9	2.8
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	8.1	7.0	6.2	5.7	5.5	4.8	4.7	4.6	4.2
Q1 2002	5 Years	138	8.0	6.1	5.1	5.8	5.6	5.3	5.3	5.2	5.1
Q2 2002	5 Years	185	4.4	3.7	3.7	3.2	2.9	3.1	3.2	2.8	4.0
Q2 2004	3 Years	341	7.0	5.9	5.2	4.3	4.3	5.5	5.7	5.4	5.3
Q2 2002	5 Years	52	4.7	3.8	3.1	2.3	2.1	2.1	2.5	2.5	2.0
Q3 2003	5 Years	74	6.3	5.7	5.3	5.3	5.4	5.6	5.5	4.5	4.6
Q4 2003	2 Years	26	3.7	3.2	3.3	3.1	2.2	2.1	1.7	1.9	2.1
Q2 2000	5 Years	8	7.9	11.6	10.7	6.1	6.9	4.1	2.6	3.0	3.6
Q1 2002	3 Years	9	10.0	4.2	4.5	2.6	2.3	1.2	1.5	1.8	1.9
Q3 2003	5 Years	9	7.9	9.1	6.9	7.1	5.6	3.1	3.6	4.6	3.6
Q4 2004	5 Years	7	9.1	8.1	6.9	5.9	6.3	2.6	2.9	4.2	6.5
Q4 2001	5 Years	1	2.7	2.9	8.6	5.6	13.8	23.1	3.7	7.3	3.2
Q4 2001	4 Years	1	10.3	13.7	9.8	6.2	5.6	3.4	2.5	0.9	3.0
Q4 2002	3 Years	1	1.7	2.8	3.2	4.0	2.5	2.5	6.4	4.0	5.0
Q4 2005	3 Years	1	0.9	0.6	1.8	0.7	0.0	0.0	0.5	0.2	0.0
Clinical Management: Use of Nine or More Different Medications											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			39.3	42.3	46.4	50.6	54.4	58.6	61.9	64.2	66.1
Standard Deviation			16.6	16.0	15.7	15.4	14.8	14.5	13.9	13.3	13.0
Median			37.9	41.4	45.8	50.0	54.5	59.0	62.5	65.0	67.0
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	36.1	39.7	44.4	49.1	53.6	57.9	61.3	64.2	66.1
Q1 2002	5 Years	138	33.9	38.1	42.4	46.5	50.4	54.9	58.8	61.7	63.8
Q2 2002	5 Years	185	37.0	40.5	44.8	49.2	53.9	59.4	62.9	62.5	62.6
Q2 2004	3 Years	341	38.7	42.0	45.9	49.6	53.2	57.4	60.9	63.4	65.8
Q2 2002	5 Years	52	34.0	37.2	40.5	44.3	49.1	54.9	59.1	61.5	63.4
Q3 2003	5 Years	74	38.3	40.1	45.4	49.1	53.5	58.3	63.5	65.8	67.6
Q4 2003	2 Years	26	40.5	45.0	48.1	52.5	58.1	61.9	64.9	66.3	67.6
Q2 2000	5 Years	8	39.4	45.5	39.3	38.2	39.1	40.0	48.0	56.0	54.5
Q1 2002	3 Years	9	36.8	39.7	43.0	48.2	51.3	51.5	58.8	62.0	65.8
Q3 2003	5 Years	9	49.8	50.0	53.5	59.7	63.8	68.3	70.1	72.7	72.4
Q4 2004	5 Years	7	26.0	31.2	33.8	39.4	43.3	50.2	48.6	54.0	52.3
Q4 2001	5 Years	1	43.5	44.8	57.9	60.1	59.4	62.9	67.0	72.8	71.3
Q4 2001	4 Years	1	51.5	58.8	53.5	59.4	65.3	70.0	68.9	69.5	70.4
Q4 2002	3 Years	1	34.8	37.8	45.8	48.2	51.5	54.8	64.2	60.5	64.9
Q4 2005	3 Years	1	46.0	46.4	48.7	44.9	50.8	57.1	67.2	69.7	71.0

Table 6 (continued): Quality Indicator/Quality Measure Annual Four-Quarter Averages for 15 Corporate Integrity Agreement Corporations and National Population

Cognitive Patterns: Incidence of Cognitive Impairment											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			11.6	11.4	11.6	11.7	11.7	11.5	12.0	12.1	12.0
Standard Deviation			12.5	12.1	12.3	12.4	12.4	12.9	13.3	13.2	13.1
Median			9.1	9.1	9.1	9.1	9.1	8.7	9.1	9.1	9.1
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	14.4	14.0	13.5	12.6	12.8	12.6	12.1	13.0	12.3
Q1 2002	5 Years	138	10.9	10.5	11.0	12.7	12.0	12.8	12.2	12.9	13.6
Q2 2002	5 Years	185	16.5	15.4	16.5	16.8	16.4	16.3	16.9	15.7	15.1
Q2 2004	3 Years	341	12.6	13.5	14.9	14.7	15.1	14.3	14.0	14.3	15.6
Q2 2002	5 Years	52	13.1	13.7	12.9	16.9	14.9	14.8	14.7	13.6	15.2
Q3 2003	5 Years	74	12.1	11.6	12.1	11.5	11.0	10.5	11.3	11.6	12.0
Q4 2003	2 Years	26	11.4	15.2	14.6	14.5	14.4	13.8	13.9	12.0	12.6
Q2 2000	5 Years	8	16.9	12.4	19.6	13.6	12.2	16.6	12.6	9.1	6.7
Q1 2002	3 Years	9	14.6	7.8	8.4	9.9	7.3	6.2	7.1	10.1	5.8
Q3 2003	5 Years	9	10.9	10.4	10.9	11.5	13.9	15.3	10.7	13.7	13.8
Q4 2004	5 Years	7	4.5	3.4	2.2	7.8	5.2	5.9	7.9	9.2	10.0
Q4 2001	5 Years	1	7.2	13.0	18.7	12.7	3.6	5.9	5.5	15.6	8.2
Q4 2001	4 Years	1	10.4	5.7	18.4	6.6	18.7	11.4	10.1	11.0	15.1
Q4 2002	3 Years	1	12.4	8.2	10.5	8.6	7.4	4.9	5.4	4.0	6.5
Q4 2005	3 Years	1	6.1	7.8	8.6	5.5	7.9	5.9	7.3	10.9	11.3
Elimination/Incontinence: Low-Risk Residents Who Lost Control of Their Bowels or Bladders											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			42.4	43.6	44.5	45.0	45.6	47.8	47.9	47.8	48.5
Standard Deviation			17.0	16.7	16.6	16.7	16.7	16.8	16.9	16.7	16.7
Median			42.6	43.8	44.8	45.3	45.9	48.2	48.2	48.3	49.1
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	45.0	47.2	47.8	47.7	47.7	50.6	50.2	50.0	51.2
Q1 2002	5 Years	138	40.1	42.3	42.6	44.2	44.8	48.3	49.0	48.8	48.3
Q2 2002	5 Years	185	42.7	44.1	44.6	45.1	45.6	49.2	50.7	51.1	58.1
Q2 2004	3 Years	341	44.4	45.5	47.2	47.4	47.8	51.9	54.3	52.9	52.7
Q2 2002	5 Years	52	49.1	52.4	52.8	54.0	51.9	55.3	56.2	56.5	54.7
Q3 2003	5 Years	74	48.0	48.8	49.0	49.2	48.5	49.3	49.3	50.2	49.4
Q4 2003	2 Years	26	42.3	42.4	41.8	44.9	48.1	51.7	53.8	54.1	54.9
Q2 2000	5 Years	8	52.5	61.0	59.6	63.3	66.6	68.9	67.9	65.5	59.0
Q1 2002	3 Years	9	53.4	55.4	53.1	54.5	53.2	53.5	53.4	54.2	56.7
Q3 2003	5 Years	9	55.8	54.7	51.2	49.1	47.7	50.1	49.7	50.0	45.5
Q4 2004	5 Years	7	38.1	37.9	33.3	35.0	38.6	40.0	37.7	33.6	37.7
Q4 2001	5 Years	1	31.4	44.6	56.8	48.0	35.9	32.2	26.6	26.7	33.5
Q4 2001	4 Years	1	38.7	24.0	25.8	33.7	36.9	35.4	29.1	21.0	23.0
Q4 2002	3 Years	1	41.7	44.8	45.0	37.9	42.0	40.8	38.2	31.6	29.8
Q4 2005	3 Years	1	31.5	33.9	32.0	36.2	37.1	47.0	40.6	41.1	46.3

