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The boldfaced material in this written statement highlights the main points of this testimony. Supporting information for the bolded points is found in the text and in Supplement A (starting on page 12), which contains comments from a number of individuals who are experienced with OASIS.

**EVIDENCE ON THE VALUE OF OASIS
TO EFFICIENTLY RAISE HOME CARE TO A NEW LEVEL
OF QUALITY AND PATIENT WELL-BEING**

During the past several months, the mandated use of the Outcome and ASsessment Information Set (OASIS) for home care has been criticized on the grounds that it will raise cost and, of more concern, reduce the quality of care and negatively affect the health of home care patients. It has been argued that OASIS is an unneeded, ponderous data set which because of its size (89 health-related items and selected additional items needed as identifiers), will increase time to assess patients with no positive return. Some have argued that only those OASIS items required for prospective payment should be required for Medicare patients and that there is no compelling reason to collect data for non-Medicare patients. Selected data items dealing with mental health and emotional status of individuals have been singled out as needlessly invasive of patient privacy, and it has been argued that these items should not appear in the OASIS data set or be transmitted to a central source.

The purpose of this testimony is to address these criticisms by discussing the evolution of OASIS, its value and effectiveness in improving quality of care, the efficiencies and improved patient outcomes it brings to home care, and its considerable promise for solving both short- and long-run problems in the home care field. In doing so, it will be clear not only that the aforementioned allegations and concerns are unfounded, but in most instances they are diametrically opposite the true attributes and circumstances that characterize OASIS. Except as indicated otherwise, all evidence, conclusions, and principles discussed in this testimony derive from the two-decade home health research and analysis program of the Center for Health Services and Policy Research at the University of Colorado Health Sciences Center. This program has entailed a multidisciplinary group of 50-60 faculty and staff, as well as many outside clinicians and researchers, devoted to conducting over 16 multi-year national research studies and demonstration projects in home care, the majority of which have involved different versions of OASIS and its various applications during the past 15 years. The funders of this program have been HCFA, the Robert Wood Johnson Foundation, the State of New York, and to a lesser extent, other foundations and state and federal governmental agencies.

**OASIS: ITS SCIENTIFIC ORIGIN, PURPOSE, AND
IMPACTS ON PATIENT OUTCOMES**

Overview

The purpose of OASIS rests with the primary reason why (home) health care is provided. Stripping away issues such as regulation, payment, cost, utilization, and staffing, we provide health care to benefit people. Since outcomes are basically changes in health status between two time points (such as start of care and discharge from care), the fundamental purpose of health care is to positively influence patient outcomes. OASIS was carefully designed for the purpose of, and has a scientific history in, (cost-effectively) enhancing patient outcomes.

OASIS was developed to measure and evaluate patient outcomes of home care. All elements of OASIS were derived by first specifying a set of patient outcomes considered critical by home care experts (e.g., nurses, physicians, therapists, social workers, administrators) for purposes of evaluating the effectiveness of care. These outcomes were chosen from the most important domains of health status addressed by home care providers. **All data items in OASIS were developed, tested in hundreds of agencies, and refined for purposes of measuring outcomes in order to evaluate and enhance the effectiveness of home care. This has been and remains the fundamental purpose of OASIS: to enhance health outcomes on behalf of home care patients.**

The general categories of data and health status items in OASIS include demographics and patient history, living arrangements, supportive assistance, sensory status, integumentary (skin) status, respiratory status, elimination status, neuro/emotional/behavioral status, activities of daily living, medications, equipment management, and information collected at inpatient facility admission or agency discharge. Each of these general categories of data items was deemed necessary to properly measure and evaluate those patient outcomes judged to be most pivotal in examining the effectiveness of home care. To properly measure outcomes as change in patient health status over time, most OASIS data items are collected at start of care and every two months thereafter until and including time of discharge.

Not only were several multidisciplinary clinical panels convened to substantively review and revise sets of the most important outcome measures for home care, but OASIS data items and measurement methods were also reviewed by multidisciplinary panels of research methodologists, clinicians, home care managers, and policy analysts. As OASIS data items were employed in research projects and subsequently in demonstration projects, reliability and validity testing was undertaken with a view toward enhancing the accuracy and utility of the data items.

OASIS is the only major data set ever developed for a large component of our health care delivery system that has been focused first and foremost on measuring and improving outcomes on behalf of patients. This is the primary principle that has guided the evolution of OASIS over its 15-year history.

A set of seven additional operating principles was established to guide the development of the OASIS data set and its several applications. These principles evolved iteratively during the early stages of the OASIS developmental period, and thereafter "settled in" and became well established as basic tenets of the OASIS developmental process and its various applications. These seven guiding principles (secondary to the above guiding principle of outcome enhancement) are:

Develop a concise, uniform data set tailored to the unique features of home care. This data set should be an integral part of the comprehensive assessments providers conduct in their daily operations.

Employ scientific methods and standards.

Construct and revise a conceptually sound applications framework, later termed Outcome- (or OASIS-) Based Quality Improvement.

Develop a system of outcomes, OASIS data items, and reports that is useful and understandable for clinicians, managers, and home care agencies in general.

