

February 2002

# NURSING HOMES

## Federal Efforts to Monitor Resident Assessment Data Should Complement State Activities

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## Abbreviations

ADL	activities of daily living
CMS	Centers for Medicare and Medicaid Services
DAVE	data assessment and verification
HCFA	Health Care Financing Administration
HHS	Health and Human Services
MDS	minimum data set
OIG	Office of Inspector General
OASIS	Outcome and Assessment Information Set
PPS	prospective payment system
SNF	skilled nursing facilities



United States General Accounting Office  
Washington, DC 20548

February 15, 2002

The Honorable Charles E. Grassley  
Ranking Minority Member  
Committee on Finance  
United States Senate

The Honorable Larry Craig  
Ranking Minority Member  
Special Committee on Aging  
United States Senate

Nursing homes play an important role in the health care system of the United States. More than 40 percent of elderly Americans will use a nursing home at some time in their lives. Such facilities provide skilled nursing, therapy, or supportive care to older individuals who do not need the intensive medical care provided by hospitals, but for whom receiving care at home is not feasible. Under the Medicare and Medicaid programs, nursing homes were expected to receive \$58 billion in 2001, with a federal share of approximately \$38 billion. Nursing homes that participate in these programs are required to periodically assess the care needs of residents in order to develop an appropriate plan of care. Such resident assessment data are known as the minimum data set (MDS).<sup>1</sup> The federal government contracts with states to periodically inspect or survey nursing homes, and state surveyors use MDS data to help assess the quality of resident care.<sup>2</sup> Medicare and some state Medicaid programs also use MDS data to adjust nursing home payments to account for variation in resident care needs.

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<sup>1</sup>The Omnibus Budget Reconciliation Act of 1987 required the Secretary of Health and Human Services to specify a minimum data set of core elements to use in conducting comprehensive assessments of patient conditions and care needs. See 42 U.S.C. § 1395i-3; 42 U.S.C. § 1396r. By mid-1991, the requirement to assess and plan for resident care had been implemented in all nursing homes that serve Medicare and Medicaid beneficiaries. MDS data are collected for all residents in these facilities, including Medicare, Medicaid, and private pay patients.

<sup>2</sup>The federal government has responsibility for establishing requirements that nursing homes must meet to participate in publicly funded programs. Every nursing home that receives Medicare or Medicaid funding must undergo a standard survey conducted on average every 12 months and no less than once every 15 months. Under its contracts with states, the federal government funds 100 percent of costs associated with certifying that nursing homes meet Medicare requirements and 75 percent of the costs associated with Medicaid standards.

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Thus, the accuracy of MDS data has implications for the identification of quality problems and the level of nursing home payments.

MDS accuracy is one of many areas that state surveyors are expected to examine during periodic nursing home surveys. Federal guidance for state surveyors regarding the accuracy of MDS assessments focuses on whether appropriate personnel completed or coordinated the assessments and whether there are any indications that the assessments were falsified. This guidance also instructs surveyors to conduct a check of specific MDS items to ensure that the resident's condition is appropriately characterized. Concerns exist, however, that state surveyors already have too many tasks and that, as a result, the survey process may not adequately address MDS accuracy. In addition, our prior work on nursing home quality issues has identified weaknesses in the survey process that raise questions about the thoroughness and consistency of state surveys.<sup>3</sup>

In response to your request, we assessed (1) how states monitor the accuracy of MDS data compiled by nursing homes through review programs separate from their standard nursing home survey process, (2) how states attempt to improve the data's accuracy where there are indications of problems, and (3) how the federal government ensures the accuracy of MDS data. We surveyed the 50 states and the District of Columbia to determine whether states had a separate MDS review program—distinct from any MDS oversight that might occur during the periodic nursing home surveys performed by all states. We then conducted structured interviews with officials in 10 of the 11 states that indicated they had separate MDS review programs.<sup>4</sup> We also interviewed staff from the Centers for Medicare and Medicaid Services (CMS), an agency within the Department of Health and Human Services (HHS) that manages the Medicare and Medicaid programs, who were responsible for developing

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<sup>3</sup>See *Nursing Homes: Sustained Efforts Are Essential to Realize Potential of the Quality Initiatives* (GAO/HEHS-00-197, Sept. 28, 2000).

<sup>4</sup>These 10 states are Iowa, Indiana, Maine, Mississippi, Ohio, Pennsylvania, South Dakota, Vermont, Washington, and West Virginia. Due to the newness of Virginia's MDS review program (implemented in April 2001), we focused on the experience of the 10 states with longer standing programs. In addition, about one-third of the states without separate MDS review programs volunteered additional information regarding the ways in which the accuracy of MDS data may be addressed through the nursing home survey process or training programs offered by the state.

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the agency's MDS review program.<sup>5</sup> In addition, we reviewed regulations, literature, and other documents relating to MDS data. We performed our work from December 2000 through January 2002 in accordance with generally accepted government auditing standards.

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## Results in Brief

Eleven states have established separate MDS review programs, apart from their standard nursing home survey process, to monitor the accuracy of resident assessment data compiled by nursing homes. An additional seven states reported that they plan to do so. According to officials in the 10 states with MDS accuracy review programs in operation as of January 2001, these programs were established primarily because of the important role played by MDS data in setting Medicaid payments and identifying quality of care problems. While routine nursing home surveys provide an opportunity to examine the accuracy of MDS data, officials in some of the 10 states with separate MDS review programs told us that surveyors do not have sufficient time to focus on the data's accuracy because of other survey tasks. To assess the accuracy of the MDS data, 9 of the 10 states conduct periodic on-site reviews in all or a significant portion of their nursing homes. These reviews include checking a sample of a home's MDS assessments and determining whether the basis for the assessments is adequately documented in residents' medical records. In addition, these reviews often include interviews of nursing home personnel familiar with residents and observations of the residents themselves. Such corroborating evidence provides reviewers increased assurance that an MDS assessment accurately reflects the resident's condition. States with on-site review programs reported that the discrepancies they identified between MDS assessments and the supporting documentation, also called "MDS errors," typically resulted from differences in clinical interpretation or mistakes, such as a misunderstanding of MDS definitions. Two of the 10 states were able to tell us the amount of the recoupments they obtained from nursing homes due to Medicaid overpayments based on inaccurate MDS assessments. For example, West Virginia received \$1 million from one nursing home relating to MDS errors associated with physical therapy services.

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<sup>5</sup>On June 14, 2001, the Secretary of HHS changed the name of the Health Care Financing Administration (HCFA) to CMS. In this report, we will continue to refer to HCFA where our findings apply to the organizational structure and operations associated with that name.

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States with separate MDS review programs identified a variety of approaches to improving MDS accuracy. State officials highlighted the on-site review process itself and provider education activities as their primary approaches. On-site reviews heighten facility staff awareness of the importance of MDS data and can lead to the correction of practices that contribute to MDS errors. Some officials said that on-site reviews provide a valuable opportunity for informal training and coaching staff about completing and documenting MDS assessments, which is important given the types of MDS errors found and the high staff turnover in nursing homes. Identifying areas of confusion by nursing home staff during on-site MDS reviews is also useful in guiding the focus of formal training sessions conducted outside of the nursing home. State officials reported that they also have one or more remedies at their disposal to help improve accuracy, such as requiring nursing homes to prepare a corrective action plan or imposing financial penalties on nursing homes when serious or extensive errors in MDS data are found. Indiana, for example, requires facilities to submit a corrective action plan detailing how the facility will address errors identified during an on-site review. In addition, Maine has collected approximately \$390,000 in financial penalties since late 1995 from facilities with MDS errors. Finally, officials from five states told us that their MDS review efforts have resulted in a notable decrease in MDS errors across all facilities. For example, the average percentage of assessments with MDS errors that resulted in a payment change since initiation of their separate review programs has decreased from about 85 percent to 10 percent of assessments in South Dakota and from 75 percent to 30 percent of assessments in Indiana.

Following the 1998 implementation of Medicare's MDS-based payment system, the Health Care Financing Administration (HCFA) began building the foundation for its own separate review program—distinct from state efforts—intended to ensure the accuracy of MDS data for all nursing home residents. In the course of developing and testing various accuracy review approaches, an agency contractor found widespread MDS errors that resulted in a change in the Medicare payment level for two-thirds of the resident assessments sampled. Its on-site visits proved to be a very effective method of assessing accuracy. As a result, the contractor recommended that any MDS reviews involve on-site visits, at least for the first few years of any national review program, along with certain off-site analysis to help target homes and areas for review. In September 2001, CMS awarded a new contract to establish a national MDS accuracy review program. As currently planned, CMS' MDS review activities are projected to involve roughly 1 percent of the estimated 14.7 million MDS assessments expected to be completed in 2001, with on-site reviews in

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fewer than 200 of the nation's 17,000 nursing homes each year. In contrast, states that conduct separate MDS reviews typically examine from 10 to 40 percent of assessments completed in all or a significant portion of their nursing homes. The CMS contractor is required to coordinate its activities with ongoing state and federal efforts. For example, to avoid unnecessary overlap, the contractor is instructed to coordinate with states regarding the selection of facilities and the timing of visits. However, the contractor is not specifically tasked with assessing the adequacy of each state's MDS accuracy activities. While CMS' approach may yield some broad sense of the accuracy of MDS assessments on an aggregate level, it appears to be insufficient to provide confidence about the accuracy of MDS assessments in the vast bulk of nursing homes nationwide.

Given the substantial level of effort and resources already invested at the state and federal levels to oversee nursing home quality of care, including periodic inspections at each home nationwide, we believe that CMS should reorient its MDS accuracy program so that it complements and leverages existing state review activities and its own established nursing home oversight efforts. Therefore, we are making recommendations to the administrator of CMS that include determining the adequacy of each state's efforts to ensure MDS accuracy and providing additional guidance and technical assistance to individual states as needed; routinely monitoring state review activities and progress as part of CMS' own ongoing federal oversight of nursing home quality; and ensuring that states and nursing homes have sufficient documentation to support the full MDS assessment.