Table 6 (continued): Quality Indicator/Quality Measure Annual Four-Quarter Averages for 15 Corporate Integrity Agreement Corporations and National Population

Elimination/Incontinence: Residents Who Have/Had a Catheter Inserted and Left in Their Bladder											
	1999	2000	2001	2002	2003	2004	2005	2006	2007		
National Population Average	55.5	46.1	43.9	42.9	42.1	43.2	44.7	45.2	45.5		
Standard Deviation	33.9	33.6	33.5	33.3	33.2	33.9	34.7	34.7	34.9		
Median	55.6	40.0	36.4	35.0	33.3	35.5	37.5	38.5	38.9		
Number of Nursing Homes	17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964		
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	60.5	49.6	45.4	45.1	43.1	42.9	47.4	47.4	49.4
Q1 2002	5 Years	138	60.9	54.5	52.7	55.3	36.6	25.2	24.0	32.5	33.7
Q2 2002	5 Years	185	69.7	55.8	56.0	55.4	53.5	53.1	39.4	38.8	39.4
Q2 2004	3 Years	341	58.5	48.4	46.8	46.5	42.6	43.3	44.5	43.9	41.7
Q2 2002	5 Years	52	74.8	41.3	51.7	49.2	53.3	49.1	36.7	49.3	51.4
Q3 2003	5 Years	74	75.2	63.5	64.0	56.7	52.3	57.7	62.0	62.8	54.6
Q4 2003	2 Years	26	46.1	33.5	29.	39.9	39.8	45.0	44.1	47.1	44.1
Q2 2000	5 Years	8	84.8	79.5	69.7	51.9	28.0	23.8	17.4	9.2	18.4
Q1 2002	3 Years	9	40.3	38.1	43.3	46.8	60.3	46.7	36.3	45.6	44.9
Q3 2003	5 Years	9	55.0	46.5	57.4	59.9	52.8	57.4	68.0	66.2	65.6
Q4 2004	5 Years	7	34.3	24.1	22.6	24.1	26.2	27.0	9.2	10.2	7.9
Q4 2001	5 Years	1	60.0	85.2	55.4	41.1	55.6	54.6	25.0	25.3	78.6
Q4 2001	4 Years	1	53.1	62.5	27.8	14.1	6.4	16.0	29.9	15.0	54.9
Q4 2002	3 Years	1	85.3	25.9	15.4	83.5	94.3	29.2	39.9	17.9	29.7
Q4 2005	3 Years	1	54.5	14.9	8.4	26.8	56.7	57.6	42.3	46.9	48.3
Elimination/Incontinence: Prevalence of Occasional or Frequent Bladder or Bowel Incontinence Without a Toileting Plan											
	1999	2000	2001	2002	2003	2004	2005	2006	2007		
National Population Average	9.3	9.1	9.2	9.4	9.3	8.6	9.3	8.8	8.5		
Standard Deviation	12.0	11.1	10.5	10.2	9.8	8.7	9.0	8.3	8.0		
Median	7.0	7.1	7.4	7.8	7.7	7.2	7.9	7.5	7.3		
Number of Nursing Homes	17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964		
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	8.5	8.6	9.5	9.8	9.5	9.0	9.6	9.2	9.2
Q1 2002	5 Years	138	7.7	7.9	8.2	8.5	8.6	8.2	8.6	8.9	8.3
Q2 2002	5 Years	185	8.3	8.6	9.5	10.0	9.3	8.6	9.2	8.2	7.6
Q2 2004	3 Years	341	8.2	8.3	8.6	8.8	8.8	8.6	8.8	8.5	5.3
Q2 2002	5 Years	52	8.4	8.5	9.1	9.2	7.9	7.8	7.8	7.8	7.0
Q3 2003	5 Years	74	8.8	9.4	9.8	9.9	9.8	9.7	11.4	9.5	9.6
Q4 2003	2 Years	26	8.2	8.6	9.8	10.0	10.5	9.8	10.4	9.4	9.0
Q2 2000	5 Years	8	13.1	13.5	18.8	11.8	8.1	5.7	6.7	9.6	11.8
Q1 2002	3 Years	9	7.4	6.0	6.6	7.3	7.2	7.3	7.9	7.6	8.2
Q3 2003	5 Years	9	13.2	13.1	13.1	15.3	15.3	12.1	14.1	13.0	11.4
Q4 2004	5 Years	7	7.1	6.9	8.6	8.1	8.8	10.6	10.7	8.7	8.1
Q4 2001	5 Years	1	11.1	16.2	11.2	10.8	7.7	3.1	6.3	5.8	5.7
Q4 2001	4 Years	1	9.0	13.6	11.8	8.8	9.2	8.7	3.3	5.5	3.9
Q4 2002	3 Years	1	10.1	8.1	13.6	15.1	11.6	11.2	11.7	9.4	10.0
Q4 2005	3 Years	1	5.6	4.4	5.8	3.5	4.9	4.6	6.9	6.2	7.2

Table 6 (continued): Quality Indicator/Quality Measure Annual Four-Quarter Averages for 15 Corporate Integrity Agreement Corporations and National Population