Design a system that fosters self-improvement, evolution, and provider ownership.

Limit the burden imposed on providers, while maximizing utility and practicality.

Anticipate that the OASIS data system will be used for multiple applications (such as informing consumers, agency marketing, monitoring and remedying fraud and abuse, facilitating voluntary accreditation, case mix adjustment for payment, increasing efficiency and effectiveness of survey and certification, detecting discrimination and access barriers to home care, determining impacts of payment policies, and monitoring the needs of recipients of home care -- in addition to the primary objective of enhancing outcomes of home care).

These principles were used in guiding research and operational activities that entailed empirically testing several versions of OASIS data items and outcomes in more than 400 home care agencies, with the input of more than 1200 home care providers, managers, and administrators. Input also was received from Medicare and Medicaid officials, policy analysts, consumer representatives, and representatives from other governmental and nongovernmental organizations with interests in (possible) OASIS applications. The final OASIS data items represent the minimum number and types of items required to implement an effective outcome enhancement and quality assurance system at the home health agency level and at the national level.

OASIS Demonstration Programs

After the initial 10 years of research and development, in the mid-1990s the National Outcome-(or OASIS-)Based Quality Improvement (OBQI) Demonstration program involving 54 home health agencies from 26 states was implemented to serve as a prototype for a national program. This program included small, medium, and large agencies, both rural and urban agencies, and home care agencies representing a variety of ownership types from around the country. Patterned after this national demonstration sponsored by HCFA, the New York State Department of Health implemented an OBQI demonstration to assess the utility of using OASIS-derived outcomes for agency-specific and regulatory applications. This program was eventually expanded to include 65 home care agencies (both certified and noncertified). The more than 100 agencies participating in the two demonstration programs successfully integrated into their day-to-day operations all facets of OASIS outcome data collection monitoring, data processing, and data transmission. OASIS data were collected on adult, nonmaternity patients regardless of payer. The OASIS implementation process typically required only a few months at each agency to run smoothly in day-to-day operations.

The OBQI applications framework entails two components: outcome analysis and outcome enhancement. The outcome analysis component begins with collecting, computerizing, and transmitting OASIS data to a central source (the University of Colorado in the case of the demonstrations). Several types of reports are returned to each agency. The most important of these is an outcome report that permits agency staff to analyze their patient outcomes aggregated to the agency level. These reports provide a comparison of agency performance (1) relative to a national reference or benchmark sample and (2) from one year to the next. Performance is reflected by a variety of outcomes such as improvement in ambulation/locomotion, stabilization in speech or language, improvement in status of surgical wounds, stabilization in anxiety, and acute care hospitalization.

The second component of OBQI, outcome enhancement, involves home care agency staff conducting process-of-care investigations that lead to plans of action specifying how care behavior will be changed in order to enhance specific outcomes. After the first round of outcome reports, two plans of action were developed by every demonstration agency, one for each of two target outcomes chosen for enhancement. (All agencies were asked to choose hospitalization as one of their target outcomes for purposes of evaluation.)

For the national demonstration, pooling all patients from Year 1 and then from Year 2, the Year 1 hospitalization rate was 31.4%, compared with a Year 2 hospitalization rate of 28.3%. This statistically significant, case mix-adjusted difference translates into a rate of decrease from Year 1 to Year 2 of 10%. Examining secondary data from Medicare claims revealed no trends over this period of time that would suggest a national decline in hospitalization rates for home care patients.

The total percent improvement across all national demonstration agencies in the nonhospitalization target outcomes from Year 1 to Year 2 was 7.8%. The analogous improvement for comparison outcomes (not correlated with the target outcomes) was approximately 1% (0.9%). The difference between these two rates was also case mix adjusted and statistically significant.

Findings related to OBQI impacts for the national demonstration were validated by the results from the New York State demonstration. The overall rate of decline for risk-adjusted hospitalization rates in the New York State demonstration was 9% (compared with the aforementioned 10% in the national demonstration). The percentage improvement from Year 1 to Year 2 in other target outcomes relative to comparison outcomes was approximately the same as in the national demonstration.

Conclusions: Pervasive, Positive Impact of OASIS on Patient Outcomes and Strong Endorsement from Agency Staff

The findings from these two entirely separate demonstration programs indicate a pervasive, positive impact of OASIS-based quality improvement on patient outcomes. As agency staff become more expert in conducting process-of-care investigations, developing plans of action for outcome enhancement, and implementing and monitoring care behavior change as a result of such plans, it is likely that OASIS-based quality improvement will be conducted even more efficiently and effectively at the agency level. Further, as this approach is implemented nationally and as agencies disseminate and publish their methods for enhancing outcomes, a growing body of knowledge is likely to provide a foundation for continued improvements in the effectiveness of home care in the United States.

Reactions of home care agency management and staff to OASIS and OBQI are particularly informative in that they demonstrate the value and multiplicity of uses of OASIS to home care agency staff -- as well as the strong sense of ownership of OASIS manifest in home care agencies experienced with this data set. Quotations from articles authored by demonstration agency staff as well as others close to the demonstration program experience are presented in Supplement A. (This supplement is highly informative -- even if skimmed or read selectively.)