In commenting on a draft of this report, CMS agreed with the importance of assessing and monitoring the adequacy of state MDS accuracy efforts. CMS recognized that the MDS impacts reimbursement and care planning and that it is essential that the assessment data reflect the resident's health status so that the resident may receive the appropriate quality care and that providers are appropriately reimbursed. While CMS' comments suggested that its current efforts may be sufficient to assess and improve state performance, we do not believe they will result in the systematic assessment and monitoring of each state's MDS accuracy that we recommended. CMS did not agree with our recommendation on the need for sufficient documentation to support the full MDS assessment, expressing concern about potential duplicative effort and unnecessary burden for nursing homes. In our view, documentation need not be duplicative, but demonstrative that the higher-level summary judgment about a resident's condition and needs entered on the MDS can be independently validated. Given the importance of MDS data in adjusting



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nursing home payments and guiding resident care, ensuring their integrity is critical to achieving their intended purposes.

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## Background

The nation's 17,000 nursing homes play an essential role in our health care system, providing services to 1.6 million elderly and disabled persons who are temporarily or permanently unable to care for themselves but who do not require the level of care furnished in an acute care hospital. Depending on the identified needs of each resident, as determined through MDS assessments, nursing homes provide a variety of services, including nursing and custodial care, physical, occupational, and speech therapy, and medical social services.<sup>6</sup> The majority of nursing home residents have their care paid for by Medicaid, a joint federal-state program for certain low-income individuals. Almost all nursing homes serve Medicaid residents, while more than 14,000 nursing homes are also Medicare-certified. Medicare, the federal health care program for elderly and disabled Americans, pays for posthospital nursing home stays if a beneficiary needs skilled nursing or rehabilitative services.<sup>7</sup> Medicare-covered skilled nursing home days account for approximately 9 percent of total nursing home days. Medicare beneficiaries tend to have shorter nursing home stays and receive more rehabilitation services than individuals covered by Medicaid.

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## MDS Used to Assess Nursing Home Residents

Since 1991, nursing homes have been required to develop a plan of care for each resident based on the periodic collection of MDS data. The MDS contains individual assessment items covering 17 areas, such as mood and behavior, physical functioning, and skin conditions. MDS assessments of each resident are conducted in the first 14 days after admission and are

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<sup>6</sup>For patients with an advanced illness, medical social services generally help the patient and family cope with the logistics of daily life, including financial and legal planning and mobilizing community resources that may be available to the patient. Such services may also include counseling the patient and family to address emotions and other issues related to the advanced illness.

<sup>7</sup>To qualify, a Medicare beneficiary must require daily skilled nursing or rehabilitative therapy services, generally within 30 days of a hospital stay of at least 3 days in length, and must be admitted to the nursing home for a condition related to the hospitalization.

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used to develop a care plan.<sup>8</sup> A range of professionals, including nurses, attending physicians, social workers, activities professionals, and occupational, speech, and physical therapists, complete designated parts of the MDS.<sup>9</sup> Assessing a resident's condition in certain areas requires observation, often over a period of days. For example, nursing staff must assess the degree of resident assistance needed during the previous 7 days—none, supervised, limited, extensive, or total dependence—to carry out the activities of daily living (ADL), such as using a toilet, eating, or dressing. To obtain this information, staff completing the MDS assessments are required to communicate with direct care staff, such as nursing assistants or activities aides, who have worked with the resident over different time periods. These staff have first-hand knowledge of the resident and will often be the primary and most reliable source of information regarding resident performance of different activities. While a registered nurse is required to verify that the MDS assessment is complete, each professional staff member who contributed to the assessment must sign and attest to the accuracy of his or her portion of the assessment.

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## MDS Used in Quality Oversight and as Basis for Payments

MDS data are also submitted by nursing homes to states and CMS for use in the nursing home survey process and to serve as the basis for adjusting payments. CMS contracts with states to periodically survey nursing homes to review the quality of care and assure that the services delivered meet the residents' assessed needs. In fiscal year 2001, the federal government

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<sup>8</sup>MDS assessments are conducted for all nursing home residents within 14 days of admission and at quarterly and yearly intervals unless there is a significant change in condition. Accommodating their shorter nursing home stays, Medicare beneficiaries in a Medicare-covered stay are assessed on or before the 5th, 14th, and 30th day of their stays and every 30 days thereafter.

<sup>9</sup>In a recent study, the HHS Office of Inspector General (OIG) reported that almost all of the facilities in its study had a position of MDS coordinator. Eighty-one percent were registered nurses, and the remainder were either licensed practical nurses, licensed vocational nurses, or social workers. See HHS OIG, *Nursing Home Resident Assessment: Quality of Care*, OEI-02-99-00040 (Washington, D.C.: HHS, Dec. 2000).

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spent about \$278 million on the nursing home survey process.<sup>10</sup> Effective July 1999, the agency instructed states to begin using quality indicators derived from MDS data to review the care provided to a nursing home's residents before state surveyors actually visit the home to conduct a survey.<sup>11</sup> Quality indicators are essentially numeric warning signs of potential care problems, such as greater-than-expected instances of weight loss, dehydration, or pressure sores among a nursing home's residents. They are used to rank a facility in 24 areas compared with other nursing homes in a state. In addition, by using the quality indicators before the on-site visit to select a preliminary sample of residents to review, surveyors should be better prepared to identify potential care problems.

In addition to quality oversight, some state Medicaid programs and Medicare use MDS data to adjust nursing home payments to reflect the expected resource needs of their residents. Such payment systems are commonly known as "case-mix" reimbursement systems. Because not all residents require the same amount of care, the rate paid for each resident is adjusted using a classification system that groups residents based on their expected costs of care. Facilities use MDS data to assign residents to case-mix categories or groups that are defined according to clinical condition, functional status, and expected use of services. In Medicare, these case-mix groups are known as resource utilization groups. Each case-mix group represents beneficiaries who have similar nursing and therapy needs. As of January 2001, 18 states had introduced such payment systems for their Medicaid programs.<sup>12</sup> As directed by the Congress, HCFA

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<sup>10</sup>To assess state survey agency performance in fulfilling contractual obligations, CMS is required by statute to conduct federal oversight surveys in at least 5 percent of the nursing homes in each state within 2 months of the state's completion of its survey. CMS fulfills this requirement by conducting a combination of (1) comparative surveys, in which a federal team independently surveys a nursing home recently inspected by a state in order to compare and contrast the results, and (2) observational surveys where federal surveyors accompany a state survey team to a nursing home to watch the conduct of the survey, provide immediate feedback, and later rate the team's performance. Comparative surveys offer a more accurate picture of the adequacy of state survey activities than do observational surveys, which primarily are used to help identify training needs. HCFA surveyors found deficiencies that were more serious than those identified by state surveyors in about 70 percent of the 157 comparative surveys they conducted between October 1998 and May 2000. See GAO/HEHS-00-197, Sept. 28, 2000.

<sup>11</sup>Quality indicators were developed in a HCFA-funded project at the University of Wisconsin. See Center for Health Systems Research and Analysis, *Facility Guide for the Nursing Home Quality Indicators* (University of Wisconsin-Madison: Sept. 1999).

<sup>12</sup>We refer to these states as having "MDS-based payment systems."

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in 1998 implemented a prospective payment system (PPS) for skilled nursing facilities (SNF)—nursing homes that are certified to serve Medicare beneficiaries. The SNF PPS also uses MDS data to adjust nursing home payments.

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### MDS Review Activities Can Be On-Site or Off-Site

States and CMS use the term “accuracy reviews” to describe efforts that help ensure MDS assessments accurately reflect residents’ conditions. Review activities can be performed on-site—that is, at the nursing home—or off-site. On-site reviews generally consist of documentation reviews to determine whether the resident’s medical record supports the MDS assessment completed by the facility.<sup>13</sup> If the MDS assessment is recent, the review may also include direct observation of the resident and interviews with nursing home staff who have recently evaluated or treated the resident.

While documentation reviews may also be conducted outside of the nursing home, other off-site reviews of MDS data include examining trends across facilities.<sup>14</sup> For example, off-site review activities could involve the examination of monthly reports showing the distribution of residents’ case-mix categories across different facilities in a state. Similarly, off-site reviews could also involve an examination of particular MDS elements, such as the distribution of ADLs within and across nursing homes to identify aberrant or inconsistent patterns that may indicate the need for further investigation. Off-site and on-site reviews may also be combined as a way of leveraging limited resources to conduct MDS accuracy activities.

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<sup>13</sup>Each nursing home resident has a medical record where information about the resident is documented. In addition to the current plan of care, examples of medical record documentation include: (1) recent physician notes, (2) results of recent tests, and (3) documentation of services provided. Nursing home staff use this documentation to complete each MDS assessment. Maintaining an adequate level of documentation in the medical record improves the ability of staff to complete the MDS accurately, particularly for areas that require observation over a period of days. Some states assert that determining the degree of assistance that a resident requires with ADLs, such as bathing, dressing and toileting, requires repeated observation over several days, thus increasing the need for documentation.

<sup>14</sup>CMS’ current review of SNF PPS claims is an example of an off-site documentation review. CMS contracts with fiscal intermediaries to process Medicare claims and to conduct reviews that use medical records requested from nursing homes to ensure that claims for Medicare payments are adequately supported. For fiscal years 2000 and 2001, such contracts required fiscal intermediaries to review 0.5 percent and 1 to 3 percent, respectively, of total SNF PPS claims.

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## Only Eleven States Conduct Separate On-Site or Off-Site Reviews of MDS Accuracy

Eleven states conduct separate MDS accuracy reviews apart from their standard nursing home survey process. Ten of these states' reviews were in operation as of January 2001. An additional 7 states reported that they intend to initiate similar accuracy reviews.<sup>15</sup> All 18 of these states either currently use an MDS-based Medicaid payment system or plan to implement such a system. The remaining 33 states have no plans to implement separate MDS review programs and currently rely on their periodic nursing home surveys for MDS oversight.<sup>16</sup> In all but one of the states with separate MDS review programs operating as of January 2001, accuracy reviews entail periodic on-site visits to nursing homes. The reviews focus on whether a sample of MDS assessments completed by the facility is supported by residents' medical records. If the MDS assessments reviewed are recent enough that residents are still in the facility and their health status has not changed, the on-site review may also be supplemented with interviews of nursing home staff familiar with the residents, as well as observations of the residents themselves, to validate the record review. About half of these states also conduct off-site data analyses in which reviewers look for significant changes or outliers, such as facilities with unexplained large shifts in the distribution of residents across case-mix categories over a short period. Officials primarily attributed the errors found during their on-site reviews to differences in clinical interpretation and mistakes, such as a misunderstanding of MDS definitions. A few of these states have been able to show some recoupments of Medicaid payments since the implementation of their on-site review programs.