Elimination/Incontinence: Prevalence of Fecal Impaction											
	1999	2000	2001	2002	2003	2004	2005	2006	2007		
National Population Average	1.1	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	
Standard Deviation	3.5	2.0	1.8	1.2	1.3	1.0	1.2	1.3	0.9		
Median	0	0	0	0	0	0	0	0	0		
Number of Nursing Homes	17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964		
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	0.8	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0
Q1 2002	5 Years	138	1.4	0.6	0.2	0.1	0.2	0.1	0.0	0.0	0.1
Q2 2002	5 Years	185	1.0	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0
Q2 2004	3 Years	341	1.9	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Q2 2002	5 Years	52	0.7	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0
Q3 2003	5 Years	74	1.2	0.3	0.2	0.2	0.2	0.1	0.1	0.0	0.0
Q4 2003	2 Years	26	0.6	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0
Q2 2000	5 Years	8	0.8	0.6	0.2	0.0	0.1	0.0	0.0	0.0	0.0
Q1 2002	3 Years	9	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q3 2003	5 Years	9	0.6	0.4	0.2	0.2	0.1	0.1	0.0	0.0	0.0
Q4 2004	5 Years	7	0.4	0.1	0.0	0.1	0.4	0.0	0.0	0.0	0.0
Q4 2001	5 Years	1	0.5	0.3	2.7	0.0	0.0	0.5	0.0	0.0	0.0
Q4 2001	4 Years	1	1.3	1.5	1.0	0.9	0.4	0.0	0.0	0.0	0.0
Q4 2002	3 Years	1	1.4	0.0	0.6	0.1	0.0	0.1	0.0	0.0	0.0
Q4 2005	3 Years	1	2.1	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0
Infection Control: Residents With a Urinary Tract Infection											
	1999	2000	2001	2002	2003	2004	2005	2006	2007		
National Population Average	8.7	8.4	8.6	9.0	9.0	9.0	9.5	9.6	9.7		
Standard Deviation	9.3	8.4	8.2	8.2	7.6	7.5	7.8	7.4	7.4		
Median	7.2	7.1	7.4	7.8	8.0	8.0	8.5	8.6	8.8		
Number of Nursing Homes	17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964		
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	8.4	9.0	9.6	10.0	10.1	10.1	11.1	10.8	10.7
Q1 2002	5 Years	138	8.7	8.4	8.0	8.5	9.1	9.0	9.4	9.6	10.3
Q2 2002	5 Years	185	7.6	7.3	7.9	8.4	8.3	8.6	9.2	9.2	9.1
Q2 2004	3 Years	341	9.2	8.9	8.8	9.1	8.8	8.2	7.9	8.2	8.6
Q2 2002	5 Years	52	7.9	7.5	8.3	7.8	8.9	8.2	9.1	9.5	10.3
Q3 2003	5 Years	74	8.9	8.8	9.7	9.0	9.8	9.8	11.6	11.3	12.1
Q4 2003	2 Years	26	10.0	10.2	9.7	11.2	11.0	11.2	11.3	11.8	12.5
Q2 2000	5 Years	8	10.9	10.4	7.9	8.5	6.8	6.7	5.5	7.2	10.2
Q1 2002	3 Years	9	8.2	7.6	7.8	8.3	8.0	9.0	9.3	7.8	11.2
Q3 2003	5 Years	9	13.0	11.4	11.3	11.9	14.8	13.2	14.8	13.6	10.6
Q4 2004	5 Years	7	6.5	6.7	5.2	8.0	5.3	7.3	7.2	8.0	9.9
Q4 2001	5 Years	1	9.6	12.7	16.3	14.1	12.2	7.2	5.2	10.6	16.0
Q4 2001	4 Years	1	5.7	8.1	3.1	3.6	5.1	6.0	2.6	2.1	7.0
Q4 2002	3 Years	1	8.4	8.7	11.4	13.1	13.4	17.2	16.7	14.3	14.1
Q4 2005	3 Years	1	5.7	3.6	5.1	2.7	4.2	7.4	8.8	5.7	13.5

Table 6 (continued): Quality Indicator/Quality Measure Annual Four-Quarter Averages for 15 Corporate Integrity Agreement Corporations and National Population

Nutrition/Eating: Residents Who Lose Too Much Weight											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			12.3	11.5	11.4	10.9	10.8	9.8	10.4	10.0	9.9
Standard Deviation			10.8	9.9	9.5	9.1	8.7	7.8	8.2	7.7	7.5
Median			10.7	10.1	10.1	9.8	9.7	8.9	9.5	9.1	9.0
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	13.6	12.8	12.6	12.2	11.3	10.3	11.0	10.1	10.0
Q1 2002	5 Years	138	12.8	11.8	11.2	10.5	10.9	10.0	10.4	10.0	10.0
Q2 2002	5 Years	185	13.3	12.4	13.0	12.0	11.6	10.6	11.0	10.3	10.4
Q2 2004	3 Years	341	11.9	11.0	10.7	10.3	9.9	8.5	8.5	7.8	7.5
Q2 2002	5 Years	52	12.1	11.2	11.7	10.9	10.5	9.3	9.9	10.6	10.3
Q3 2003	5 Years	74	11.2	12.5	12.0	11.6	11.4	10.6	10.5	9.9	10.9
Q4 2003	2 Years	26	12.9	12.5	13.1	12.6	11.5	10.4	11.6	12.2	10.3
Q2 2000	5 Years	8	16.7	21.7	20.3	18.6	10.7	9.0	11.9	8.8	8.2
Q1 2002	3 Years	9	13.4	10.4	10.9	9.9	10.4	9.5	10.0	12.8	12.3
Q3 2003	5 Years	9	20.0	14.2	14.4	14.2	14.2	12.4	14.2	13.0	11.7
Q4 2004	5 Years	7	11.3	12.3	11.0	10.7	13.8	9.7	12.1	13.1	16.1
Q4 2001	5 Years	1	16.0	15.7	15.1	10.6	12.8	13.1	10.5	9.3	10.3
Q4 2001	4 Years	1	13.1	15.5	11.4	10.3	12.0	18.6	15.6	18.0	12.7
Q4 2002	3 Years	1	8.1	12.2	12.2	4.8	8.9	13.2	8.7	10.2	10.2
Q4 2005	3 Years	1	10.2	9.2	11.5	10.0	8.1	10.3	8.6	8.1	9.0
Nutrition/Eating: Prevalence of Tube Feeding											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			8.1	8.0	7.8	7.7	7.6	7.3	7.2	7.0	6.7
Standard Deviation			9.3	10.7	10.4	10.4	10.3	10.1	10.1	9.9	9.6
Median			7.2	5.4	5.3	5.2	5.1	4.8	4.7	4.6	4.4
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	7.1	7.0	6.8	6.8	6.9	6.4	6.2	6.3	6.3
Q1 2002	5 Years	138	5.7	5.6	5.8	6.0	5.7	5.3	5.5	5.3	5.1
Q2 2002	5 Years	185	9.3	9.0	9.0	8.9	8.8	8.8	8.9	8.5	8.3
Q2 2004	3 Years	341	7.0	6.8	6.6	6.3	5.8	5.5	5.3	5.1	4.8
Q2 2002	5 Years	52	11.8	12.7	13.4	13.7	12.9	11.5	11.7	11.3	9.9
Q3 2003	5 Years	74	10.1	10.2	10.1	10.9	11.3	9.9	10.0	10.8	10.4
Q4 2003	2 Years	26	7.7	8.2	8.9	9.2	9.4	8.2	8.3	8.3	8.6
Q2 2000	5 Years	8	9.3	16.6	5.6	8.4	5.6	5.9	7.3	6.6	8.8
Q1 2002	3 Years	9	18.8	20.6	19.1	18.3	18.9	17.6	17.5	19.1	18.0
Q3 2003	5 Years	9	16.8	16.0	16.2	15.9	15.5	14.2	14.9	13.9	12.6
Q4 2004	5 Years	7	2.3	2.7	3.5	2.4	3.4	4.4	3.2	2.8	2.7
Q4 2001	5 Years	1	7.7	9.8	3.7	4.1	5.7	5.6	9.1	8.2	9.0
Q4 2001	4 Years	1	2.0	2.2	1.9	2.8	2.7	0.9	1.3	2.8	4.2
Q4 2002	3 Years	1	7.5	6.9	6.0	5.6	4.3	5.0	7.8	7.9	9.9
Q4 2005	3 Years	1	20.9	19.2	17.2	14.3	12.9	7.4	6.4	5.3	6.6