OASIS BURDEN AND PRIVACY ISSUES

Computer Expense

In implementing and maintaining the OASIS data system at a home care agency, several changes are necessary. The vast majority of agencies, including all larger agencies, have the computer capacity to encode and transmit OASIS data. For a smaller agency the cost of purchasing a computer with the needed capacity is between \$900 and \$1200. All agencies are currently required to bill HCFA electronically, so computer capabilities already exist unless an agency contracts its billing to another organization. Most personal computers used for word processing are sufficient to encode (computerize) and transmit OASIS data with free software available from HCFA.

In implementing OASIS, some agencies have chosen to upgrade their computer systems considerably, to make sweeping changes in their comprehensive assessments, and to invest considerably in staff training

and orientation. This is certainly understandable and acceptable. On the one hand, it is a good time to be making such changes. On the other hand, it is not appropriate to attribute such investments to the implementation costs of OASIS.

Data Collection Burden

Regional train-the-trainer programs for implementing OASIS have been conducted so that state government and state home care association staff could attend sessions on how to conduct OASIS training for home care agency staff at the state level. Free or low-cost training and OASIS operations manuals on implementing and maintaining the OASIS data system are available to all agencies in the United States. These training programs and manuals instruct agency staff how to properly embed OASIS items in the agency's current assessment, replacing similar items with OASIS items. In this regard, the OASIS data set does not constitute a separate "instrument" unto itself that is "added onto" current agency assessment forms. The training manuals also include sample agency assessment forms with OASIS items integrated, that agencies are free to use.

A significant misconception about OASIS is that it is a ponderous data set that includes over 80 new items that substantially increase the time home care providers spend assessing patients. In fact, OASIS contains very few new items that are not already part of an agency's clinical record on a patient. It simply contains the same items in a more precise form that enhances the accuracy of assessment, improves care planning, and permits uniform evaluation of patient outcomes. OASIS items require more space on paper than the analogs that they replace in clinical records, but as a group, they typically require no more time for data collection. That is, once a provider is familiar with the items, it is only necessary for a particular option (e.g., level on a health status scale) to be checked, without any narrative notes regarding the patient's condition.

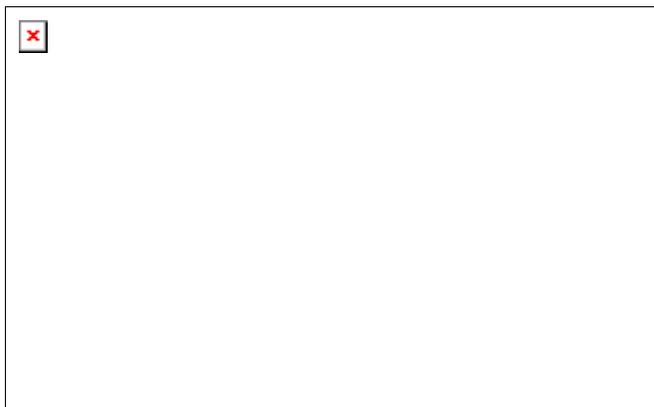
Hence, it is imperative to be aware that OASIS data elements replace, not augment, items in agencies' current clinical records. **A typical clinical record resulting from a patient assessment includes over 200 items if it is a valid comprehensive assessment. Replacing extant items with OASIS items, therefore, means that about half (or fewer) of the items in an agency's clinical record are replaced by OASIS items.** Although more paper is usually added to the agency's comprehensive assessment with OASIS, the total number of items is basically unchanged. The sample assessment form in the agency manual that incorporates OASIS and many other items needed for assessment actually requires fewer pages than the printed OASIS data set because it is formatted to take less space.

In an earlier prospective payment demonstration program, OASIS items were simply added to current agency assessments and therefore increased the time required to do an assessment. Further, selected additional agencies implementing OASIS or OASIS-like data items have not integrated these items into their assessment but added them on to the current assessment. This approach substantially increases the burden and time required to complete the assessment. These times have been invalidly cited as the added burden of OASIS for assessment.

In fact, as shown in the accompanying figure, a time study demonstrated that after agency staff had acclimated to OASIS, assessment time including OASIS items was no different from assessment time not including OASIS data. In all, the start of care visit during which OASIS data are collected required a total of 154 minutes (including both in-home and out-of-home time, where out-of-home time refers to documentation, form completion, and care coordination activities not necessary to undertake in the patient's home). This was about the same as the total time for non-OASIS assessments - 161 total minutes. There was a difference in in-home time, with OASIS requiring 8 minutes more in-home time, and 15 minutes less out-of-home time. This is because the more objective and systematic checklist format of OASIS eliminates the need for a considerable amount of narrative documentation

and thus, despite the fact that the OASIS items occupy more space on paper, they actually reduce total provider time spent in completing and documenting an assessment while at the same time rendering the assessment more precise. Total time at discharge was 67 minutes for OASIS users and 68 minutes for non-OASIS users. Because the number of OASIS items required at two-month intervals is approximately the same as those required at discharge (8 fewer items are required at two-month intervals than at discharge), the average time expended at the follow-up assessment should be similar to the discharge assessment.