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<sup>15</sup>In January 2002, we learned that one of these states—Kentucky—had implemented its MDS review program in October 2001. Our analysis, however, is based on the 10 programs in operation as of January 2001.

<sup>16</sup>The District of Columbia is included as one of the 33 states that has no plans to implement a separate MDS review program. In this report, we generally refer to the District of Columbia as a state.

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## Most States Do Not Have Separate MDS Review Programs

Of the 50 states and the District of Columbia, only 11 conduct accuracy reviews of MDS data that are separate from the state's nursing home survey process.<sup>17</sup> (See table 1.) These 11 states provide care to approximately 22 percent of the nation's nursing home residents and all but one have an MDS-based payment system (Virginia began conducting MDS accuracy reviews in April 2001 in anticipation of adopting such a payment system in 2002). Seven additional states plan to initiate separate MDS reviews—three currently have an MDS-based payment system and four are planning to implement such a payment system. Officials in the 10 states with separate, longer standing MDS review programs said that the primary reason for implementing reviews was to ensure the accuracy of the MDS data used in their payment systems. Several of these states also indicated that the use of MDS data in generating quality indicators was another important consideration. Vermont officials, in particular, emphasized the link to quality of care, noting that the state had created its own MDS-based quality indicators prior to HCFA's requirement to use quality indicators in nursing home surveys. A state official told us it was critical that the MDS data be accurate because Vermont was making this information available to the public as well as using it internally as a normal part of the nursing home survey process.

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<sup>17</sup>Since separate MDS accuracy reviews are associated with states' Medicaid programs, the costs can be considered administrative expenses. In general, the federal government pays 75 percent of the cost for review activities performed by skilled professional medical personnel, such as registered nurses, and 50 percent for other personnel costs. States are responsible for the remaining costs.

**Table 1: States with and without MDS Review Programs as of January 2001**

Type of payment system	State	State totals
<b>States with separate MDS review programs</b>		
MDS-based payment system	Indiana, Iowa, Maine, Mississippi, Ohio, Pennsylvania, South Dakota, Vermont, Washington, West Virginia	10
Planning to adopt MDS-based payment system	Virginia (reviews began April 2001)	1
<b>States planning separate MDS review programs</b>		
MDS-based payment system	Idaho, Kentucky, New Hampshire	3
Planning to adopt MDS-based payment system	Georgia, Minnesota, <sup>a</sup> New Jersey, Utah	4
<b>SUBTOTAL</b>		<b>18</b>
<b>States with no plans to establish separate MDS review programs</b>		
MDS-based payment system	Colorado, <sup>b</sup> Florida, Kansas, Nebraska, North Dakota	5
No MDS-based payment system	Alaska, Alabama, Arkansas, Arizona, California, Connecticut, District of Columbia, Delaware, Hawaii, Illinois, <sup>a</sup> Louisiana, Massachusetts, <sup>a</sup> Maryland, <sup>b</sup> Michigan, Missouri, Montana, <sup>a</sup> North Carolina, New Mexico, Nevada, New York, <sup>a</sup> Oklahoma, Oregon, Rhode Island, South Carolina, Tennessee, Texas, <sup>a</sup> Wisconsin, Wyoming	28
<b>Subtotal</b>		<b>33</b>
<b>Total</b>		<b>51</b>

Note: States' decisions regarding whether to adopt an MDS-based payment system and MDS review program may have changed since the time of our data collection (January 2001). For example, a Kentucky official told us that it implemented a separate MDS review program in October 2001, and Montana has shifted to an MDS-based payment system.

<sup>a</sup>Although these states do not conduct a separate review of MDS data, they do conduct separate reviews of data that are linked to their state's Medicaid payment system. For example, Texas has a non-MDS-based case-mix payment system called the Texas Index for Level of Effort that is based on a recipient's condition, ADLs, and the level of staff intervention.

<sup>b</sup>Colorado and Maryland officials volunteered that they had conducted onetime reviews of MDS data, but are not planning to regularly continue these reviews. Colorado's state survey agency conducted an MDS review of 90 nursing homes (40 percent of homes) in the summer of 2000 and Maryland officials participated in a HCFA-funded project to conduct on-site reviews from May through July 2000 at 5 percent of its nursing homes.

Source: GAO survey of 50 states and the District of Columbia.

To varying degrees, three major factors influenced the decision of 33 states not to establish separate MDS review programs. First, the

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majority—28 states—do not have MDS-based Medicaid payment systems. Second, some states cited the cost of conducting separate reviews. Kansas, for example, reported a lack of funding and staff resources as the reason for halting a brief period of on-site visits in 1996 as a follow-up to nursing home surveys. Arkansas as well reported insufficient staff for conducting a separate review of MDS data.<sup>18</sup> Finally, officials in about one-third of the states without separate MDS reviews volunteered that they had some assurance of the accuracy of MDS data either because of training programs for persons responsible for completing MDS assessments or because of the nursing home survey process.<sup>19</sup> For example, Missouri operates a state funded quality improvement project in which nurses with MDS training visit facilities to assist staff with the MDS process and use of quality indicator reports. North Carolina also reported that its quarterly training sessions provide MDS training to approximately 800 providers a year. Regarding standard surveys, Connecticut and Maryland reported that their nursing home survey teams reviewed MDS assessments to determine if they were completed correctly and if the assessment data matched surveyor observations of the resident. In Connecticut, surveyors may also review a sample of facility MDS assessments for possible errors whenever they identify aberrant or questionable data on the quality indicator reports.

Officials in the 10 states with separate, longer standing MDS review programs generally said that the survey process itself does not detect MDS

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<sup>18</sup>A few of the 10 states that carry out separate MDS reviews have structured their programs to reduce the costs of on-site reviews. For example, Ohio uses off-site data analysis to target a subset of facilities for further on-site review. However, West Virginia, which conducted on-site reviews until 1998, cited a lack of staff as the major reason for switching to an off-site-only review approach.

<sup>19</sup>These 13 states include: Connecticut, Florida, Kansas, Maryland, Michigan, Missouri, Montana, North Carolina, Nevada, Oregon, South Carolina, Tennessee, and Wisconsin. Because states volunteered this information, there may be other states that conduct similar activities that provide some assurance of the accuracy of MDS data.



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accuracy issues as effectively as separate MDS review programs.<sup>20</sup> Some noted that nursing home surveyors do not have time to thoroughly review MDS accuracy and often review a smaller sample size than MDS reviewers. The surveyors' primary focus, they indicated, was on quality of care and resident outcomes—not accuracy of MDS data. For example, surveyors would look at whether the resident needed therapy and whether it was provided. In contrast, the MDS reviewer would calculate the total number of occupational, speech, and physical therapy minutes to ensure that the resident was placed in the appropriate case-mix category. Officials in Iowa similarly noted that surveyors do not usually cite MDS accuracy as a specific concern unless there are egregious MDS errors, again, because the focus of the survey process is on quality of care.

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**States with Separate MDS Review Programs Emphasize On-Site Oversight, but Also Conduct Off-Site Monitoring**

Nine of the 10 states with separate, longer standing MDS accuracy review programs use on-site reviews to test the accuracy of MDS data, generally visiting all or a significant portion of facilities in the state at least annually, if not more frequently. (See app. I for a summary of state on-site review programs.) Due to a lack of staff, one state—West Virginia—limits its MDS reviews to off-site analysis of facility-specific monthly data. Most of these states have been operating their MDS review programs for 7 years or longer and developed them within a year of implementing an MDS-based payment system. Three of the nine states arrive at the facility unannounced while the other six provide advanced notice ranging from 48 hours to 2 weeks.

The sample of facility MDS assessments reviewed by each state varies considerably. Assessment sample sizes generally range from 10 to 40 percent of a nursing home's total residents but some states select a specific number of residents, not a percentage, and a few specifically target residents in particular case-mix categories. For example, Indiana selects a sample of 40 percent—or no less than 25 residents—across all

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<sup>20</sup>Two of the 10 states with MDS accuracy programs closely coordinate their reviews with state nursing home surveys—Vermont and Washington. In Vermont, 12 registered nurses separately conduct both the MDS accuracy reviews and nursing home surveys. Vermont officials told us that they had previously tried combining these processes but decided to separate them because of the heavy workload. In Washington, the nurses who conduct nursing home surveys and MDS reviews are located in the same department, and therefore coordinate closely by sharing reports and other information. The quality assurance nurses who conduct the MDS reviews are surveyor trained and participate in nursing home surveys about six times per year. Even so, Washington officials cited the importance of having a separate MDS review process aside from the nursing home surveys.

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major case-mix categories, while Ohio's sample can be based on a particular case-mix category, such as residents classified as "clinically complex."<sup>21</sup> Iowa officials told us that its reviewers select at least 25 percent of a facility's residents, with a minimum of 5 residents, while Pennsylvania chooses 15 residents from each facility, regardless of case-mix category or facility size. Some states expand the resident sample when differences between the MDS assessment and supporting documentation reach a certain threshold.<sup>22</sup> For example, if the on-site review for the initial sample in Iowa finds that 25 percent or more of the MDS assessments have errors, a supplemental random sample is selected for review. While a few states limit their sample to Medicaid residents only, most select assessments to review from the entire nursing home's population.

On-site reviews generally involve a comparison of the documentation in the resident's medical record to the MDS assessment prepared by the facility.<sup>23</sup> Generally, the on-site process also allows reviewers to interview nursing home staff and to directly observe residents, permitting a better understanding of the documentation in a resident's medical record and clarifying any discrepancies that may exist. Staff interviews and resident observations can enhance the reviewer's understanding of the resident's condition and allow a more thorough MDS review than one relying primarily on documentation. However, as the interval between the facility's MDS assessment and the on-site review increases, staff interviews and resident observations become less reliable and more

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<sup>21</sup>Generally, patients classified as clinically complex may have conditions such as burns, pneumonia, internal bleeding, or dehydration.

<sup>22</sup>States with on-site reviews generally define MDS errors as an unsupported MDS assessment, or they use a stricter standard of an unsupported MDS assessment that results in a change in the resident's case-mix category. None of the states identify whether an MDS error results in a quality indicator change.