Table 6 (continued): Quality Indicator/Quality Measure Annual Four-Quarter Averages for 15 Corporate Integrity Agreement Corporations and National Population

Nutrition/Eating: Prevalence of Dehydration											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			1.6	1.0	0.8	0.7	0.6	0.4	0.4	0.4	0.3
Standard Deviation			5.8	4.7	3.8	3.3	2.9	2.3	2.7	2.5	2.0
Median			0	0	0	0	0	0	0	0	0
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	1.9	1.0	0.8	0.7	0.5	0.3	0.2	0.3	0.2
Q1 2002	5 Years	138	1.6	1.0	0.8	1.0	0.8	0.7	0.4	0.3	0.2
Q2 2002	5 Years	185	2.1	0.8	0.7	0.5	0.3	0.2	0.2	0.1	0.1
Q2 2004	3 Years	341	1.1	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1
Q2 2002	5 Years	52	2.4	1.1	0.7	0.5	0.2	0.1	0.4	0.3	0.2
Q3 2003	5 Years	74	1.5	0.8	0.6	0.7	0.5	0.5	0.7	0.4	0.3
Q4 2003	2 Years	26	1.5	0.4	0.2	0.3	0.2	0.2	0.2	0.1	0.1
Q2 2000	5 Years	8	3.2	4.5	3.2	0.6	0.3	0.1	0.6	0.0	0.2
Q1 2002	3 Years	9	0.4	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0
Q3 2003	5 Years	9	4.2	1.3	1.1	1.2	1.1	0.7	0.9	1.0	0.6
Q4 2004	5 Years	7	0.6	0.3	0.6	0.3	0.1	0.5	0.1	0.3	0.3
Q4 2001	5 Years	1	0.0	0.0	0.2	0.0	0.3	0.0	0.3	1.4	1.1
Q4 2001	4 Years	1	3.4	2.4	0.2	0.0	0.2	0.0	0.0	0.0	0.0
Q4 2002	3 Years	1	2.1	0.2	0.3	0.2	0.4	0.1	0.3	0.4	0.4
Q4 2005	3 Years	1	0.7	0.6	0.2	0.0	0.0	0.0	0.0	0.3	0.2
Pain Management: Residents Who Have Moderate to Severe Pain											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			13.7	13.2	13.1	12.5	10.7	9.8	10.1	9.3	8.7
Standard Deviation			13.2	12.3	12.3	11.9	11.0	10.1	10.6	9.8	9.5
Median			10.7	10.4	10.3	9.8	8.0	7.3	7.6	7.0	6.4
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	14.2	13.8	14.3	14.1	12.6	11.1	10.6	8.8	7.5
Q1 2002	5 Years	138	13.9	14.3	13.8	14.5	14.3	13.1	12.9	11.0	9.6
Q2 2002	5 Years	185	11.5	12.1	12.5	11.5	8.6	8.4	8.9	8.1	7.6
Q2 2004	3 Years	341	12.9	12.9	12.6	11.3	7.0	5.2	5.1	4.6	4.6
Q2 2002	5 Years	52	10.3	9.8	11.0	10.3	7.4	7.2	7.9	7.4	7.6
Q3 2003	5 Years	74	12.9	11.9	12.2	11.9	10.4	10.2	11.3	9.2	6.7
Q4 2003	2 Years	26	13.8	12.2	13.3	13.4	11.2	10.6	10.5	10.0	7.8
Q2 2000	5 Years	8	22.7	30.9	17.9	15.6	10.7	8.2	12.2	12.0	7.4
Q1 2002	3 Years	9	11.3	10.8	9.8	7.4	5.4	4.5	4.7	5.0	4.9
Q3 2003	5 Years	9	13.8	12.9	12.2	12.1	13.1	13.8	13.3	15.6	13.3
Q4 2004	5 Years	7	13.7	9.2	6.7	9.2	10.4	8.3	5.6	7.8	8.5
Q4 2001	5 Years	1	13.3	13.5	19.3	21.5	16.4	12.8	17.3	11.9	5.9
Q4 2001	4 Years	1	13.7	25.4	25.0	11.5	8.0	9.4	11.3	1.4	1.4
Q4 2002	3 Years	1	7.0	6.2	11.2	12.5	7.3	5.9	9.9	13.8	14.2
Q4 2005	3 Years	1	18.6	16.5	13.5	14.1	8.2	8.5	5.6	5.8	8.2

Table 6 (continued): Quality Indicator/Quality Measure Annual Four-Quarter Averages for 15 Corporate Integrity Agreement Corporations and National Population