OASIS TIME STUDY



In general, most agencies that have had at least one year of experience with OASIS are not surprised with the findings from the OASIS time study. In fact, one agency conducted its own time study that confirmed the above findings. **The results presented in the time study are averages, with some agencies experiencing more time and others less time than cited here.** Some agencies experienced considerably more assessment time after implementing OASIS. For the most part, this was because their original assessments required less time than was the case for the vast majority of agencies throughout the country. Various agency staff encountering this circumstance admitted that their original assessments were inadequate. Again, these results pertain to OASIS time requirements after clinical staff have had adequate orientation and experience in using OASIS items in an assessment. The learning curve for some clinical staff is considerably more accelerated than for others. Across the clinical staff in a typical agency, sufficient skill to reach the point where these results pertain is usually acquired within three months, and for the most part, sufficient skill is acquired considerably sooner.

Some Reasons for Burden Complaints and Valid Burden Concerns

Not one single agency in the aforementioned demonstration programs (in which agencies received no financial assistance to implement and maintain the OASIS data system) dropped from the program because of OASIS-related burden or costs. This also has been true with 97-98% of the agencies we are familiar with that have voluntarily implemented OASIS before the federal mandate. However, agencies that do not properly implement OASIS from the perspective of (1) integration of data items into the current assessment, (2) adequate training and orientation, (3) adequate communication with staff regarding the purposes and value of OASIS, and (4) not anticipating the natural resistance that occurs on the part of clinical staff to any change of this nature, will naturally struggle and, in many instances, complain that this is an extremely costly or difficult task to undertake.

The Medicare Conditions of Participation have long included the requirement that care provided by a home health agency follow a plan of care, which must have the following attributes:

(a) Standard: Plan of Care. The plan of care developed in consultation with the agency staff covers all pertinent diagnoses, including mental status, types of services and equipment required, frequency of visits, prognosis, rehabilitation potential, functional limitations, activities permitted, nutritional requirements, medications and treatments, any safety measures to protect against injury, instructions for timely discharge or referral, and any other appropriate items (Source: CFR 42 - 484.18, revision effective August 1991).

In order to establish a plan of care with all of the attributes listed above, a clinician must complete the equivalent of what is now referred to as a comprehensive assessment. The recent HCFA regulation clarifies this responsibility and makes it more specific and uniform by requiring that a comprehensive assessment include OASIS. The new comprehensive assessment requirement extends the comprehensive assessment time points to include two-month follow-up points and discharge as well as start of care. It is important to note that this is not an OASIS requirement, rather it is a new comprehensive assessment requirement by HCFA.

Thus, many of the criticisms regarding OASIS-related burden are unfounded. Yet there are valid start-up costs related to training, forms development and integration, and a learning process that is real. These costs should (and may currently) be adequately covered. Also, time required to computerize OASIS data, which might be in the range of 10 minutes per form using the free HCFA software, is a new cost incurred by most agencies. As noted above, although not an OASIS-driven cost, the requirement that comprehensive assessments be done at follow-up time points may increase staff time for many agencies. **Although many burden-related concerns are unfounded, clarifying whether particular start-up costs, data entry or encoding costs, and (non-OASIS) assessment costs at follow-up time points are adequately covered under the current payment approach would only be fair to home care providers.**

Privacy Considerations

With respect to the issue of privacy, current concerns center on certain portions of OASIS which seem to be personal in nature, such as mental health and emotional status items in OASIS. There is consensus among home care clinicians that such items are needed in a comprehensive home care assessment in order to properly assess the needs of patients and determine mitigating factors that could influence how service should be provided or whether certain types of outcomes can be attained. In order to properly develop a plan of care, it is important to assess the patient's mental health and emotional status. To fail to do so would be to neglect a crucial element of care planning with possible serious consequences for patient health status. As noted earlier, the current Conditions of Participation for Medicare-certified agencies in Section 484.18(a) note that "the plan of care covers all pertinent diagnoses, including mental status, ." **From a clinical perspective, the main issue is not whether these items are needed, since they certainly are, but whether the information recorded on a given patient can be kept sufficiently private or confidential so that no one else (other than those who properly need access to such information) has access to the specific information on a named individual.**

That is, the challenge is whether such information can be transmitted to a third party (e.g., HCFA) for purposes such as quality improvement and still protect the privacy of the individual patient. There are two dimensions to this challenge. The first dimension involves the safeguards necessary to ensure that individuals authorized to have access to such data fulfill their responsibilities to prevent unauthorized or inappropriate use of the information. The second dimension is a technical issue which involves the encryption of identifying information. This applies to those instances where it is necessary to have individual patient data but in a form where patient identity is concealed. It deals with encryption of patient data to maintain security within the home care agency and during the data submission process.

Procedures already exist for safeguarding patient data against unauthorized use. Further, sanctions for inappropriate use of data have been established, and these systems will continue to evolve over time. The technical issues certainly can be solved. They require carefully designing a sound approach to protecting privacy through encryption -- which also can be progressively improved over time. Addressing patient privacy need not prevent establishing a data collection system for the purposes of analyses to improve quality and refine payment methodologies.