<sup>23</sup>To strengthen the on-site review process, a few states—Iowa, South Dakota, and Vermont—conduct interrater reliability checks and one of these states, South Dakota, also conducts independent assessments. During an interrater reliability check, two reviewers examine the same MDS assessment and medical record separately and compare their findings to determine if they are correctly and consistently identifying MDS errors. For independent assessments, reviewers complete a separate MDS assessment using all of the available information at the facility and then compare it to the original assessment completed by the facility. In two recent reports, the HHS OIG also conducted independent assessments based on medical record documentation for 640 residents. See HHS OIG, OEI-02-99-00040, Dec. 2000 and *Nursing Home Resident Assessment: Resource Utilization Groups*, OEI-02-99-00041 (Washington, D.C.: HHS, Dec. 2000).

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difficult to conduct.<sup>24</sup> For example, staff knowledge of a particular patient may fade over time, the patient's health status may change, or the patient may be discharged from the facility. Pennsylvania officials, who reported reviewing assessments that were 6 to 12 months old, told us that the state's MDS reviews tended to identify whether the nursing home had adequate documentation. Reviewing such old assessments tends to focus the review process on the adequacy of the documentation rather than on whether the MDS assessment was accurate.<sup>25</sup> Four of the nine states review assessments between 30 and 90 days old, a process that likely increases the value of interviews and observation. The combination of interviews and observations can be valuable, but limiting reviews to only recent MDS assessments and providing homes advance notice may undermine the effectiveness of on-site reviews.<sup>26</sup> Under such circumstances, facilities have an opportunity to focus on the accuracy of their recent assessments, particularly if the nursing home knows when their reviews will occur, instead of adopting facility-wide practices that increase the accuracy of all MDS assessments.

Based on their on-site reviews, officials in the nine states identified seven areas as having a high potential for MDS errors, with two areas most often identified as being among the highest potential for error: (1) mood and behavior and (2) nursing rehabilitation and restorative care.<sup>27</sup> (See fig. 1.) Assessments of resident mood and behavior are used to calculate quality indicators and, along with nursing rehabilitation and restorative care, are

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<sup>24</sup>The nine states with on-site reviews had different criteria regarding when the assessment was too old to use interviews and observations as corroborating evidence. For example, one state reported that interviews and observations become less useful for an MDS assessment completed 14 days prior to the state review, while another state cited 180 days.

<sup>25</sup>Similarly, the HHS OIG acknowledged that its documentation review of MDS assessments up to 11 months old did not permit a specific determination of why differences occurred, only whether the MDS was consistent with the rest of the medical record. See HHS OIG, OEI-02-99-00041 and OEI-02-99-00040, Dec. 2000.

<sup>26</sup>We have earlier reported that the timing of some nursing home surveys makes them predictable, allowing facilities to mask certain deficiencies if they chose to do so. See GAO/HEHS-00-197, p. 11.

<sup>27</sup>Nursing rehabilitation and restorative care are interventions that assist or promote the resident's ability to attain his or her maximum functional potential. Some examples include passive or active range of motion movements, amputation care, and splint or brace assistance.

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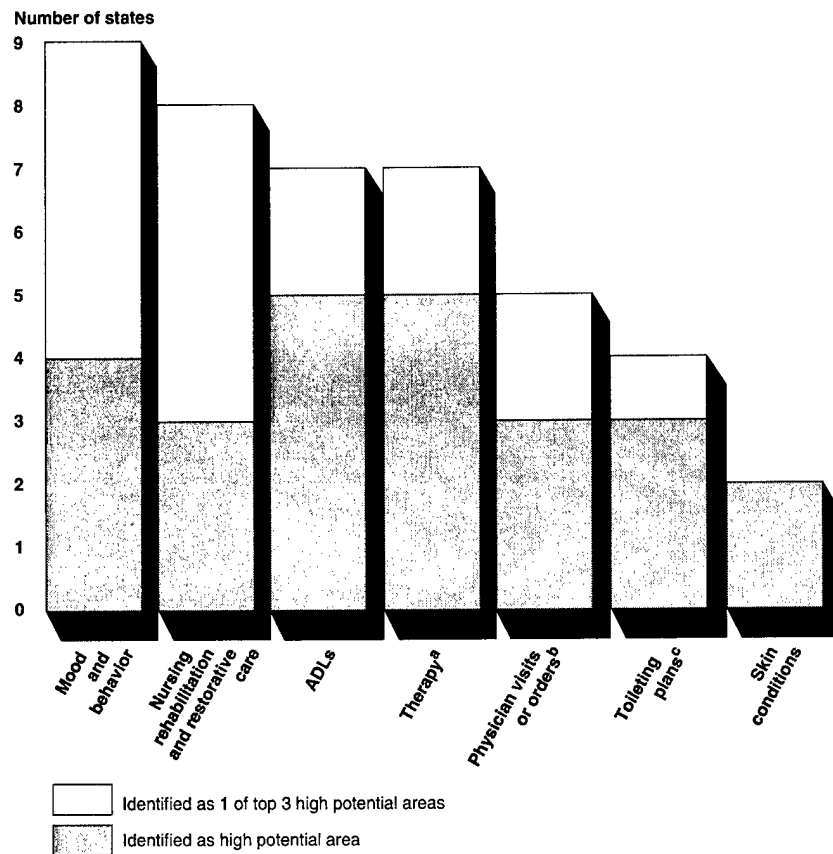
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often important in determining nursing home payments.<sup>28</sup> CMS indicated that several of the MDS elements cited in figure 1 were also identified by a CMS contractor as areas of concern. Officials in most states with separate on-site review programs told us that errors discovered during their on-site reviews often resulted from differences in clinical interpretation or mistakes, such as a misunderstanding of MDS definitions by those responsible for completing MDS assessments. Officials in only four of the nine states were able to tell us whether the errors identified in their MDS reviews on average resulted in a case-mix category that was too high or too low. Two of these states reported roughly equal numbers of MDS errors that inappropriately placed a resident in either a higher or lower case-mix category; a third indicated that errors more often resulted in higher payments; and a fourth found that errors typically resulted in payments that were too low. None of the nine states track whether quality indicator data were affected by MDS errors.

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<sup>28</sup>For example, 2 of the 24 quality indicators are based on behavior areas assessed in the MDS, such as residents being verbally abusive, physically abusive, or showing symptoms of depression.

**Figure 1: MDS Elements Identified By Nine States As Having High Potential for MDS Errors**



Note: We asked states to identify areas of the MDS assessment that have a high potential for MDS errors. State responses were included in this figure if two or more states identified an area as "high potential."

<sup>a</sup>Staff record the number of days and total minutes of therapy, such as physical or occupational therapy, received by a resident in the last 7 days.

<sup>b</sup>Staff record the number of days during the last 14-day period in which a physician has examined the resident or changed the care directions for the resident. The latter is known as physician orders.

<sup>c</sup>Staff members record scheduled times each day that they perform any of the following tasks: (1) take the resident to the bathroom, (2) give the resident a urinal, or (3) remind the resident to go to the bathroom.

Source: Interviews with officials from nine states with separate on-site review programs in operation as of January 2001.

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Two of the 10 states with MDS review programs were able to tell us the amount of Medicaid recoupments resulting from inaccurate MDS assessments. From state fiscal years 1994 through 1997, South Dakota officials reported that the state had recouped about \$360,000 as a result of recalculating nursing home payments after MDS reviews. West Virginia received \$1 million in 1999 related to MDS errors for physical therapy discovered during a 1995 on-site review at a nursing home. Officials in five additional states told us that they recalculate nursing home payments when MDS errors are found, but could not provide the amount recovered.<sup>29</sup>

Of the 10 states with longer standing MDS review programs, four use off-site analyses to supplement their on-site reviews, while one state relies on off-site analyses exclusively. Both Maine and Washington examine MDS data off-site to monitor changes by facility in the mix of residents across case-mix categories. Such changes may help identify aberrant or inconsistent patterns that may indicate the need for further investigation. Ohio, a state with approximately 1,000 facilities—more than any other state that conducts MDS reviews—analyzes data off-site to identify facilities with increased Medicaid payments and changes in case-mix categories to select the approximately 20 percent of facilities visited each year.<sup>30</sup> West Virginia has eliminated its on-site reviews and now focuses solely on analyzing monthly reports for its 141 facilities—for example, significant changes in case-mix categories or ADLs across consecutive MDS assessments. In addition to informally sharing results of off-site reviews with the state nursing home surveyors, West Virginia is trying to formalize a process in which off-site reviews could trigger additional on-site or off-site documentation reviews.

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<sup>29</sup> At the time of our interviews, three states did not recalculate Medicaid payments as a result of errors found during MDS reviews—Maine, Pennsylvania, and Iowa.

<sup>30</sup> Although Virginia had not begun its reviews at the time of our data collection, state officials told us that they planned to use off-site data analysis to target approximately 20 facilities—7 percent—per month for on-site review.

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## States Attempt to Improve MDS Data Accuracy through On-Site Reviews, Training, and Other Remedies

Officials in the nine states with on-site review programs consistently cited three features of their review programs that strengthened the ability of nursing home staff to complete accurate MDS assessments and thus decrease errors: (1) the actual presence of reviewers, (2) provider education, and (3) remedies that include corrective action plans and financial penalties. On-site reviews, for example, underscore the state's interest in MDS accuracy and provide an opportunity to train and coach those who are responsible for completing MDS assessments. Similarly, the errors discovered during on-site reviews guide the development of more formal training sessions that are offered by the state outside of the nursing home. Requiring nursing homes to prepare corrective action plans and imposing financial penalties signal the importance of MDS accuracy to facilities and are tools to improve the accuracy of the MDS data. As a result of these efforts, some states have been able to show a notable decrease in their overall error rates.

Most of the nine states view on-site visits and training as interrelated elements that form the foundation of their MDS review programs. State officials said that nursing homes pay more attention to properly documenting and completing the MDS assessments because reviewers visit the facilities regularly. On-site visits also allow reviewers to discuss MDS documentation issues or requirements with staff, providing an opportunity for informal MDS training. For example, Indiana officials told us that 2 to 3 hours of education are a routine part of each facility's MDS review. Noting the high staff turnover rates in nursing homes, many states reported that frequent training for the staff responsible for completing MDS assessments is critical.<sup>31</sup> Officials in seven of the nine states with on-site reviews told us that high staff turnover was one of the top three factors contributing to MDS errors in their states. In addition, many of the

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<sup>31</sup>We recently testified on the problem of nurse and nurse aide retention in a range of health care settings, including nursing homes. See *Nursing Workforce: Recruitment and Retention of Nurses and Nurse Aides Is a Growing Concern* (GAO-01-750T, May 17, 2001). In addition, the HHS OIG recently reported that about 60 percent of MDS coordinators had worked 1 year or less in that role at their current nursing home and over 65 percent had no prior experience as an MDS coordinator. See HHS OIG, OEI-02-99-00040, Dec. 2000.