Physical Functioning: Residents Whose Need for Help With Daily Activities Has Increased											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			15.9	15.8	15.8	15.9	15.8	15.8	15.8	15.9	15.4
Standard Deviation			10.8	10.3	10.0	10.1	9.7	9.7	9.8	9.8	9.4
Median			14.3	14.3	14.3	14.4	14.4	14.3	14.3	14.5	14.1
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	18.0	18.6	18.9	18.3	18.2	18.2	18.0	20.2	19.1
Q1 2002	5 Years	138	15.2	16.5	16.0	16.8	15.0	15.2	17.0	17.4	18.6
Q2 2002	5 Years	185	17.0	17.6	17.8	20.3	23.3	22.9	23.0	23.7	23.1
Q2 2004	3 Years	341	17.9	19.3	22.2	23.3	22.2	22.9	18.4	18.2	17.7
Q2 2002	5 Years	52	14.5	14.6	15.2	17.9	19.8	18.4	17.7	17.9	17.8
Q3 2003	5 Years	74	13.8	13.7	14.9	16.5	18.2	18.8	18.5	19.9	18.9
Q4 2003	2 Years	26	16.3	16.8	17.7	21.0	19.6	19.7	18.7	17.7	17.4
Q2 2000	5 Years	8	16.8	3.3	12.6	13.3	12.5	14.9	11.7	15.7	11.0
Q1 2002	3 Years	9	16.0	13.9	11.5	12.2	14.7	12.3	13.4	16.1	14.6
Q3 2003	5 Years	9	14.9	15.9	18.9	16.5	18.6	14.3	14.5	16.5	21.6
Q4 2004	5 Years	7	12.1	12.6	9.3	10.1	11.1	13.5	12.2	12.3	15.8
Q4 2001	5 Years	1	21.8	24.8	20.2	11.9	17.6	20.2	21.6	27.0	24.5
Q4 2001	4 Years	1	14.8	14.5	17.1	14.2	19.8	14.8	14.2	21.0	14.7
Q4 2002	3 Years	1	11.8	18.1	15.6	9.9	11.3	8.2	13.0	7.1	8.4
Q4 2005	3 Years	1	14.2	12.9	10.7	11.9	12.2	12.4	13.4	16.1	13.5
Physical Functioning: Residents Who Spend Most of Their Time in a Bed or in a Chair											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			8.5	7.0	6.4	6.0	5.7	5.4	5.4	5.2	5.1
Standard Deviation			12.6	11.2	10.4	9.8	9.4	8.9	8.8	8.5	8.3
Median			5.1	4.0	3.7	3.4	3.2	3.0	3.0	2.9	2.8
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	8.0	6.6	6.3	6.1	6.1	6.2	5.6	5.6	5.9
Q1 2002	5 Years	138	7.5	6.9	6.4	6.5	6.3	5.5	5.1	4.9	4.5
Q2 2002	5 Years	185	9.7	8.5	7.7	7.1	6.5	6.3	6.2	5.9	5.7
Q2 2004	3 Years	341	7.1	5.6	5.4	5.2	4.6	4.1	3.5	3.2	3.3
Q2 2002	5 Years	52	11.4	8.3	8.0	7.4	6.7	6.8	6.7	6.2	5.6
Q3 2003	5 Years	74	8.8	7.8	7.1	7.6	9.2	9.6	10.0	9.1	9.2
Q4 2003	2 Years	26	8.2	6.4	5.2	5.2	5.6	5.0	5.3	5.3	6.1
Q2 2000	5 Years	8	11.1	13.0	10.4	11.2	7.1	5.1	4.4	3.3	5.4
Q1 2002	3 Years	9	11.9	6.3	5.3	5.2	6.3	7.3	8.3	10.2	10.0
Q3 2003	5 Years	9	13.5	10.3	12.5	14.3	13.9	12.8	13.1	15.1	11.8
Q4 2004	5 Years	7	4.0	3.4	3.8	2.1	2.4	3.3	2.3	2.9	2.0
Q4 2001	5 Years	1	6.9	13.2	4.9	11.8	10.1	4.5	3.6	2.5	5.6
Q4 2001	4 Years	1	13.0	6.2	4.1	9.4	2.4	1.8	3.5	2.1	4.7
Q4 2002	3 Years	1	6.8	6.8	4.8	2.9	1.8	1.4	2.1	1.9	4.4
Q4 2005	3 Years	1	8.9	5.8	5.2	3.2	4.1	5.3	5.7	6.5	6.6

Table 6 (continued): Quality Indicator/Quality Measure Annual Four-Quarter Averages for 15 Corporate Integrity Agreement Corporations and National Population

Physical Functioning: Residents Whose Ability To Move In and Around Their Rooms Got Worse											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			15.0	14.9	14.9	15.1	15.0	15.1	15.1	15.1	14.9
Standard Deviation			10.9	10.4	10.1	10.2	10.1	10.3	10.3	10.2	10.0
Median			13.3	13.3	13.5	13.6	13.6	13.6	13.5	13.6	13.3
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	17.4	17.5	17.6	17.2	17.1	16.7	16.5	17.1	15.9
Q1 2002	5 Years	138	14.0	14.5	14.6	15.1	14.2	14.5	13.9	14.2	15.5
Q2 2002	5 Years	185	15.6	15.6	16.5	18.2	20.6	21.3	21.7	22.1	23.4
Q2 2004	3 Years	341	15.7	17.0	19.7	21.2	20.9	21.5	19.9	19.7	19.1
Q2 2002	5 Years	52	14.2	15.1	15.0	18.1	18.5	17.3	19.0	18.3	16.9
Q3 2003	5 Years	74	13.1	11.8	12.6	13.9	14.9	15.9	16.4	17.3	17.7
Q4 2003	2 Years	26	15.9	16.1	17.3	19.2	18.8	18.6	19.9	17.0	17.9
Q2 2000	5 Years	8	20.4	14.9	11.4	12.6	14.6	16.0	13.1	19.4	13.9
Q1 2002	3 Years	9	17.4	13.0	13.0	13.1	13.7	13.7	14.5	15.6	14.2
Q3 2003	5 Years	9	16.8	15.2	16.6	18.6	18.6	13.9	14.9	13.8	21.9
Q4 2004	5 Years	7	8.4	10.2	7.7	9.2	8.0	11.5	8.5	10.1	11.9
Q4 2001	5 Years	1	14.3	21.9	16.9	8.8	12.4	10.3	8.1	11.0	12.7
Q4 2001	4 Years	1	10.8	17.3	20.8	16.1	14.9	12.2	13.0	18.4	10.5
Q4 2002	3 Years	1	10.6	8.2	12.6	10.5	11.8	7.5	11.5	7.0	8.8
Q4 2005	3 Years	1	12.7	10.9	9.2	11.4	11.4	12.9	13.2	15.3	12.1
Physical Functioning: Incidence of Decline in Range of Motion											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			9.8	8.9	8.3	8.1	7.7	7.4	7.4	7.2	6.9
Standard Deviation			9.7	8.9	8.3	8.2	7.7	7.4	7.6	7.5	7.1
Median			7.7	6.9	6.5	6.3	6.0	5.7	5.6	5.4	5.2
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	10.2	8.7	7.8	7.3	7.1	6.7	6.3	6.4	5.9
Q1 2002	5 Years	138	8.2	7.5	6.5	7.3	7.1	7.1	6.6	7.3	7.8
Q2 2002	5 Years	185	10.9	9.9	9.0	8.7	9.3	9.8	10.2	9.2	9.1
Q2 2004	3 Years	341	9.9	9.4	9.3	9.3	8.6	7.9	6.9	6.9	6.9
Q2 2002	5 Years	52	9.1	8.1	8.1	8.6	8.2	8.6	8.9	9.0	10.1
Q3 2003	5 Years	74	8.3	6.9	8.2	8.1	7.5	6.7	7.2	7.0	6.9
Q4 2003	2 Years	26	8.5	8.3	7.5	8.1	6.7	6.2	7.4	6.3	7.7
Q2 2000	5 Years	8	8.7	5.8	6.2	7.4	9.3	5.2	6.0	5.7	8.7
Q1 2002	3 Years	9	10.8	7.1	6.3	8.4	6.3	4.6	7.1	8.4	6.9
Q3 2003	5 Years	9	10.5	12.2	10.7	8.3	9.6	7.4	7.4	9.3	8.8
Q4 2004	5 Years	7	5.4	5.5	2.9	3.8	4.8	6.0	6.5	6.2	7.1
Q4 2001	5 Years	1	7.2	19.3	9.0	8.7	6.9	4.7	2.3	4.3	9.4
Q4 2001	4 Years	1	8.8	5.7	4.9	4.1	4.3	5.4	3.4	3.0	4.7
Q4 2002	3 Years	1	4.6	12.9	7.4	4.0	7.4	5.5	3.0	6.0	2.5
Q4 2005	3 Years	1	10.0	10.0	5.6	8.3	5.6	4.0	6.2	8.4	8.5