Clearly, data on patient health status (e.g., OASIS data) and services are needed by payers to ensure that (1) services being provided are needed and (2) services are being effectively provided (in terms of their impacts on patients). Thus, payers obviously must have access to patient-level data for these purposes. In addition, if data on the health status and related information in OASIS were not available for purposes of refining outcome measurement and case mix adjustment for outcome evaluation, as well as case mix adjustment for prospective payment, it would seriously curtail the capacity to continually improve Medicare's approaches to quality enhancement and payment. **The challenge, which can be overcome, is therefore to use the best available methods for adequately protecting privacy at the present time and continually improve upon the privacy safeguards over the course of time.**

WHY COLLECT DATA ON INDIVIDUALS OTHER THAN MEDICARE AND MEDICAID PATIENTS?

As the OASIS and OBQI research program evolved, it became clear that to systematically monitor and improve patient outcomes, clinical staff of home care agencies wanted and needed outcome reports for all patients regardless of payer source. OASIS-based quality improvement and related reports were therefore designed to mesh with the "total operations" of agencies, not just part of their business (e.g., patients with specific payers). All the home care agencies with which we have worked in implementing OASIS and OASIS-based quality improvement have collected data on patients regardless of payer source. One of the primary advantages in doing so, from an agency's perspective, is that it receives outcome and related reports on its entire caseload. This permits managers to make more rational decisions in terms of resource management on behalf of their agency's patients, taking its total cost structure and total utilization picture into consideration. In addition, from a clinical perspective, agency staff are not required to use different forms for different types of patients. This uniformity helps in designing agency-wide approaches to care planning, care coordination, and the provision and monitoring of care.

In addition, the responsibility of HCFA to monitor the quality of care provided by home health agencies certified by Medicare is well established within the Social Security Act (Sec. 1861(o)(6) and Sec. 1891 (b)). Furthermore, this responsibility is not limited to patients for whom the payer is Medicare or Medicaid.

Thus, on issues related to quality of care, Medicare's purview extends to all patients under the care of an agency that seeks Medicare certification and payment. The rationale for this, in part, rests with the principle that **the Federal government, as the dominant payer in this field, takes on the responsibility to certify home health agencies that provide care to Medicare enrollees and to ensure that HCFA payment practices and other policies and procedures do not adversely impact Medicare or non-Medicare patients.** Since Medicare is by far the largest payer in the home health care field, its payment and related practices have powerful impacts on what happens to both Medicare and non-Medicare patients.

Under the current payment environment (the Interim Payment System) there is little doubt that patterns of care have changed in the vast majority of home care agencies across the country. For the most part, such patterns seem to have been characterized by reductions in total number of visits and various types

of services. What has happened to patients, both Medicare and non-Medicare patients, is relatively unknown. Are more patients being discharged without meeting their goals? Are elderly and chronic care patients receiving fewer services resulting in more complications that accelerate impairments and acute exacerbations of chronic problems? Is this more true for Medicare patients than non-Medicare patients?

Under the future payment environment (i.e., the Prospective Payment System [PPS]), very strong incentives will exist to cut back on services. Since a home care agency will be paid on the basis of an episode of care for each patient, regardless of how many visits are provided, the fiscal incentives to reduce visits will be pronounced. This can result in inferior care for Medicare patients, although we will not know whether this is the case unless we are able to measure what happens to patients, i.e., patient outcomes. Thus, on the one hand, it is likely that these incentives may result in a number of agencies providing inferior care to Medicare patients. On the other hand, agencies interested primarily in profit maximization will have the incentive to admit as many Medicare patients as possible and minimize services provided so as to maximize profit under PPS. **This can result not only in inferior outcomes for Medicare patients, but it can result in reduced access for non-Medicare patients since profits may not be as substantial for non-Medicare patients.**

Under any of these scenarios, **if OASIS data are collected on both Medicare and non-Medicare patients under PPS, it will be possible to determine which agencies have inferior outcomes for Medicare (or non-Medicare) patients and whether case mix or numbers of non-Medicare patients are changing substantially over time, reflecting decreasing access for non-Medicare patients.** Thus, **collecting data on all adult, nonmaternity patients admitted to certified home health agencies permits the Medicare program to meet its responsibilities to all patients.** In this regard, by requiring that OASIS data be available on all such patients, outcome reports can be produced for individual agencies that permit both individual home care providers and Medicare to assess impacts (on patients) of care behaviors in response to payment system changes. Thus, OASIS-derived outcome, case mix, and adverse event reports will help individual agencies in assessing the impacts of their internal changes (in response to payment) on patients. They also will help HCFA in assessing the system-wide impacts of such changes not only on Medicare patients, but also on other patients for which the government has the aforementioned responsibilities.

Without OASIS data collected on Medicare and non-Medicare patients alike, PPS may create a two-class home care delivery system for public- vs. nonpublic-pay patients, and we may not learn definitively of this system and how to fix it until it has caused many years of damage. Because home care serves a population that many describe as one of our most vulnerable (the homebound, ill elderly), this is an extremely serious concern.