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reasons cited for MDS errors—such as a misunderstanding of MDS definitions and other mistakes—reinforce the need for training.<sup>32</sup>

States with on-site reviews use the process to guide provider education activities—both on-site and off-site. For example, during Pennsylvania's annual MDS reviews of all nursing homes, state reviewers determine the types of training needed. According to state officials, the state uses the results of these reviews to shape and provide facility-specific training, if it is needed, within a month of the review and subsequently conducts a follow-up visit to see if the facility is improving in these areas. They indicated that all 685 homes visited during 2000, the first year of this approach, were provided with some type of training. To improve MDS accuracy, several states also provide voluntary training opportunities outside of the nursing home. Maine, Iowa, Indiana, and South Dakota, for example, provide MDS training regularly throughout the state, rotating the location of the training by region so that it is accessible to staff from all facilities.

While states generally emphasized on-site reviews and training as the primary ways to improve the accuracy of the MDS data, some reported that they have also instituted certain remedies, such as corrective action plans and financial penalties. Indiana and Pennsylvania, for example, require facilities to submit a corrective action plan detailing how the facility will address errors identified during an on-site review. Two states—Maine and Indiana—impose financial penalties.<sup>33</sup> Maine has instituted financial penalties for recurring serious errors, collecting approximately \$390,000 since late 1995. Maine also requires facilities with any MDS errors that result in a case-mix category change to complete and

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<sup>32</sup>HCFA provided guidance in March and July 2001 to facilities regarding the completion of MDS assessments. HCFA last published similar guidance in August 1996. A few state officials noted the long lapse in the publication between the two guides and told us that clearer and more timely guidance on MDS definitions was needed. However, CMS' *Long Term Care Facility Resident Assessment Instrument User's Manual*, which provides guidance on completing MDS assessments, has not been updated since 1995.

<sup>33</sup>Vermont and Washington also told us that financial penalties are an available remedy, but had not imposed them as of early 2001.



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submit a corrected MDS assessment for the resident.<sup>34</sup> While Indiana imposes financial penalties, it does not view them as the primary tool for improving MDS accuracy.<sup>35</sup> Rather, officials attributed a decrease in MDS errors to the education of providers and the on-site presence of reviewers. Other remedies cited by states include conducting more frequent on-site MDS reviews and referring suspected cases of fraud to their state's Medicaid Fraud Control Unit.

Five of the nine states that conduct on-site MDS reviews told us that their efforts have resulted in a notable decrease in MDS errors across all facilities since the implementation of their review programs. (See table 2.) South Dakota officials, for example, reported that the percentage of assessments with MDS errors across facilities had decreased from approximately 85 percent to 10 percent since the implementation of the state's MDS review program in 1993. Similarly, Indiana reported a decrease in the statewide average error rate from 75 percent to 30 percent of assessments in 1 year's time. Four states could not provide these data. In calculating these decreases, three of the five states—Indiana, Maine, and South Dakota—define MDS errors as an unsupported MDS assessment that caused the case-mix category to be inaccurate.<sup>36</sup> Iowa's definition, however, includes MDS elements that are not supported by medical record documentation, observation, or interviews, regardless of whether the MDS error changed the case-mix category. Similarly, while Pennsylvania does not limit errors to those that changed the case-mix category, the state

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<sup>34</sup>In Maine, facilities are instructed to follow CMS' correction policy guidelines for MDS errors that do not result in a case-mix category change. In commenting on a draft of this report, CMS noted the development and implementation of its policy, which provided a new mechanism for facilities to correct inaccurate information in the MDS database. This new policy has significantly decreased the ability of facilities to submit certain types of inaccurate MDS data, such as entering a "5" for a particular MDS element, when the only available choices are "1-4." Under this policy, CMS has seen a reduction of approximately 66 percent in the proportion of records in the database containing invalid data values.

<sup>35</sup>Indiana imposes financial penalties if more than 35 percent of a facility's MDS assessments have errors. State officials told us that very few facilities—roughly 3 to 4 each quarter—have errors that are significant enough to trigger financial penalties.

<sup>36</sup>In Maine, only a subset of these case-mix category changes is used to calculate an error rate.

defines errors as a subset of MDS elements that are not supported by the medical record.<sup>37</sup>

**Table 2: MDS Assessments with Errors in Five States with On-Site MDS Review Programs (in percent)**

State	Initial MDS error rate	Subsequent MDS error rate	Time of initial and subsequent error rate
Indiana	75	30	1999, 2000
Iowa	32	22	July, December 2000
Maine <sup>a</sup>	21	10	1995, 2000
Pennsylvania	20	15	2000, 2001
South Dakota	85	10	1993, 1998

<sup>a</sup>Errors that result in changes for a subset of case-mix categories were used to calculate these error rates.

Source: Data provided by Indiana, Iowa, Maine, Pennsylvania, and South Dakota.

## CMS' MDS Review Program Could Better Leverage Existing State and Federal Accuracy Activities

Following implementation of Medicare's MDS-based payment system in 1998, HCFA began building the foundation for its own separate review program—distinct from state efforts—to help ensure the accuracy of MDS data. In the course of developing and testing accuracy review approaches, its contractor found widespread MDS errors that resulted in a change in Medicare payment categories for 67 percent of the resident assessments sampled. In September 2001, CMS awarded a new contract to implement a nationwide MDS review program over a 2- to 3-year period.<sup>38</sup> Despite the benefits of on-site reviews, as demonstrated by states with separate review programs, the current plan involves conducting on-site reviews in fewer than 200 of the nation's 17,000 nursing homes each year. In addition, the contractor's combined on-site and off-site reviews to evaluate MDS accuracy will involve only about 1 percent of the approximately 14.7 million MDS assessments expected to be prepared in 2001. In contrast, states that conduct separate on-site MDS reviews typically visit all or a

<sup>37</sup>Pennsylvania reviews only those MDS elements that have a positive response. For example, if a facility responded "no" or left an MDS element blank, that item would not be reviewed for accuracy, even if it could affect the case-mix category for that particular resident.

<sup>38</sup>CMS refers to the contractor responsible for this program as the data assessment and verification (DAVE) contractor.

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significant portion of their nursing homes and generally examine from 10 to 40 percent of assessments. While CMS' approach may yield some broad sense of the accuracy of MDS assessments on an aggregate level, it may be insufficient to help ensure the accuracy of MDS assessments in most of the nation's nursing homes. At present, it does not appear that CMS plans to leverage the considerable resources already devoted to state nursing home surveys and states' separate MDS review programs that together entail a routine on-site presence in all nursing homes nationwide. Nor does it plan to more systematically evaluate the performance of state survey agencies regarding MDS accuracy through its own federal comparative surveys. Finally, CMS is not requiring nursing homes to provide documentation for the full MDS assessment, which could undermine the efficacy of its MDS reviews.

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### Testing of MDS Accuracy Approaches Identified Widespread Accuracy Problems

In September 1998, HCFA contracted with Abt Associates to develop and test various on-site and off-site approaches for verifying and improving the accuracy of MDS data. Two of the approaches resembled state on-site MDS reviews and the off-site documentation reviews performed by CMS contractors that review Medicare claims.<sup>39</sup> Another approach used off-site data analysis to target facilities for on-site review.<sup>40</sup> To determine the effectiveness of the approaches tested in identifying MDS inaccuracies, Abt compared the errors found under each approach to those found in its "reference standard"—independent assessments performed by MDS-trained nurses hired by Abt for approximately 600 residents in 30 facilities

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<sup>39</sup>Similar to the separate MDS reviews conducted by the states, Abt reviewed a subset of MDS items at a sample of nursing homes that met certain criteria, e.g., they were important in determining case-mix categories or calculating quality indicators or were suspected of being underreported. Abt reviewers used information from medical records as well as interviews and observations with staff and residents to determine whether the selected items on the MDS assessments were accurate.

<sup>40</sup>One off-site approach tested relied on analyzing certain MDS "trigger" items, such as pneumonia, that are likely to be in error when found in a certain pattern on two consecutive MDS assessments for the same resident. Off-site data analysis under this approach could be used to identify facilities for on-site review that have a high proportion of residents shown as having pneumonia—one potential trigger item—across two or more MDS assessments.

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in three states.<sup>41</sup> Abt found errors in every facility, with little variation in the percentage of assessments with errors across facilities. On average, the errors found affected case-mix categories in 67 percent of the sampled Medicare assessments. Abt concluded that the errors did not result in systematic overpayments or underpayments to facilities even though there were more errors that placed residents in too high as opposed to too low a case-mix category. Abt did not determine, however, the extent to which errors affected quality indicators.

Due to the prevalence of errors, Abt recommended a review program that included periodically visiting all facilities during the program's first several years. Recognizing the expense of visiting every facility, however, Abt also recommended eventually transitioning to the use of off-site mechanisms to target facilities and specific assessments for on-site review. Abt also made recommendations to address the underlying causes of MDS errors: simplifying the MDS assessment tool, clarifying certain MDS definitions (particularly for ADLs), and improving MDS training for facilities.<sup>42</sup>

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### The Federal MDS Review Program Is Too Limited to Evaluate State-Level Accuracy Assurance Efforts

Building on the work of Abt Associates, in the summer of 2000, the agency began formulating its own distinct nationwide review program to address long-term MDS monitoring needs. The agency developed a request for proposal for MDS data assessment and verification activities and sought proposals from its 12 program safeguard contractors.<sup>43</sup> On September 28, 2001, CMS awarded a 3-year contract for approximately \$26 million to

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<sup>41</sup>The nurses conducted assessments over several days and shifts using all available documentation—medical record reviews, interviews, and observations—to replicate as closely as possible the observation period the facility used to make its assessments of those same residents. Because Abt found too few assessments meeting its original criteria—completed by the facility up to 14 days prior to the visits—it augmented its sample with assessments that were up to 35 days old.

