

Nursing Home Quality Initiative Overview

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Background

About 3 million elderly and disabled Americans received care in our nation's nearly 17,000 Medicare and Medicaid-certified nursing homes in 2001. Slightly more than half of these were long-term nursing home residents, but nearly as many had shorter stays for rehabilitation care after an acute hospitalization. About 75 percent were age 75 or older.

The care of nursing home residents is a high priority for the Bush administration, the Department of Health and Human Services (HHS), and the Centers for Medicare & Medicaid Services (CMS). CMS began enforcing new nursing home regulations as an outgrowth of the Omnibus Budget Reconciliation Act (OBRA) of 1987. In particular, the Nursing Home Oversight Improvement Program addresses weaknesses in federal and state nursing home oversight.

In November 2001, HHS Secretary Tommy G. Thompson announced the Nursing Home Quality Initiative to continue to improve quality of care in nursing homes. Working with measurement experts, the National Quality Forum and a diverse group of nursing home industry stakeholders, CMS adopted a set of improved nursing home quality measures. In April 2002, CMS launched a six-state pilot in Colorado, Florida, Maryland, Ohio, Rhode Island and Washington. The quality measures were available for those states on Nursing Home Compare at www.medicare.gov. Quality Improvement Organizations provided technical support to nursing homes, and many fruitful collaborations and partnerships were begun.

The national Nursing Home Quality Initiative was launched on November 12, 2002, and is a broad-based initiative that includes CMS's continuing regulatory and enforcement systems, new and improved consumer information, community-based nursing home quality improvement programs, and partnerships and collaborative efforts to promote awareness and support.

Timing

After a successful pilot last spring, CMS is more convinced than ever of the need to expand the nursing home quality initiative. On November 12, 2002, CMS released quality of care information for nearly 17,000 nursing homes in all 50 states, the District of Columbia, and some U.S. Territories. Consumers can view these measures and much more helpful information on Nursing Home Compare at www.medicare.gov. The quality information on the Nursing Home Compare is being updated quarterly and feedback from consumers continues to be positive.

Quality Strategy

The quality initiative, an important component of CMS's comprehensive strategy to improve the quality of care provided by America's nursing homes, is a four-prong effort that consists of:

- regulation and enforcement efforts conducted by state survey agencies and CMS;
- improved consumer information on the quality of care in nursing homes;
- continual, community-based quality improvement programs designed for nursing homes to improve their quality of care; and
- collaboration and partnership to leverage knowledge and resources.

From our experience in the pilot this spring, we appreciate the importance of partnerships and have incorporated this aspect into the national effort.

Regulation and Enforcement

CMS designed regulation and enforcement activities to assure the public that Medicare and Medicaid nursing homes comply with regulatory requirements for patient health and safety, and quality of care. CMS monitors data that nursing homes report (the Minimum Data Set) and administrative data from the Online Survey, Certification, and Reporting System. CMS uses these aggregated data sets to provide a comprehensive view of the individual receiving care in the nursing home. State Survey and Certification Agencies focus on the quality of care furnished to residents as measured by indicators of medical, nursing and rehabilitative care, dietary and nutrition services, activities and social participation, and sanitation, infection control, and the physical environment. Surveys also include a review of compliance with residents' rights, written plans of care, and an audit of the residents' assessment.

The core of the nursing home survey process is a four-to-five day onsite visit to see that a nursing home is meeting federal health and safety requirements. The standard survey takes a "snapshot" of the care given to beneficiaries at the time of the survey. Nursing home surveys are unannounced and, by law, must take place based on a statewide average of once every 12 months, but no longer than once every 15 months. The survey process also requires States to conduct surveys within prescribed time frames any time a serious problem is alleged. Survey results and complaint data are available on Nursing Home Compare.

Consumer Information on Quality of Care

The ten new quality measures are an additional resource to help consumers compare the quality of care in nursing homes. CMS is promoting consumers' use of quality measures through an integrated communications campaign including paid advertising and publicity, as well as grassroots outreach through Medicare's Quality Improvement Organizations and other health care intermediaries. To reach caregivers, CMS is working closely with physicians and nurses, discharge planners, community organizations and the media. The campaign attempts to cultivate an environment, in cooperation with nursing home industry leadership, which will promote improvement in the quality of care.

Informational advertisements (English and Spanish) were run in 71 major daily newspapers on November 13, 2002 to help raise awareness of the quality initiative throughout the country. The advertising will highlighted the availability of the nursing home quality measures and show consumers how to obtain that information. Consumers can call 1-800-MEDICARE or visit www.medicare.gov for the quality measures, or obtain a copy of Medicare's Guide to Selecting a Nursing Home as an additional information source.

These measures are just one more piece of the information available to help consumers make informed decisions about their nursing home care. The measures are also intended to motivate nursing homes to improve their care and to inform discussions about quality between consumers and clinicians.