POLICY CLIMATE CONDUCTIVE TO OVERLOOKING THE VALUE OF OASIS

The Interim Payment System (IPS) for Medicare-certified home health agencies was implemented under the Balanced Budget Act of 1997. As is well known, IPS has had a powerful impact on the home care industry in the United States. By most estimates, at least 1000 certified agencies have closed. The financial status of many agencies is weak, and closures are continuing. Unfortunately, it does not appear that IPS has succeeded in eliminating the "bad apples." Many good agencies appear to have gone under. It is not possible to definitively assess whether we have lost predominantly good agencies because we do not have adequate data to determine how they were performing in terms of patient outcomes. Nevertheless, most individuals familiar with home care quality, payment issues, and public policy seem to agree that IPS has taken a serious toll on home care in the United States. While some of this is warranted, it appears to have gone beyond what might be considered in the best interest of home care from a public policy perspective.

Also unfortunate is the coincidence that HCFA's announcement mandating the OASIS data system, appearing in January of this year, has been coterminous with IPS. **In view of the strong backlash and preoccupation with IPS-related issues, it has been understandable that many in the industry have reached the conclusion that OASIS is essentially a designed accompaniment of IPS.**

In addition, because HCFA has been mandated to develop a prospective payment system (PPS) for home health care in the near future, it was necessary to announce an extremely ambitious schedule for certified home health agencies to implement OASIS data collection and transmission. That is, among the many purposes to be served by OASIS is to yield case mix data that will be used in revising and finalizing a case mix-adjustment methodology for conditioning payment on case mix under PPS. This application understandably forced an unusually tight implementation time frame.

These two factors, the implementation of IPS concurrent with the announcement of the OASIS mandate and the ambitious implementation schedule for OASIS released in the January 1999 regulations, have led to far more concern about OASIS than would otherwise be the case. In fact, three versions of OASIS have been released for public review and reaction over the past four years. None was negatively received until the implementation of IPS. In addition, many agencies voluntarily implemented OASIS and OASIS-based quality improvement without any mandate from HCFA. As discussed earlier, nearly all agencies that have implemented and maintained OASIS for at least a year are staunch advocates of OASIS and OASIS-based quality improvement. Before the shift to IPS took place, the home health industry was generally supportive of OASIS and felt a sense of ownership about this data set that was developed specifically with the needs of home care agencies in mind. This support was evidenced by the statements and activities of both individual agencies and by state and national provider associations (such as the National Association for Home Care).

Currently, there seems to be a tendency to examine the OASIS data set simply as a set of items that require a given amount of space on paper and have a given number of boxes that can be checked. There is also a tendency to examine the data items and question why certain ones are being collected. **Unfortunately, in the face of IPS, there has been little effort on the part of many in the home care field to understand how and why OASIS has evolved, what this data set is going to be used for, its significant value to home care agencies and their patients, and its merits.**

OASIS is incorrectly considered part of the IPS problem. In fact, OASIS represents a significant solution to several problems, including problems caused by IPS. As noted earlier, it was developed primarily for home care providers. One of the guiding principles in its development was that OASIS and its applications as they relate to outcome enhancement must be of practical value and mesh with the day-to-day operations of home care agencies. It must yield reports and tools that agency staff can use to evaluate their own effectiveness in terms of how they are investing resources on behalf of their patients. It was required that the reports be sufficiently practical and understandable so that agencies can change and reallocate staffing and other resources both to produce better outcomes and to control or minimize costs in doing so. That this is possible has been shown clearly under the OASIS OBQI demonstration programs.

OASIS can also be used by agency staff to monitor case mix, including potential changes in case mix so that approaches to care can be altered systematically in accord with the changing needs of patients. Beyond this, and in addition to outcome reports, agencies receive adverse event reports reflecting the frequency with which a variety of untoward events (such as emergent care for wound infection or deteriorating wound status, development of a urinary tract infection, or substantial decline in management of oral medications) occur. These types of events can be monitored efficiently through OASIS, providing agencies with critical information in order to investigate why they occur for individual patients.

As has been discussed, OASIS not only results in enhanced outcomes and management decisions on how best to invest limited resources in patient care, but it also can contribute to reducing total health system costs through enhanced outcomes such as reductions in hospitalization rates for home care patients. Much of this simply has been lost due to the preoccupation with IPS and the accelerated implementation schedule. **The main point, however, is that OASIS is not part of the problem. It is a significant component of the solution. The fact that it is extremely popular with those who have implemented and used it for a reasonable period of time is a testament to its utility. The solution works.**

FINAL STATEMENT

OASIS is a data set with a considerable history in enhancing the health outcomes of home care patients. It is far from what some have called a ponderous data set. Each of its well-studied data elements are precise and, when properly inserted into an agency's comprehensive assessment, replacing like items with OASIS items, it yields a highly useful information set that has been shown to:

- Increase the accuracy of patient assessments,
- Improve care planning,
- On average, require no additional assessment time after an initial learning curve,
- Yield outcome reports permitting an agency to monitor its own performance,
- Provide the basis for improving care when patient outcomes are poor, and
- Enable agency staff to allocate resources to minimize cost and maximize patient outcomes.