<sup>42</sup>Similar to Abt, the HHS OIG concluded that differences found between MDS assessments and the supporting documentation indicated confusion or difficulties with the MDS assessment instrument and the need for enhanced training. The HHS OIG found differences in 76 percent of the Medicare assessments reviewed. ADLs and the number of minutes recorded for therapy, specifically occupational and physical therapy, provided the greatest source of differences.

<sup>43</sup>Program safeguard contractors were authorized by the Health Insurance Portability and Accountability Act of 1996, which allowed HCFA to contract with specialized entities to identify program integrity concerns. See 42 U.S.C. § 1395ddd. In May 1999, HCFA selected a pool of 12 contractors that can bid on proposed contracts covering these types of activities. See *Medicare: Opportunities and Challenges in Contracting for Program Safeguards* (GAO-01-616, May 18, 2001).

Computer Sciences Corporation. The contract calls for the initiation of on-site and off-site reviews by late spring 2002, but the full scope of MDS review activities will not be underway until the second year of the contract.<sup>44</sup> (See table 3.)

**Table 3: Implementation Schedule for CMS' MDS Accuracy Review Program**

Phase	Time period	Review activities
Developmental	October 2001 through May 2002	<ul style="list-style-type: none"> <li>• Test a combination of the most promising components from Abt's earlier assessment of various on-site and off-site approaches.</li> <li>• Recommend the appropriate balance between on-site and off-site reviews.</li> <li>• Identify and develop new approaches for monitoring MDS accuracy.</li> <li>• Begin to identify communication and collaboration strategies for federal and state accuracy reviews, such as coordinating with states.</li> </ul>
Initial implementation	April 2002 through September 2002	<ul style="list-style-type: none"> <li>• Begin conducting on-site and off-site accuracy reviews.</li> <li>• Continue to evaluate the efficacy of the accuracy review approaches being implemented and identify areas of risk.</li> <li>• Conduct ongoing data surveillance, such as monitoring and identifying trends in payments based on MDS data.<sup>a</sup></li> </ul>
Full implementation	October 2002 through September 2003	<ul style="list-style-type: none"> <li>• Perform ongoing data analysis and the full scope of data assessment and verification activities.<sup>b</sup></li> <li>• Implement training and education activities to ensure that those responsible for MDS data understand and accurately complete MDS assessments. This approach is expected to include a method for communicating how the contractor will continually refine and improve accuracy review processes.</li> </ul>

Note: The contract covers 1 year with two additional 1-year options. Currently, full implementation would occur in the second year of the contract. The third year of the contract may also include on-site enforcement surveys and special studies concerning the accuracy of reported Medicare and Medicaid data.

<sup>44</sup>Although the contractor will first focus on conducting MDS accuracy activities, the contractor is also required to establish a review program for the Outcome and Assessment Information Set (OASIS), the data used as the basis for home health payments and quality measures.

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<sup>a</sup>For example, one of the contractor's tasks is to analyze MDS data reported by nursing homes that serve Medicare beneficiaries to determine whether differences in case-mix categories relate to changes in the patient's health status or changes in how providers are reporting MDS data.

<sup>b</sup>For example, while continuing on-site and off-site MDS reviews, the contractor will also be required to calculate error rates for paid claims for Medicare-covered services.

Source: DAVE contract statement of work for CMS' review program for MDS accuracy.

Despite this broad approach, the contractor is not specifically tasked with assessing the adequacy of each state's MDS reviews. Instead, it is required to develop a strategy for coordinating its review activities with other state and federal oversight, such as the selection of facilities and the timing of visits, to avoid unnecessary overlap with routine nursing home surveys or states' separate MDS review programs. This approach does not appear to build on the benefits of on-site visits that are already occurring as part of state review activities. Rather, the contract specifies independent federal on-site and off-site reviews of roughly 1 percent of the approximately 14.7 million MDS assessments expected to be prepared in 2001—80,000 during the first contract year and 130,000 per year thereafter.<sup>45</sup> The contractor, however, tentatively recommended that the majority of reviews, about 90 percent, be conducted off-site. According to CMS, these off-site reviews could include a range of activities, such as the off-site targeting approaches developed by Abt or medical record reviews similar to those conducted by CMS contractors for purposes of reviewing Medicare claims. In addition, the contractor is expected to conduct a range of off-site data analyses that could include a large number of MDS assessments. The remaining 10 percent of MDS assessments—representing fewer than 200 of the nation's 17,000 nursing homes—would be reviewed on-site each year. This limited on-site presence is inconsistent with Abt's earlier recommendation regarding the benefits of on-site reviews in detecting accuracy problems, and with the view of almost all of the states with separate MDS review programs that an on-site presence at a significant number of their nursing homes is central to their review efforts.

While CMS' approach may yield some broad sense of the accuracy of MDS assessments on an aggregate level, it appears to be insufficient to provide confidence about the accuracy of MDS assessments in the vast bulk of nursing homes nationwide. Given the substantial resources invested in on-site nursing home visits associated with standard surveys or states'

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<sup>45</sup>The reviews would encompass assessments from all payer sources. According to CMS, the number of assessments to be reviewed is a target that is subject to change.

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separate MDS review programs, CMS' MDS review program could view states' routine presence as the cornerstone of its program and instead focus its efforts on ensuring the adequacy of state reviews. CMS could build on its established federal monitoring survey process for nursing home oversight. The agency is required by statute to annually resurvey at least 5 percent of all nursing homes that participate in Medicare and Medicaid. One of the ways CMS accomplishes this requirement is by conducting nursing home comparative surveys to independently assess the states' performance in their nursing home survey process. During a comparative survey, a federal team independently surveys a nursing home recently inspected by a state in order to compare and contrast the results. These federal comparative surveys have been found to be most effective when completed in close proximity to the state survey and involve the same sample of nursing home residents to the maximum extent possible. Abt also attempted to review recently completed MDS assessments.

Finally, a potential issue that could undermine the efficacy of the federal MDS accuracy reviews involves the level of documentation required to support an MDS assessment. CMS requires specific documentation for some MDS elements, but officials said that the MDS itself—which can simply consist of checking off boxes or selecting multiple choice answers on the assessment form—generally constitutes support for the assessment without any additional documentation. CMS officials consider the MDS assessment form to have equal weight with the other components of the medical record, such as physician notes and documentation of services provided. As a result, CMS asserts that the assessment must be consistent with, but need not duplicate, the medical record. In contrast, most of the nine states with separate on-site review programs require that support for each MDS element that they review be independently documented in the medical record. State officials told us that certain MDS elements, such as ADLs, are important to thoroughly document because they require observation of many activities by different nursing home staff over several days. As a result, some of these states require the use of separate flow charts or tables to better document ADLs. Similarly, some states require documentation for short-term memory loss rather than accepting a nursing home's assertion that a resident has this condition. CMS' training manual describes several appropriate tests for identifying memory loss, such as having a resident describe a recent event. In one of its December 2000 reports, the HHS OIG recommended that nursing homes be required to establish an "audit trail" to support certain MDS elements. HCFA disagreed, noting that it does not expect all information in the MDS to be duplicated elsewhere in the medical record. However, given the uses of MDS data, especially in adjusting nursing home payments and producing

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quality indicators, documenting the basis for the MDS assessments in the medical record is critical to assessing their accuracy.

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## Conclusions

In complying with federal nursing home participation and quality requirements, about 17,000 nursing homes were expected to produce almost 15 million MDS assessments during 2001 on behalf of their residents. This substantial investment of nursing home staff time contributes to multiple functions, including establishing patient care plans, assisting with quality oversight, and setting nursing home payments that account for variation in resident care needs. While some states, particularly those with MDS-based Medicaid payment systems, stated that ensuring MDS accuracy requires establishing a separate MDS review program, many others rely on standard nursing home surveys to assess the data's accuracy. Flexibility in designing accuracy review programs that fit specific state needs, however, should not preclude achieving the important goal of ensuring accountability across state programs. It is CMS' responsibility to consistently ensure that states are fulfilling statutory requirements to accurately assess and provide for the care needs of nursing home residents.

The level of federal financial support for state MDS accuracy activities is already substantial. The federal government pays up to 75 percent of the cost of separate state MDS review activities and in fiscal year 2001 contributed \$278 million toward the cost of the state nursing home survey process, which is intended in part to review MDS accuracy. Instead of establishing a distinct but limited federal review program, reorienting the thrust of its review program in order to complement ongoing state MDS accuracy efforts could prove to be a more efficient and effective means to achieve CMS' stated goals. Such a shift in focus should include (1) taking full advantage of the periodic on-site visits already conducted at every nursing home nationwide through the routine state survey process, (2) ensuring that the federal MDS review process is designed and sufficient to consistently assess the performance of all states' reviews for MDS accuracy, and (3) providing additional guidance, training, and other technical guidance to states as needed to facilitate their efforts. With its established federal monitoring system for nursing home surveys—especially the comparative survey process—that helps assess state performance in conducting the nursing home survey process, CMS has a ready mechanism in place that it can use to systematically assess state performance for this important task. Finally, to help improve the effectiveness of MDS review activities, CMS should take steps to ensure that each MDS assessment is adequately supported in the medical record.



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## Recommendations for Executive Action

With the goal of complementing and leveraging the considerable federal and state resources already devoted to nursing home surveys and to separate MDS accuracy review programs, we recommend that the administrator of CMS

- review the adequacy of current state efforts to ensure the accuracy of MDS data, and provide, where necessary, additional guidance, training, and technical assistance;
- monitor the adequacy of state MDS accuracy activities on an ongoing basis, such as through the use of the established federal comparative survey process; and
- provide guidance to state agencies and nursing homes that sufficient evidentiary documentation to support the full MDS assessment be included in residents' medical records.

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## Agency and State Comments and Our Evaluation

We provided a draft of this report to CMS and the 10 states with separate MDS accuracy programs for their review and comment. (See app. II for CMS' comments.) CMS agreed with the importance of assessing and monitoring the adequacy of state MDS accuracy efforts. CMS also recognized that the MDS affects reimbursement and care planning and that it is essential that the assessment data reflect the resident's health status so that the resident may receive the appropriate quality care and that providers are appropriately reimbursed. However, CMS' comments did not indicate that it planned to implement our recommendations and reorient its MDS review program.<sup>46</sup> Rather, CMS' comments suggested that its current efforts provide adequate oversight of state activities and complement state efforts.