Community-based Quality Improvement

Experience tells us that targeted quality improvement initiatives improve the quality of care. Medicare Quality Improvement Organizations (QIOs), formerly known as Peer Review Organizations or PROs, have been leaders in this type of improvement work. The QIOs have worked with providers, hospitals and others on improvement activities in the past, and have seen providers achieve a 10-20% relative improvement in performance.

As part of this initiative, QIOs are working with nursing homes to improve performance on the published measures and to develop and implement quality improvement projects. For example, QIOs help interpret and communicate data to nursing homes, which can motivate homes to improve. When mistakes or errors occur, QIOs help the nursing home do "root cause analyses" to learn what went wrong and put systems in place to prevent recurrence. QIOs are helping nursing homes to review and assess their current organizational and clinical processes of care, identifying those areas that the NH is already doing well and offering strategies to become more effective, by introducing quality improvement concepts and tools through both individual and group consultation

QIOs also work with community, health care, and business organizations, and with the local media. Together they provide quality information to the public and encourage nursing homes to use the information to improve care..

Collaboration and Partnership

The importance of the fourth prong of the nursing home quality strategy, collaboration and partnership, was highlighted during the spring pilot. In order to be effective, the quality initiative has truly become a collaborative effort including federal and state agencies, quality improvement organizations, independent health quality organizations, consumer advocates, and nursing home providers. The initiative is designed to improve communication among all parties in order to positively impact quality of care. By creating partnerships to expand our knowledge and resources, we can achieve greater and more immediate improvements in the quality of nursing home care.

What Are the Nursing Home Quality Measures?

To support CMS's evolutionary process of improving nursing home quality measures, the National Quality Forum (NQF) recommended domains of care for the public reporting pilot. NQF's nursing home steering committee included providers, state government representatives, consumer advocates, and others who reviewed the available measures and made their recommendations. CMS subsequently made minor revisions to the list of measures, such as dropping the weight loss measure, based on input from a comprehensive validation report, experts, and many stakeholders during the pilot program. The 10 quality measures are:

Six Measures for Long-Stay Residents:

- Percentage of residents with loss of ability in basic daily tasks
- Percentage of residents with infections
- Percentage of residents with pain
- Percentage of residents with pressure sores
- Percentage of residents with pressure sores (with facility-level risk adjustment)
- Percentage of residents in physical restraints

Four Measures for Short-Stay Residents:

- Percentage of short-stay residents with delirium
- Percentage of short-stay residents with delirium (with facility-level risk adjustment)
- Percentage of short-stay residents who walk as well or better (with facility-level risk adjustment)
- Percentage of short-stay residents with pain

These quality measures meet four criteria. They are important to consumers, are accurate (reliable, valid and risk adjusted), can be used to show ways in which facilities are different from one another, and can be influenced by the provision of high quality care by nursing home staff.

The nursing home quality measures come from resident assessment data that nursing homes routinely collect on the residents at specified intervals during their stay (the Minimum Data Set). These measures assess the resident's physical and clinical conditions and abilities, as well as preferences and life care wishes. These assessment data have been converted to develop the 10 quality measures that give consumers another source of information that shows how well nursing homes are caring for their residents' physical and clinical needs.

The quality measures developed under CMS contract to Abt Associates and a research team lead by Drs. John Morris and Vince Mor have been validated and are based on the best research currently available. In the Fall 2003, the NQF will recommend a final set of measures endorsed by their consensus process that will become the new set of publicly reported quality measures.

Nursing Home Quality Initiative Methodology and Assessment

Evaluation of Pilot

An evaluation of the six-state pilot project was conducted to learn lessons to improve the national rollout. The evaluation studied processes designed to:

- stimulate quality improvement activities in nursing homes; and
- promote awareness and use of the new quality measures among consumers including beneficiaries, caregivers, nursing home facilities and other constituent groups.

The process to stimulate quality improvement efforts by nursing homes was measured by surveying nursing home administrators and related stakeholders. CMS also measured consumer exposure to state and national media and local live events/workshops, tracking CMS website hits and calls to the toll-free number, online satisfaction surveys, and consumer interviews. In addition to the formal evaluation, CMS met with constituent groups throughout the pilot program to get feedback from each of their different perspectives. This feedback was used to refine the pilot and to adjust the national implementation. Findings from the pilot evaluation include:

The quality initiative was successful in promoting quality improvement activities among nursing homes.

- Over half of the nursing homes (52%) in the six pilot states requested quality improvement technical assistance from the QIOs.
- The vast majority of nursing homes (88%) knew about the quality initiative.
- Over three-quarters of nursing homes (78%) reported making quality improvement changes during the pilot and 77% indicated that the quality initiative was, in part, responsible for their decision to undertake these activities.

The quality initiative increased people's search for nursing home quality information.