This, in turn, results in an overall program of continually improving cost effectiveness that evolves and improves as agency staff become progressively more familiar with OASIS applications.

From a public policy perspective, OASIS data can assist not only in enhancing patient outcomes, but also in refining the case mix-adjustment approach to prospective payment, evaluating the effects of prospective payment on Medicare and non-Medicare patients, and increasing the efficiency of the Medicare survey and certification program. In all, the fact that OASIS has been successfully applied and is of practical value at the home care agency level means it has utility for the individual patient receiving care, the home health agency, and the public oversight of care provision.

Supplement A

QUOTATIONS FROM HOME CARE AGENCY STAFF ABOUT THE VALUE OF OASIS

Selected quotations from articles authored by demonstration agency staff as well as articles authored by media reporters or others based on interviews with demonstration agency staff are reproduced below. These quotations demonstrate that, in a number of contexts and not just in a few instances, OASIS data collection and outcome- (or OASIS-) based quality improvement (OBQI) have proven beneficial to home care agencies and have contributed to enhanced quality of care for individual patients.

General Comments on the Advantages of OASIS and OBQI

Wide Ranging Positive Effect:

"Implementation of OASIS data collection not only has far-reaching impact on operating procedures, it also has a wide ranging positive effect on patient care management and the organization's approach to

QI. Clinicians express enthusiastic support of OASIS as a tool that has multiple benefits for patient care and staff development, including:

- More objective and consistent patient assessment,
- Improved staff assessment skills,
- Systematic reassessment,
- Better problem identification, care planning, and care delivery,
- Universal measure of outcomes and goal achievement which facilitates an OBQI approach to process of care evaluation and continuous improvement of patient services."

Hulley D; K Scribner; and H Siegel. "OASIS: A case study by the Home and Health Care Association of Massachusetts" *The Remington Report*, September-October 1997, p. 55.

Increased Efficiency and Effectiveness:

"As a result of implementation, our staff has become a more efficient and effective care team with an increased focus on patients' health status. Members of all disciplines were forced to 'speak the same language' and we were motivated to improve our documentation and delivery systems."

Rexrode A, et al. "OASIS: South Carolina's Experiences" *Home Health FOCUS*, August 1998, p. 19 & 21.

New QI Approach Benefits Patients and Clinicians, Demonstrates Effectiveness:

"OASIS marks the first time we have focused on clinical quality improvement efforts as opposed to agency processes and procedures."

"OASIS brought a decrease in both length of service and number of visits per client."

"OASIS gave us outcome measures that demonstrate the value and effectiveness of home care. Nurses have had little data that truly demonstrate to the health care system that we can make a positive difference."

"OASIS helps us identify patient problems more rapidly."

"OASIS has brought quality improvement to the clinicians. It used to be 'the QI nurse's job'."

"Lessons from the OBQI demonstration sites" *Caring*, September 1997, p. 49-50.

Examples of Patient Well-Being and Performance Improvement

Improving Assessment and Teaching - Reducing Hospitalization:

"Since looking at the [OBQI outcome] report's bar graphs, St. Mary's Home Care has been able to improve patient education and assessment by coming up with new flowcharts and teaching forms that help the nursing staff deliver the best possible care to approximately 1000 clients annually."

"The amount of information we get out of it [OASIS] is great. It's great because it makes sure you are comparing apples to apples, not apples to oranges."

"There is a dollar cost to this, in terms of training staff to collect the data and getting up to speed. But if we can prevent one hospital admission, then it all balances out."

"Comparing apples to apples yields a healthy crop of QI action plans" *Homecare Quality Management*, July 1997, p. 86 & 89.

Reduction of Hospitalization Related to Diabetes:

"With the OASIS project the patients are being readmitted to the hospital less than they were before since the program began in January 1995, there hasn't been a single case of a diabetic patient being readmitted to the hospital for problems relating to the disease within 45 days of discharge. Previously patients were constantly being readmitted for problems related to their diabetes."

"Give diabetic patients an attitude adjustment" *Homecare Quality Management*, October 1997, p. 141.

Improvement is Not Restricted to Poor Performers:

"The quality manager of Lee (MA) Visiting Nurse Association had no complaints with how the agency did on its first annual outcomes report using data collected as part of an Outcome and Assessment Information Set (OASIS) demonstration project."

"'We didn't do badly; some of our outcomes were slightly poorer than the national average, and some were better,' says Suzanne Hatch, BSN, MEd, CPHQ, quality manager and staff development coordinator for the Lee VNA."

"Because no glaring problems cropped up on the report, Hatch decided to make a quality improvement project out of one of the agency's more positive outcomes. 'This was going to be a learning experience, and I wanted it to be positive and to engage our nurses so they would be interested in participating in this quality project,' Hatch says." (Reference below)

Improvement in Dyspnea, "Like Discovering Gold":

"Hatch decided to focus on dyspnea, or breathing difficulties. The agency had done well in this area when compared to the national reference group, which was part of the demonstration project."

"'One of the bright spots of the year was our work with improving dyspnea outcomes,' Hatch adds. The staff was excited to think they had done this well, and the potential was there to do better."