While CMS stated that it currently evaluates, assesses, and monitors the accuracy of the MDS through the nursing home survey process, it also acknowledged the wide variation in the adequacy of current state accuracy review efforts. Our work in the 10 states with separate MDS review programs raised serious questions about the thoroughness and adequacy of the nursing home survey process for reviewing MDS accuracy. Officials in many of these states said that the survey process itself does not detect MDS accuracy issues as effectively as separate MDS review programs. Surveyors, we were told, do not have time to thoroughly

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<sup>46</sup>CMS refers to the contractor responsible for this program as the DAVE contractor.

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review MDS accuracy and their focus is on quality of care and resident outcomes, not accuracy of MDS data.

In response to our recommendations on assessing and monitoring the adequacy of each state's MDS reviews, CMS commented that it would consider adding a new standard to the state performance expectations that the agency initiated in October 2000. CMS indicated that the state agency performance review program would result in a more comprehensive assessment of state activities related to MDS accuracy than could be obtained through the comparative survey process. CMS also outlined planned analytic activities—such as a review of existing state and private sector MDS review methodologies and instruments, ongoing communications with states to share the knowledge gained, and comprehensive analyses of MDS data to identify systemic accuracy problems within states as well as across states—that it believes will help to evaluate state performance.

We agree that some of CMS' proposed analytic activities could provide useful feedback to states on problem areas at the provider, state, region, and national levels. Similarly, the addition of MDS accuracy activities to its state performance standards for nursing home surveys, which CMS is considering, has merit. While CMS plans to consider adding a new standard to its state agency performance review program, the agency has a mechanism in place—the comparative survey process—that it could readily use to systematically assess state performance. However, CMS apparently does not intend to do so. Based on our discussions with agency officials, it does not appear that CMS' approach will yield a consistent evaluation of each state's performance. We continue to believe that assessment and routine monitoring of each state's efforts should be the cornerstone of CMS' review program. As we previously noted, the agency's proposed on-site and off-site reviews of MDS assessments are too limited to systematically assess MDS accuracy in each state and would consume resources that could be devoted to complementing and overseeing ongoing state activities. A comprehensive review of the adequacy of state MDS accuracy activities, particularly in those states without a separate review program, is essential to establish a baseline and to allow CMS to more efficiently target additional guidance, training, or technical assistance that it acknowledged is necessary.

CMS did not agree with our recommendation that it should provide guidance to states regarding adequate documentation in the medical record for each MDS assessment. CMS stated that requiring documentation of all MDS items places an unnecessary burden on

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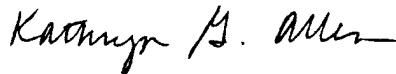
facilities. Skilled reviewers, it stated, should be able to assess the accuracy of completed MDS assessments through a combination of medical record review, observation, and interviews. CMS further stated that requiring duplicative documentation might result in documentation that is manufactured and of questionable accuracy. Of course, the potential for manufactured data could also be an issue with the MDS, when supporting documentation is absent or limited. Without adequate documentation, it is unclear whether the nursing home staff sufficiently observed the resident to determine his or her care needs or merely checked off a box on the assessment form. We continue to believe, as do most of the states with separate MDS review programs, that requiring documentation for the full MDS assessment is necessary to ensure the accuracy of MDS data. In our view, however, this documentation need not be duplicative of that which is already in the medical record but rather demonstrative of the basis for the higher-level summary judgments about a resident's condition. Some states have already developed tools to accomplish this and in commenting on a draft of this report, two states said that CMS should establish documentation requirements for responses on the MDS. In addition, the discrepancies cited by the HHS OIG in its studies stemmed from inconsistencies between MDS assessments and documentation in residents' medical records. The OIG acknowledged that the results of its analyses were limited by the information available in the medical record—for example, when a facility MDS assessment was based on resident observation, the facility may not have documented these observations in the medical record. The importance of adequate documentation is further reinforced by the fact that using interviews and observation to validate MDS assessments may often not be possible, particularly for residents who have been discharged from the nursing home before an MDS accuracy review. Given the importance of MDS data in adjusting nursing home payments and guiding resident care, documenting the basis for the MDS assessment—in a way that can be independently validated—is critical to achieving its intended purposes.

CMS provided additional clarifying information that we incorporated as appropriate. In addition, the states that commented on the draft report generally concurred with our findings and provided technical comments that we incorporated as appropriate.

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As agreed with your offices, unless you publicly announce the contents of this report earlier, we will not distribute it until 30 days after its date. At that time, we will send copies to the administrator of CMS; appropriate congressional committees; and other interested parties. We will also make copies available to others upon request.

If you or your staff have any questions, please call me at (202) 512-7114 or Walter Ochinko at (202) 512-7157. Major contributors to this report include Carol Carter, Laura Sutton Elsberg, Leslie Gordon, and Sandra Gove.



Kathryn G. Allen  
Director, Health Care—Medicaid  
and Private Insurance Issues

# Appendix I: Summary of State On-Site MDS Reviews As of January 2001

State <sup>a</sup>	Number of nursing homes <sup>b</sup>	Year state began: • MDS-based payment system • MDS reviews	Review combined with nursing home surveys?	Survey findings used in planning MDS reviews?	Reviews done on-site, off-site, or both?	Frequency of on-site reviews (all facilities unless otherwise noted) <sup>c</sup>	Number of MDS assessments reviewed at each facility	Average time lapse between facility MDS and state review
IA	465	2000 (payment) 2000 (reviews)	No	No	Both	Annually	At least 25 percent with a minimum of 5 residents	90 days
IN	562	1998 (payment) 1998 (reviews)	No	No	On-site only	At least every 15 months	40 percent—or no less than 25 residents	State reviews most recent MDS assessment
ME	126	1993 (payment) 1994 (reviews)	No	No <sup>d</sup>	Both	Quarterly	Minimum of 10 assessments per facility	76 days
MS	191	1988 (payment) 1992 (reviews)	No	No	On-site only	Annually	At least 20 percent of residents in facility	45 days
OH	1,009	1993 (payment) 1994 (reviews)	No	Not usually <sup>e</sup>	Both	Annually <sup>f</sup>	Ranging from all to 50 residents, based on facility size	State reviews most recent MDS assessment for the reporting quarter

**Appendix I: Summary of State On-Site MDS  
Reviews As of January 2001**

<b>Reported importance of interviews/ observations versus medical record review<sup>d</sup></b>	<b>State definition of "error"</b>	<b>Facility error rate calculated</b>	<b>Examples of remedies and efforts to recoup Medicaid payments<sup>e</sup></b>	<b>Accuracy and other trends</b>	<b>Other features of on-site reviews</b>
Interviews and observations are less important than medical record review	MDS element not supported by record, observation, or interview	Yes	Make referrals to state survey agency; conduct additional reviews; provide on-site education	During the first 2 quarters of reviews, error rate decreased from 32 percent to 22 percent	State provides voluntary training sessions on completing and submitting MDS assessments. State officials noted that provider education is a strong focus of their MDS review program.
Interviews and observations are equally important as medical record review	Assessment caused resident to be placed in the wrong case-mix category <sup>f</sup>	Yes	Impose financial penalties by reducing the administrative component of a facility's Medicaid payment; facility must submit plan and is subject to revisit; recalculate case-mix category and Medicaid rates	State officials link decreases in MDS error rates to the presence of on-site reviewers and the education of providers	State publishes annual guidelines for providers on documentation needed to support MDS data
Interviews and observations are equally important as medical record review	MDS element not supported by record, observation, or interview <sup>h</sup>	Yes <sup>h</sup>	Conduct more frequent reviews; impose financial penalties; <sup>h</sup> request MDS reassessment from facility	While problems continue in some MDS elements, others show improvement, such as ADLs	Reviewers bring portable computers to facilities and, using state-designed software, review MDS data
Interviews and observations are equally important as medical record review	Assessment caused resident to be placed in the wrong case-mix category	No	Revisit facilities where problems have been identified; recalculate case-mix category and Medicaid rates	Facilities with poor MDS reviews tend to receive many survey deficiencies	State published guidelines for providers on documentation needed to support MDS data
Interviews and observations are less important than medical record review	Assessment caused resident to be placed in the wrong case-mix category	Yes	Revisit facilities where problems have been identified; recalculate case-mix category and Medicaid rates	When recalculating the case-mix, the adjusted payments decreased about 99 percent of the time	State has done the following to address MDS errors: training; Web site; MDS newsletter; and providing results of MDS reviews

**Appendix I: Summary of State On-Site MDS  
Reviews As of January 2001**

<b>State<sup>a</sup></b>	<b>Number of nursing homes<sup>b</sup></b>	<b>Year state began: • MDS-based payment system • MDS reviews</b>	<b>Review combined with nursing home surveys?</b>	<b>Survey findings used in planning MDS reviews?</b>	<b>Reviews done on-site, off-site, or both?</b>	<b>Frequency of on-site reviews (all facilities unless otherwise noted)<sup>c</sup></b>	<b>Number of MDS assessments reviewed at each facility</b>	<b>Average time lapse between facility MDS and state review</b>
<b>PA</b>	774	1996 (payment) 1994 (reviews)	No	No	On-site only	Annually	15 randomly selected residents from assessments actually used in the rate-setting process	6-12 months
<b>SD</b>	113	1993 (payment) 1993 (reviews)	No	Not usually <sup>d</sup>	On-site only	Every 15 months	At least 25 percent of residents in facility	14-30 days
<b>VT</b>	43	1992 (payment) 1992 (reviews)	No, but same staff conduct reviews and surveys	Not usually <sup>d</sup>	On-site only	At least annually	10 percent pre-determined and/or random sample of all residents in all units	MDS never older than 90 days
<b>WA</b>	271	1998 (payment) 1998 (reviews)	No, but staff participate in surveys about 6 times per year	Yes	Both	Annually (Staff also conduct quarterly quality review audits)	Approximately 20 percent, depending on facility size	45-60 days