- Phone calls to 1-800-MEDICARE concerning nursing home information more than doubled during the pilot rollout, and visits to www.medicare.gov's nursing home quality information increased tenfold for the six pilot states.

Users of the quality information on-line were highly satisfied.

- Web users said the information was clear, easy to understand, easy to search and valuable. On a scale of 0 to 10, over 40% of web users scored the information a 10 on these dimensions and approximately 70% gave the information an 8 or higher.

Risk-Adjusting Quality Measures

It is important to adjust the raw data when computing quality measures. Nursing homes vary in the level of overall health and functional impairment of each individual resident and in admission and discharge practices. These differences can affect quality measure rates but do not reflect the quality of care provided by the nursing homes. Unless scores are adjusted for such factors, a quality measure may not give a true and fair picture of the clinical care being provided.

Many of these measures are risk adjusted and other measures have data and clinical adjustments. These adjustments take into account differences among residents that may affect the individual quality measure rates, which are not reflective of care processes. This allows an “apples to apples” comparison of the quality measures between nursing homes.

There are a number of different ways to adjust data, including determining exclusion factors and regression analysis. Regression-based risk adjustment involves using statistical methods to account for factors, such as resident characteristics, which are not related to quality of care. The quality measures use exclusions and two types of regression-based adjustments -- resident and facility adjustments.

Exclusions

Exclusion factors are used to limit the measures to a relevant group of residents. For example, the measure on the loss of ability in basic daily tasks excludes residents in a coma from consideration since they cannot perform basic daily tasks. If residents in a coma were included in this measure, it could affect that nursing home’s percentage on the quality measure, and make it difficult to compare with other nursing homes, which might not have any residents in a coma.

In addition to exclusions for clinical conditions, CMS has excluded residents who have missing assessment data. For instances in which a resident assessment is missing the data elements needed to calculate the quality measure, the resident is excluded from that measure.

Resident-Level Risk Adjustment

Resident-level risk adjustment factors into some quality measures an individual resident’s specific health risks, such as variations in health and how they function. A resident may have a health condition that could increase or decrease the likelihood of being counted in a specific measure regardless of the quality of care provided by the nursing home. For example, a resident may have cognitive impairment (difficulty thinking and communicating), which impacts his ability to clearly express levels of pain. This difficulty in expressing how they feel could decrease the likelihood of triggering the “pain” measure regardless of the nursing home’s quality of care. Therefore the quality measure for long-term residents with pain is risk adjusted to take into account residents that have cognitive impairments.

Consider two nursing homes that provide the same quality of care to their residents and whose residents are exactly the same except for one feature. “Nursing Home A” has many residents who are cognitively impaired, “Nursing Home B” does not. Before risk adjusting, “Nursing Home A’s” percentage of residents in pain is lower than “Nursing Home B.” After risk adjustment, the scores are the same.

Two of the quality measures are risk adjusted at the resident level: delirium (for temporary/short stay residents) and pain (for long-term residents). These measures have added adjustments that take into account certain resident characteristics so that they reflect differences in the quality of care that is provided and not differences in the resident’s health.

Facility-Level Risk Adjustment

Some of the measures are adjusted at the facility level to account for differences in how nursing homes admit and assess residents. Facility-level risk adjustment takes into account the fact that some nursing homes may admit frailer, sicker residents, or specialize in a particular area of care (such as pressure sores) that may contribute to a higher rate for a particular quality measure.

The facility-level adjustments are made based on the proportion of residents with admission assessments that meet certain conditions. This is called the “Facility Admission Profile” or FAP. The FAP adjustment affects three measures: pressure sores (for long-term residents) and delirium and walking (for temporary/short stay residents). The walking measure is reported with the FAP adjustment. The other two measures are reported with and without the FAP adjustment. Information on these two measures is being shared in two ways because both measures were equally valid and reliable, and because scientists do not yet agree which measure (with or without FAP) is most accurate. We expect to resolve this during the coming year and will revise our measures accordingly.

Validation of Quality Measures

A comprehensive validation study of the quality measures was done to ensure that the MDS-based quality measures are valid measures of the quality of care provided by nursing homes. The study had two components: a one-state Pilot Study (conducted in 45 facilities, reviewing over 1,300 patient records, in the state of Massachusetts) and a National Validation conducted in six states (MO, CA, OH, PA, IL, TN) in over 200 nursing homes (both hospital-based and free-standing) which reviewed over 6,000 patient records. The results of this study show strong evidence that the quality measures are related to the care provided by the nursing home staff and are, therefore, valid.

The goal of the validation study was to determine the degree of relationship that exists between the MDS-derived quality measures and the services and care provided by the facility. For example, a facility with a low level of pressure ulcers should be one in which there are specific care practices and guidelines focused on reducing the incidence of pressure ulcers and helping to heal those that already exist. For the quality measures

to be presumed to be "real" or valid, a significant relationship between the quality measure and the relevant service inputs (e.g. care practices) was required.