Table 6 (continued): Quality Indicator/Quality Measure Annual Four-Quarter Averages for 15 Corporate Integrity Agreement Corporations and National Population

Psychotropic Drug Use: Prevalence of Antipsychotic Use, in the Absence of Psychotic Conditions											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			16.4	17.3	18.6	20.5	21.6	22.0	21.6	20.9	20.2
Standard Deviation			11.5	11.4	11.7	12.2	12.4	12.8	12.7	12.6	12.6
Median			14.8	15.8	17.1	19.1	20.2	20.6	20.0	19.4	18.6
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	14.6	16.9	18.5	20.8	21.7	22.1	20.7	18.8	18.9
Q1 2002	5 Years	138	19.8	20.2	21.4	23.7	24.3	22.6	20.9	20.9	21.1
Q2 2002	5 Years	185	18.2	19.4	20.7	22.7	23.6	22.6	20.1	17.1	14.8
Q2 2004	3 Years	341	16.0	17.0	18.8	19.8	18.9	17.9	18.3	18.7	18.1
Q2 2002	5 Years	52	14.6	14.8	16.3	18.4	18.1	17.8	17.7	18.1	19.2
Q3 2003	5 Years	74	14.2	14.5	15.6	17.5	17.5	18.4	17.5	17.2	16.8
Q4 2003	2 Years	26	12.1	13.0	12.3	12.7	15.6	15.6	14.0	13.6	12.3
Q2 2000	5 Years	8	14.8	16.5	16.0	18.3	15.3	16.3	13.4	12.2	13.7
Q1 2002	3 Years	9	17.2	16.0	17.8	19.5	17.0	18.6	16.8	16.2	15.9
Q3 2003	5 Years	9	10.5	11.7	13.7	18.5	20.0	19.5	18.5	18.2	17.7
Q4 2004	5 Years	7	16.2	19.3	23.1	24.4	22.9	19.0	15.7	18.9	22.3
Q4 2001	5 Years	1	23.8	22.0	24.0	24.8	27.3	33.7	21.2	17.3	31.7
Q4 2001	4 Years	1	14.7	17.0	16.2	19.4	24.8	23.8	25.1	27.7	21.0
Q4 2002	3 Years	1	12.6	12.9	13.2	18.0	27.1	31.1	28.5	25.5	25.4
Q4 2005	3 Years	1	10.6	6.9	10.4	15.1	20.4	21.0	26.2	19.2	19.2
Psychotropic Drug Use: Prevalence of Antianxiety/Hypnotic Drug Use											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			18.2	17.7	17.9	18.1	18.1	18.2	19.1	20.3	21.2
Standard Deviation			12.1	11.6	11.5	11.3	11.0	10.9	11.1	11.3	11.6
Median			16.7	16.1	16.3	16.7	16.7	16.7	17.6	18.9	20.0
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	18.4	18.3	18.6	18.2	18.4	18.3	19.1	19.8	20.6
Q1 2002	5 Years	138	18.1	17.6	18.8	18.7	19.1	17.7	19.0	20.4	21.6
Q2 2002	5 Years	185	17.5	16.7	16.4	16.7	18.0	17.7	19.0	19.9	20.5
Q2 2004	3 Years	341	16.9	16.7	17.1	17.1	16.6	16.2	17.2	19.3	19.8
Q2 2002	5 Years	52	15.0	14.6	15.4	15.9	15.8	16.3	17.3	18.3	19.3
Q3 2003	5 Years	74	16.9	16.6	16.5	18.0	19.3	19.6	19.8	21.6	22.8
Q4 2003	2 Years	26	21.3	20.9	21.7	21.2	22.9	24.6	24.0	26.7	26.9
Q2 2000	5 Years	8	25.9	26.0	11.9	14.5	12.8	14.4	17.8	20.4	20.4
Q1 2002	3 Years	9	9.9	8.8	8.1	7.7	8.2	7.5	7.6	8.0	9.1
Q3 2003	5 Years	9	21.7	19.0	22.4	22.4	23.0	20.1	23.5	28.2	26.3
Q4 2004	5 Years	7	20.2	21.2	22.5	22.7	22.4	20.4	16.0	14.2	17.3
Q4 2001	5 Years	1	17.7	11.1	17.3	19.8	25.9	25.5	26.9	23.9	20.4
Q4 2001	4 Years	1	15.4	15.4	16.5	25.7	21.0	20.6	11.8	20.3	24.3
Q4 2002	3 Years	1	14.3	14.9	10.9	9.7	9.2	7.3	12.6	10.9	10.4
Q4 2005	3 Years	1	21.1	17.3	12.2	13.8	14.5	12.2	17.7	20.3	24.7

Table 6 (continued): Quality Indicator/Quality Measure Annual Four-Quarter Averages for 15 Corporate Integrity Agreement Corporations and National Population

Psychotropic Drug Use: Prevalence of Hypnotic Use More Than Two Times in Last Week											
	1999	2000	2001	2002	2003	2004	2005	2006	2007		
National Population Average	3.9	3.6	3.7	3.7	3.9	3.9	4.1	4.6	5.0		
Standard Deviation	6.6	5.9	5.9	5.7	5.6	5.5	5.5	5.6	5.8		
Median	2.5	2.3	2.4	2.5	2.7	2.6	2.9	3.3	3.7		
Number of Nursing Homes	17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964		
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	3.4	3.3	3.4	3.3	3.4	3.3	3.8	4.1	4.5
Q1 2002	5 Years	138	3.5	3.1	3.1	3.6	3.6	3.5	3.7	4.3	5.0
Q2 2002	5 Years	185	3.7	3.2	3.4	3.4	4.0	3.9	4.3	5.0	5.3
Q2 2004	3 Years	341	2.8	2.7	2.5	2.6	2.6	2.5	2.9	3.4	3.7
Q2 2002	5 Years	52	3.1	3.1	3.6	3.7	3.8	4.9	5.2	5.6	5.7
Q3 2003	5 Years	74	3.7	3.5	3.9	4.0	4.4	4.4	4.4	5.1	5.8
Q4 2003	2 Years	26	5.2	5.3	5.6	5.5	5.7	5.8	6.4	6.5	6.9
Q2 2000	5 Years	8	10.0	4.6	4.8	5.2	3.7	3.9	7.1	10.1	8.2
Q1 2002	3 Years	9	1.3	1.1	1.4	1.7	1.8	1.9	1.8	2.2	1.9
Q3 2003	5 Years	9	4.5	3.9	5.9	5.2	5.7	4.7	5.2	6.7	6.7
Q4 2004	5 Years	7	6.1	4.8	3.9	3.8	4.8	5.7	1.3	1.0	1.6
Q4 2001	5 Years	1	7.6	1.9	4.9	6.1	12.8	15.4	12.4	13.9	10.4
Q4 2001	4 Years	1	5.7	2.6	3.1	6.0	3.3	2.8	3.0	6.5	7.9
Q4 2002	3 Years	1	1.0	0.5	0.8	1.0	1.3	1.0	2.9	2.0	2.4
Q4 2005	3 Years	1	7.7	4.2	1.5	1.5	3.6	3.7	4.5	6.0	8.0
Quality of Life: Residents Who Were Physically Restrained											
	1999	2000	2001	2002	2003	2004	2005	2006	2007		
National Population Average	10.5	10.2	10.1	9.4	8.0	7.4	6.7	6.0	5.2		
Standard Deviation	11.2	11.0	10.7	10.2	8.8	8.5	8.1	7.7	7.0		
Median	7.3	7.1	7.2	6.5	5.5	4.9	4.2	3.6	2.9		
Number of Nursing Homes	17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964		
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	7.7	8.0	8.1	8.0	6.8	7.0	6.1	5.6	4.9
Q1 2002	5 Years	138	7.9	8.1	8.2	7.9	7.9	7.3	6.0	5.3	4.4
Q2 2002	5 Years	185	11.7	11.4	11.7	11.6	8.6	7.3	6.7	6.7	5.4
Q2 2004	3 Years	341	6.0	6.3	6.5	5.4	3.9	2.8	1.9	1.9	1.9
Q2 2002	5 Years	52	16.7	16.5	17.9	16.9	12.1	9.7	8.1	7.1	6.9
Q3 2003	5 Years	74	9.3	11.0	11.0	9.5	7.4	7.3	6.3	5.3	3.6
Q4 2003	2 Years	26	6.4	6.7	6.7	7.6	7.1	8.5	8.4	9.0	7.9
Q2 2000	5 Years	8	19.5	20.7	15.7	15.8	14.7	16.1	16.6	11.6	7.1
Q1 2002	3 Years	9	15.2	12.9	11.1	7.0	7.0	8.6	7.2	3.8	2.9
Q3 2003	5 Years	9	7.8	12.2	13.9	10.3	7.0	6.8	5.3	5.5	3.7
Q4 2004	5 Years	7	11.2	9.3	11.2	12.8	14.3	13.1	4.6	2.0	1.1
Q4 2001	5 Years	1	23.2	3.4	12.5	9.7	7.8	15.8	5.4	9.7	9.0
Q4 2001	4 Years	1	5.7	10.5	10.3	14.7	9.5	3.0	2.8	2.1	0.2
Q4 2002	3 Years	1	5.8	10.7	14.0	12.3	17.0	11.9	9.9	8.4	7.6
Q4 2005	3 Years	1	16.9	28.7	24.4	19.8	6.8	5.3	3.9	6.5	2.7