"'It was like we discovered gold,' Hatch says. 'For all the patients who improved, this constellation of behavior was there,' Hatch says. 'We thought this was a good thing, but while we were better than the reference group, we saw we had room for improvement internally.'"

"QI project makes good program even better" *Homecare Quality Management*, September 1998, p. 134-136.

Better Outcomes, Precise Patient Assessment, and Managing Costs

Reduced Hospitalization - Linking Outcomes to Utilization:

"Anyone who thinks OASIS data won't be an indispensable survival tool for HHAs in this era of

Medicare payment limits and prospective payments should consider the experience of one agency in HFCA's demonstration project."

"Advocate Home Health Service, Oak Brook, Ill., reduced its rehospitalizations 5% last year after analysis of its OASIS information showed it above average in 1996 patient returns to inpatient care."

"At Advocate, for example, patient symptoms that could lead to hospital admission, such as shortness of breath and edema-caused weight increases -- both of them heart failure indicators -- now are a priority, says Cheryl Meyer, Advocate's OASIS coordinator."

"For Advocate, OASIS-derived information also has made its nurses 'more aware of the need to document their interventions' during home visits, notes OASIS coordinator Meyer. In the past, incomplete documentation left the HHA uncertain about why some patients had been rehospitalized, she adds. But in the future Advocate hopes to tie clinical outcomes to resources, helping it to reduce average visits per episode of care in line with Medicare's new payment limits." (Reference below)

Precise Assessment Achieves Specific Determination of Patient Care Needs:

"A 75-year-old Medicare beneficiary was admitted by VNA Healthcare, Waterbury, Conn., with second degree burns of the left foot, insulin-dependent diabetes, hypertension, nerve damage causing numbness in the hands and feet and osteoarthritis."

"The patient's inability to bathe himself, use the toilet on his own or carry out any of the other activities of daily living (ADLs), as confirmed by his OASIS assessment, qualified him for seven days a week of nurse aide visits. But guided by OASIS, the VNA reduced that in stages to only two visits and ultimately discharged the patient after two months, says Nancy Culos, the VNA's VP for visiting nurse and home care." (Reference below)

Reduced Hospitalization Rates for Cardiac Patients:

"Visiting Nurse Service of New York, the nation's largest freestanding, nonprofit HHA, learned from trial collection of OASIS data by two of its 52 nurse teams that a number of patients should have been on ACE inhibitors to increase their cardiac output, but weren't. In addition, it discovered that many patients lacked scales to detect weight increases caused by fluid accumulation."

"Compared with the bare-bones information normally collected on patients, such as primary diagnosis and residence address, OASIS disclosed additional rehospitalization factors -- whether the patient was living alone, illness severity and ADL status. Alerted to those findings, nurses involved in the test have reduced the rehospitalization rate for their approximately 600 patients to 40.6% from 42.9%." (Reference below)

Fostering Functional Independence Rather than Dependence:

"OASIS information also showed patients weren't making the progress in grooming, dressing and bathing the HHA wants. One factor: Nurses weren't using the same definitions to describe a patient's ability to do bed-to-chair, standing-to-sitting and other 'transfers.' Another: Home health aides were keeping patients dependent in order to assure themselves of jobs, the VNS suspects.

"Guided by OASIS, the HHA now is readying new protocols designed to avoid rehospitalization and speed independence from home care, says Sylvia Koerner, director of quality management services. To

encourage ADL progress, it also will be sharing its OASIS information with the 20 home health aide suppliers it contracts with throughout New York City, Koerner adds."

"OASIS data puts some HHAs ahead of IPS curve" *home health line*, June 22, 1998, p. 3-5.

More Thorough Assessment Results in More Efficient Care:

"Humboldt Home Health Services was one of the 50 [agencies] selected for participation in this project. The staff has been living and working with the OASIS data set for a year and a half and has gained some valuable insights about the provision of cost-effective quality service delivery and care practices through this experience."

"As the agency staff became more familiar with the use of the OASIS-based tool at the required intervals the nurses began to realize the potential impacts for improvement in both clinical care and in cost savings over the entire course of a patient's service delivery. Although the initial assessment process is longer than the previous one (10 to 20 minutes), the nursing staff's attitude about the overall effectiveness of care provision seems to have improved. This improvement was due to a more accurate assessment of patient needs and influencing factors, thereby facilitating utilization of appropriate resources at the right time to the correctly targeted patient need." (Reference below)

Measuring Outcomes Enhances Effectiveness of Care:

"The elements of successful care delivery entail the ability to measure clinical outcomes, to assess the effectiveness of actions, to measure the resources that were necessary to achieve those outcomes, and to measure patients' satisfaction with the care they received. How does an OASIS-based tool assist in this process? It provides an agency with the ability to plan care effectively, measure clinical outcomes in an objective standardized manner, and accurately evaluate the effectiveness of the care delivery."

"Using an OASIS-based tool has begun to assist Humboldt Home Health's staff in 'doing the right thing, the right way, at the right time'."

Starr T and L Anderson. "OASIS: Friend----Not Enemy" *Home Health Care Management and Practice*, June 1998, p. 111-113.