**Appendix I: Summary of State On-Site MDS  
Reviews As of January 2001**

<b>Reported Importance of interviews/ observations versus medical record review<sup>d</sup></b>	<b>State definition of error</b>	<b>Facility error rate calculated</b>	<b>Examples of remedies and efforts to recoup Medicaid payments<sup>e</sup></b>	<b>Accuracy and other trends</b>	<b>Other features of on-site reviews</b>
Interviews and observations are less important than medical record review	Positive MDS element not supported by record <sup>a</sup>	Yes	Conduct more frequent reviews; provide training within 1 month; require corrective action plan	State officials expect that their new MDS review process will ultimately lead to a decrease in error rates	By restructuring the MDS review process, facilities are reviewed more frequently, issues are identified more quickly and training is provided almost immediately to nursing facility staff
Interviews and observations are equally important as medical record review	Assessment caused resident to be placed in the wrong case-mix category	Yes	Revisit facilities where problems have been identified; recalculate case-mix category and Medicaid rates	Since the state has been reviewing MDS data, the error rate has decreased from about 85 percent to 10 percent	On-site reviews also include independent assessments and inter-rater reliability checks
Interviews and observations are equally important as medical record review	MDS element not supported by record, observation, or interview (effective 10/1/01)	Yes (effective 10/1/01)	Impose financial penalties (none imposed to date); revisit facilities where problems have been identified; recalculate case-mix category and Medicaid rates	State officials told us that Vermont facilities do not have serious MDS accuracy issues	Vermont tried to combine MDS reviews with nursing home surveys, but found that it detracted from the survey process
Interviews and observations are equally important as medical record review	Assessment caused resident to be placed in the wrong case-mix category	Yes	Impose financial penalties (none imposed to date); revisit facilities where problems have been identified; recalculate case-mix category and Medicaid rates	The types of MDS errors that commonly reoccur relate to misapplication of MDS definitions, and may in large part be due to facility staff turnover. In commenting on a draft of this report, officials told us that these errors are consistent with those found in other states with MDS-based payment systems.	State plans to publish the results of MDS accuracy reviews on a Web page to prevent simple but recurring errors

<sup>a</sup>Virginia is not included because of the newness of its MDS review program (began operating in April 2001). We have included the nine other states with longer standing on-site review programs.

<sup>b</sup>Source: CMS Nursing Home Compare Web site, <http://www.medicare.gov/nhcompare/Search>, printed 6/8/01.

<sup>c</sup>This column reflects the frequency of initial reviews for each facility. Some states conduct follow-up reviews more frequently for facilities where problems have been identified.



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**Appendix I: Summary of State On-Site MDS  
Reviews As of January 2001**

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<sup>a</sup>We asked states to select from the following categories: more important, equally important, and less important.

<sup>b</sup>In addition, all nine states reported that they refer cases of suspected fraud to their state's Medicaid Fraud Control Unit.

<sup>c</sup>Indiana officials added the following language to characterize MDS errors: An error occurs when the audit findings are different from the facility's transmitted MDS data and those differences result in a different case-mix category.

<sup>d</sup>Survey findings may be used to plan MDS reviews, although this has not occurred yet.

<sup>e</sup>Financial penalties and facility error rates, however, are only based on errors that result in changes for a subset of case-mix categories.

<sup>f</sup>Survey findings are occasionally used in planning MDS reviews.

<sup>g</sup>Staff use risk analysis to select approximately 200 facilities per year for on-site reviews.

<sup>h</sup>Pennsylvania reviews only those MDS elements that have a positive response. For example, if a facility responded "no" or left an MDS element blank, that item would not be reviewed for accuracy, even if it could affect the case-mix category for that particular resident.

# Appendix II: Comments from the Centers for Medicare and Medicaid Services



DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

Administrator  
Washington, DC 20201

**DATE:** JAN 30 2002

**TO:** Kathryn G. Allen  
Associate Director  
Health Care—Medicaid and Private  
Insurance Issues

**FROM:** Thomas A. Scully *Tam Scully*  
Administrator

**SUBJECT:** General Accounting Office Draft Report, *Nursing Homes: Federal Efforts to Monitor Resident Assessment Data Should Complement State Activities* (GAO-02-279)

Thank you for the opportunity to review and comment on the above-referenced report regarding Federal and state efforts to monitor resident assessment data and to ensure the accuracy of the minimum data set (MDS). The Centers for Medicare & Medicaid Services (CMS) recognizes the coding of items on the MDS impacts reimbursement and care planning. It is essential that the assessment data reflect the resident's health status, so that the resident may receive the appropriate quality care and that providers are reimbursed appropriately.

When automation requirements were implemented in 1998, CMS devoted significant resources to the development of an accuracy improvement program. We instructed a contractor to develop MDS accuracy review protocols. Then we funded a program safeguard contractor, known as the Data Assessment and Verification (DAVE) contractor, to audit and verify MDS data.

The CMS also developed and implemented a major MDS system enhancement that provided new mechanisms to correct inaccurate information residing in the MDS database. Accuracy was significantly improved with the addition of this system (e.g., approximately 66 percent reduction in the proportion of records in the database containing invalid data values).

We currently evaluate, assess, and monitor the accuracy of the MDS through the nursing home survey process. According to Task 5C of Appendix P Survey Procedures for Long-Term Care, "after observing and talking with the resident, the surveyor conducts a comprehensive review which includes the following: a check of specific items on the MDS for accurate coding for the resident's condition. The specific items to be checked will be based on the Quality Indicators (QIs) identified for the resident on the Resident Level Summary.

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**Appendix II: Comments from the Centers for  
Medicare and Medicaid Services**

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At least 2 of the QIs identified for the resident must be matched against the QI definitions and against evidence other than the MDS to verify that the resident's condition is accurately recorded in the MDS. Keep in mind that you are verifying that the resident's condition was accurately assessed at the time the MDS was completed."

We appreciate the effort that went into this report and the opportunity to review and comment on the issues it raises. Our comments on the GAO recommendations follow.

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GAO Recommendation

With the goal of complementing and leveraging the considerable Federal, State, and nursing home resources already devoted to nursing home surveys and to separate MDS accuracy review programs, we recommend that the Administrator of CMS:

- Review the adequacy of current state efforts to ensure the accuracy of MDS data, and provide, where necessary, additional guidance, training or technical assistance.

CMS Response

We agree that assessing the adequacy of state efforts to ensure the accuracy of MDS data is an important oversight function. Development of analytic tools to monitor and compare State activities is included in the DAVE scope of work. The CMS considered alternatives to MDS and Outcome and Assessment Information Set (OASIS) accuracy verification before deciding on the more centralized focus of the DAVE contract. The CMS thinks that this national approach to accuracy is better positioned to impact accuracy across all states, recognizing that current state efforts varies widely in adequacy and reflects different special interests within states.

The DAVE contract includes many tasks that will evaluate state performance related to MDS accuracy and the provision of training and technical assistance. During the early phases of the DAVE contract, the contractor will review existing data dependent tools and instruments (e.g., state agency and private sector entities) used to monitor MDS data accuracy. This assessment will include how methodologies used in existing systems can be blended into their review efforts. Further, CMS and the DAVE contractor will have ongoing communications with the state agency communities to discuss activities necessary to support data assessment and verification efforts and to share the knowledge gained.

The DAVE reports can be developed to identify systemic accuracy problems within states (i.e., facilities with consistently high numbers of residents classifying into clinically complex solely due to the number of physician orders, high numbers of patients receiving ultra high therapy, etc), as well as across states. Establishing national baseline thresholds for MDS and OASIS data and applicable associated claims will furnish the national, state, and provider level evidence we need to address areas of concern for CMS: program integrity; beneficiary health and safety; and quality improvement. While some states and fiscal intermediaries (FIs) are already doing a limited level of this analysis, they lack the data and staff resources to do an ongoing comprehensive analysis. The DAVE contractor can give the state agencies and FIs analytic files. The states and FIs can provide feedback on major problem areas at provider, state, region, and national levels. The DAVE on-site reviews can then complement the state efforts.

The CMS understands the need for continual state and provider MDS training to improve the accuracy of MDS assessments. The CMS funded an accuracy protocol

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development contract. In August 1999, we analyzed the findings of this contract and published two sets of questions and answers, released in March 2001 and July 2001 on CMS's Web site. The questions and answers address the areas of concern identified in "Figure 1" of the GAO report. (Note the reference standard data are from facilities located in states with existing auditing systems, (Pennsylvania, Washington, Ohio). This information was also used as the basis for the development of a special MDS 2.0 training session for state MDS coordinators that was provided during the July 2001 MDS conference. The same information will be used to guide future revisions of the MDS instrument.

**GAO Recommendation**

- **Monitor the adequacy of state MDS accuracy activities on an ongoing basis, such as through the use of the established federal comparative survey process.**

**CMS Response**

We agree that state agency training and oversight functions are crucial to ensuring accuracy of MDS data. We believe that, under the DAVE contract, we will be able to significantly upgrade our capabilities to monitor state agency activity. The DAVE scope of work includes reports that CMS can use to evaluate MDS accuracy on state, regional, and national levels. These reports will provide CMS with the baseline data needed to analyze provider data by state and region. Once baselines are established, we can use statistical analysis to highlight aberrant coding patterns that impact quality and reimbursement. We plan to communicate this information to state agencies so they can better focus their training efforts. At the same time, we will be able to use the DAVE reports to review the effectiveness of state training and oversight activities.

The CMS monitors state survey agencies' performance in several areas to ensure that standards are met and to identify any necessary corrective action. Each year we identify the performance areas to be included in the evaluation. Since CMS funds states in order to provide training and technical assistance to nursing homes, we will consider this area for inclusion in future state survey agency performance review protocols. We are confident that the state agency performance review program will result in a more comprehensive assessment of state activities related to MDS accuracy (through training and technical assistance) than could be obtained through the comparative survey process.

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**GAO Recommendation**

- **Provide guidance to state agencies and nursing homes that sufficient evidentiary documentation to support the full MDS assessment be included in residents' medical records.**

**CMS Response**

We do not agree that duplicative documentation of MDS items is necessary or desirable. The MDS, as a clinical assessment, is an integral part of the resident's record. The CMS's position is that additional documentation for all MDS items creates unnecessary burden for facilities. There are however, by exception, just a few MDS items for which a second source of documentation is required.

The MDS, in conjunction with other clinical documentation, provides a full view of the beneficiary's clinical course in a given time period. Validation of MDS responses generally requires a review of information from medical records and other sources. In evaluating assessments, the reviewer must be able to exercise clinical judgment in determining the plausibility of MDS responses in light of other information in the resident's medical record. If we were to require duplicative documentation to support comparative reviews, that documentation may be manufactured for the sole purpose of satisfying a comparative audit, and may be of questionable accuracy. Skilled reviewers/auditors are able to assess the accuracy of completed MDS through a combination of reviews, the comprehensive record, observations, and interviews.

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