Table 6 (continued): Quality Indicator/Quality Measure Annual Four-Quarter Averages for 15 Corporate Integrity Agreement Corporations and National Population

Quality of Life: Prevalence of Little or No Activity											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			30.9	20.8	15.9	13.1	11.1	9.5	8.7	8.1	7.5
Standard Deviation			22.1	17.8	15.6	14.3	13.4	12.5	12.2	11.8	11.3
Median			27.6	17.2	12.0	9.1	7.0	5.5	4.5	3.9	3.4
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	28.3	18.8	14.1	10.5	7.7	6.6	5.7	5.3	4.4
Q1 2002	5 Years	138	31.5	19.9	14.5	13.6	10.8	9.9	7.9	7.7	5.3
Q2 2002	5 Years	185	32.1	20.5	14.9	11.6	8.6	6.0	5.6	4.3	3.4
Q2 2004	3 Years	341	26.8	17.6	12.7	9.7	7.1	5.5	4.4	3.9	4.1
Q2 2002	5 Years	52	28.8	17.8	13.8	9.8	6.8	5.5	4.4	4.5	4.1
Q3 2003	5 Years	74	33.8	19.0	13.3	12.2	11.4	9.8	7.1	6.0	5.7
Q4 2003	2 Years	26	23.5	13.5	10.7	8.9	4.6	3.2	2.6	2.6	1.6
Q2 2000	5 Years	8	19.3	15.7	11.9	8.2	5.6	5.6	3.5	0.6	1.4
Q1 2002	3 Years	9	33.0	18.7	11.6	6.9	5.4	2.5	1.6	1.3	0.5
Q3 2003	5 Years	9	38.5	23.1	15.6	14.4	16.5	11.2	8.4	10.6	5.9
Q4 2004	5 Years	7	22.8	18.3	14.8	10.9	10.1	9.7	2.6	2.7	1.8
Q4 2001	5 Years	1	55.4	68.4	69.0	12.9	9.9	23.8	4.5	3.1	2.4
Q4 2001	4 Years	1	40.9	41.0	31.9	22.9	16.0	18.2	13.5	16.6	23.4
Q4 2002	3 Years	1	57.2	27.4	28.6	25.5	24.9	18.9	7.3	7.3	7.5
Q4 2005	3 Years	1	22.1	4.3	4.2	4.4	0.8	0.0	0.4	0.0	0.3
Skin Care: Residents With Pressure Ulcers											
			1999	2000	2001	2002	2003	2004	2005	2006	2007
National Population Average			10.8	10.3	10.4	10.3	10.5	9.9	10.3	9.8	9.5
Standard Deviation			11.1	10.3	10.2	9.8	9.5	8.8	9.1	8.5	8.1
Median			9.0	8.7	8.9	8.8	9.1	8.7	9.0	8.6	8.3
Number of Nursing Homes			17,370	17,214	17,011	16,763	16,558	16,346	16,196	16,026	15,964
CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	10.1	10.3	10.4	10.4	10.3	9.5	9.9	9.2	9.3
Q1 2002	5 Years	138	8.3	8.7	9.2	9.1	9.3	8.9	8.9	9.1	9.2
Q2 2002	5 Years	185	11.0	10.4	10.9	10.6	10.5	9.5	10.1	9.6	10.0
Q2 2004	3 Years	341	8.5	8.8	8.7	8.3	8.1	7.3	7.4	7.1	6.9
Q2 2002	5 Years	52	14.0	12.8	13.0	12.0	11.5	11.7	11.9	11.7	13.2
Q3 2003	5 Years	74	11.9	11.6	11.3	11.7	11.9	11.9	12.6	12.4	11.5
Q4 2003	2 Years	26	11.7	11.8	11.8	12.2	11.4	11.7	13.0	12.8	13.0
Q2 2000	5 Years	8	24.7	31.6	18.5	18.9	12.9	11.0	11.9	13.7	14.1
Q1 2002	3 Years	9	14.8	11.6	13.9	15.0	16.5	14.5	15.9	16.8	18.7
Q3 2003	5 Years	9	21.4	19.4	21.2	20.0	18.1	14.5	16.2	15.1	13.4
Q4 2004	5 Years	7	11.4	11.6	10.7	9.4	11.3	15.2	9.9	6.9	8.6
Q4 2001	5 Years	1	7.4	14.3	11.2	7.7	12.2	9.1	8.1	11.6	9.6
Q4 2001	4 Years	1	8.5	6.0	9.8	8.5	6.9	7.1	1.0	3.5	4.2
Q4 2002	3 Years	1	15.9	9.0	15.1	11.6	10.8	9.3	7.9	8.9	6.6
Q4 2005	3 Years	1	9.5	6.5	6.5	6.5	7.0	4.6	10.7	10.1	14.2

Source: Office of Inspector General Analysis of Quality Indicator/Quality Measure data.

STATE SURVEY DEFICIENCIES DATA BY CORPORATION

State Survey Deficiencies. The Centers for Medicare & Medicaid Services (CMS) contracts with States to survey nursing homes initially, and routinely thereafter, for participation in the Medicare and Medicaid programs.²² States verify that the nursing homes maintain Federal quality of care standards by conducting a standard survey of each nursing home every 9 to 15 months. When surveyors determine that an area of care in a nursing home does not meet Federal standards, they issue a “deficiency tag.” Each deficiency tag includes a number that describes the specific infraction and a letter indicating the scope and severity. (See Table 7.) The scope refers to the number of affected residents and the severity refers to the degree of harm. CMS uses 47 deficiency tags to determine whether a nursing home is providing substandard quality of care. These deficiency tags refer to quality of life, quality of care, and participation requirements for resident behavior and facility practices.²³

State survey deficiency data are maintained in CMS’s Online Survey, Certification, and Reporting (OSCAR) system. We obtained OSCAR data for the national population of nursing homes for all standard surveys conducted between January 1, 1999, and December 31, 2007.

Table 7. Scope and Severity Matrix for State Survey Deficiencies			
Deficiency Severity	Deficiency Scope		
	Isolated	Pattern	Widespread
Actual or potential for death or serious injury (immediate jeopardy)	J	K	L
Actual harm that is not immediate jeopardy	G	H	I
Potential for more than minimal harm	D	E	F
Potential for minimal harm, substantial compliance exists	A	B	C

Source: CMS, “State Operations Manual.”

²² Sections 1819(g) and 1919(g) of the Social Security Act.

²³ CMS, “State Operations Manual,” section 7001. Available online at <http://www.cms.hhs.gov/manuals/downloads/som107c07.pdf>. Accessed on June 20, 2008.

Selection of Deficiency Tags for Inclusion. For this analysis, we included the 47 deficiency tags that CMS uses to determine whether a nursing home is providing “substandard quality of care.” The deficiency tags used are listed in Table 8.

Table 8: Quality of Care Survey Deficiency Tags Selected for Analysis

Resident Behavior and Facility Practices		
42 CFR §	F-Tag	Deficiency
483.13(a)	F221, F222	Restraints
483.13(b)	F223	Abuse
483.13(c)	F224, F226	Staff Treatment of Residents
Quality of Life		
42 CFR §	F-Tag	Deficiency
483.15(a)	F241	Dignity
483.15(b)	F242	Self-Determination and Participation
483.15(c)	F243, F244	Participation in Resident and Family Groups
483.15(d)	F245	Participation in Other Activities
483.15(e)	F246, F247	Accommodation of Needs
483.15(f)	F248, F249	Activities
483.15(g)	F250, F251	Social Services
483.15(h)	F252, F253, F254, F255, F256, F257, F258	Environment
Quality of Care		
42 CFR §	F-Tag	Deficiency
483.05	F309	Quality of Care Deficiencies Not Covered by § 483.25(a)–(m)
483.25(a)	F310, F311, F312	Activities of Daily Living
483.25(b)	F313	Vision and Hearing
483.25(c)	F314	Pressure Sores
483.25(d)	F315, F316	Urinary Incontinence
483.25(e)	F317, F318	Range of Motion
483.25(f)	F319, F320	Mental and Psychosocial Functioning
483.25(g)	F321, F322	Naso-Gastric Tubes
483.25(h)	F323, F324	Accidents
483.25(i)	F325, F326	Nutrition
483.25(j)	F327	Hydration
483.25(k)	F328	Special Needs
483.25(l)	F329	Unnecessary Drugs
483.25(m)	F332, F333	Medication Errors
483.25(n)	F334	Influenza and Pneumococcal Immunizations

Source: “CMS State Operations Manual,” Appendix PP, “Guidance to Surveyors for Long Term Care Facilities,” Rev. 26, August 17, 2007.

Analysis of survey deficiency data. We took the following steps to analyze the survey deficiency data:

1. For each survey of each nursing home, we computed the total number of deficiencies of a scope and severity of “D” or higher. We did not include scope and severity levels “A” through “C” because they are considered to be substantial compliance by CMS.

2. We computed the average number of deficiencies in each State for each year from 1999 through 2007.
3. We created an index for each nursing home for each standard survey that was computed as the number of deficiencies for the survey divided by the average number of deficiencies for the State for the year of the survey.²⁴ These deficiency index scores for each corporation are presented in Table 9. The national index score equals 1; therefore, scores above 1 indicate that the corporation had more deficiencies than the average, and scores lower than 1 indicate that the corporation had fewer than average.

Table 9: Index Scores for CIA Corporations for Quality of Care Deficiencies of Scope and Severity of D or Higher*

CIA Corporations											
CIA Start Quarter	Term of CIA	Number of Nursing Homes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Q2 2001	5 Years	251	1.11	1.15	1.23	1.19	1.10	1.14	1.04	1.14	1.21
Q1 2002	5 Years	138	1.14	1.11	1.36	1.05	1.05	1.19	1.05	1.03	1.11
Q2 2002	5 Years	185	1.03	1.05	1.17	1.15	1.20	1.13	1.16	1.20	1.34
Q2 2004	3 Years	341	1.03	1.06	1.08	1.01	0.96	0.83	0.83	0.89	1.12
Q2 2002	5 Years	52	1.17	1.36	1.12	1.08	1.05	1.11	0.76	1.48	1.22
Q3 2003	5 Years	74	1.18	1.10	1.09	1.04	1.16	1.02	1.20	1.66	1.38
Q4 2003	2 Years	26	0.99	0.77	1.03	1.22	1.14	0.94	0.97	0.95	1.55
Q2 2000	5 Years	8	0.88	1.04	1.20	1.51	1.69	0.73	0.88	1.33	0.77
Q1 2002	3 Years	9	0.68	1.90	1.36	1.09	1.45	1.30	2.05	1.44	1.70
Q3 2003	5 Years	9	1.27	0.73	1.44	1.20	1.63	0.55	0.83	2.20	0.78
Q4 2004	5 Years	7	0.35	0.96	0.37	1.02	1.58	1.74	0.60	0.97	1.36
Q4 2001	5 Years	1	2.97	1.79	0.70	1.32	0.31	0.29	2.16	2.97	1.79
Q4 2001	4 Years	1		1.11	0.32	0.28	0.30	0.28	1.03	0.23	1.11
Q4 2002	3 Years	1	1.09	3.61	0.96	1.95	1.41	1.55	2.16	1.09	
Q4 2005	3 Years	1	3.28	0.29	0.37	0.33	1.30	1.10	1.35	0.65	3.28

*Shaded areas indicate the years during which the corporation was under the CIA.

Source: Office of Inspector General analysis of OSCAR quality of care deficiencies on standard surveys.

²⁴ Prior Office of Inspector General (OIG) work found that there was variation across States in the number of deficiencies cited and that States differ in how they determine specific deficiency citations. Using same-State nursing homes as a denominator, rather than all nursing homes in the Nation, helped to account for any variation in surveyor practices across States and create a meaningful comparative index. OIG, “Deficiency Trends and Survey and Certification Process Consistency” (OEI-02-01-00600), March 2003.

A C K N O W L E D G M E N T S

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