

# CMS Quality Indicator Survey Demonstration Project

## OVERVIEW OF THE QIS PROCESS AND DEMONSTRATION

### QIS Survey Overview

The Quality Indicator Survey (QIS) is a revised long-term care survey process that was developed under Centers for Medicare & Medicaid Services (CMS) oversight through a multi-year contract. The QIS was designed as a staged process for use by surveyors to systematically and objectively review all regulatory areas and subsequently focus on selected areas for further review.

The QIS provides a structure for an initial review of larger samples of residents based on the MDS, observations, interviews, and medical record reviews. Utilizing onsite automation, survey findings from the first stage are combined to provide rates on a comprehensive set of Quality of Care Indicators (QCIs) covering all resident- and facility-level federal regulations for nursing homes. The second stage then provides surveyors the opportunity to focus survey resources on further investigation of care areas where concerns exist. Although the survey process has been revised under the QIS, the federal regulations and interpretive guidance remain unchanged.

The QIS was designed to achieve several objectives:

- Improve consistency and accuracy of quality of care and quality of life problem identification using a more structured process;
- Comprehensively review the full range of regulatory care areas within current survey resources;
- Enhance documentation by organizing survey findings through automation; and
- Focus survey resources on facilities with the largest number of quality concerns.

Initial testing of the QIS process has revealed that it yields increased consistency and improved documentation of survey findings. Given the promising results of these tests, CMS now wishes to evaluate the QIS on a larger scale using surveys of record through a demonstration, with an independent evaluation.

### QIS Demonstration Overview

For the purposes of the QIS Demonstration, CMS has designated the QIS as a standard survey. Some facilities in Demonstration states will be surveyed using the QIS as the survey of record; however, most facilities in these states will be surveyed using the current survey process, now known as the traditional survey.

The demonstration and evaluation of the QIS will be conducted in five states: California, Connecticut, Kansas, Louisiana, and Ohio. These five states were selected from among twenty-five volunteering states based on several criteria, including: geographic balance; representation of rural areas; citation history; use of technology; and average survey time. One state was selected based on its primarily rural population.

Throughout the Demonstration, the QIS surveys will be observed by contractors whose role will be to evaluate the QIS and make recommendations to continuously improve the QIS process. The evaluation findings will ultimately be used by CMS in determining whether to replace the traditional survey with the QIS on a national scale.

Participating states will be trained on the use of the QIS protocols and software in two phases, the first beginning in September 2005 and second beginning in February 2006. Connecticut, Kansas, and Ohio will participate in the first phase, and California and Louisiana will

take part in the second phase. The training approach will be evaluated and refined between the first and second phases.

Training will be comprised of classroom training, training surveys, and surveys of record during which training staff will be present. During the initial QIS surveys in each state, training contractor staff will be present to provide guidance on the use of the QIS protocols. Later on, evaluation contractor staff will accompany some survey teams to evaluate the QIS process.

In summary, the QIS Demonstration has several objectives: determine consistency of QIS when implemented in five states as surveys of record; assess time required to conduct QIS; continuously improve upon QIS process; and test training approaches that may be used for widespread training.

## DESCRIPTION OF THE QIS

The QIS process utilizes customized software, called the "QIS Data Collection Tool" (QIS DCT), to guide surveyors through a structured, two-staged investigation. Figure 1 on the following page provides a step-by-step overview of the QIS process. The process begins with offsite preparation activities (similar to those completed during the traditional federal long-term care survey process), which include preparation of team assignments and review of available information regarding prior deficiencies, complaints, ombudsman information, and existing waivers/variances. Unlike the traditional survey process, the QIS does not require surveyors to review the Quality Measure/Quality Indicator (QM/QI) and OSCAR 4 reports or pre-select potential residents for review prior to the survey. MDS data are also requested and loaded offsite into sur-

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## DESCRIPTION OF THE QIS—CONTINUED

veyors' computers and are used to calculate the MDS-based QCIs and create the resident pool from which the Stage I samples are randomly selected.

Following the offsite activities, and upon entry into the facility, a formal entrance conference is held during which necessary information is requested from the facility. Concurrent to the entrance conference, an abbreviated tour of the facility is conducted to provide an orientation to the resident population, staff, and facility layout. Unlike the traditional survey process, the purpose of the tour under the QIS process is not to select a sample of residents for review nor to gather detailed information regarding specific concerns.

Three distinct Stage I samples are selected. These include: 1) the MDS sample (which is drawn offsite); 2) the Census sample; and 3) the Admission sample. The MDS sample includes facility-reported information for all residents who had an MDS assessment at any time within the past six months (except discharge or re-entry assessments). The Census sample includes 40 randomly selected residents in the facility at the time of the onsite visit, and the Admission sample includes 30 recent admissions (emphasizing SNF post-acute patients and long-stay admissions on critical issues such as rehospitalization, death, or functional loss). In addition to these three samples, other residents can be sampled at the surveyors' discretion (referred to as the Surveyor-initiated sample).

Stage I involves a preliminary investigation of both the Census and Admission samples, covering all regulatory areas. This review is through staff, resident, and family interviews, resident observations, and medical record reviews. Concurrent with the resident-level tasks, facility-level investigations are initiated, which include a Resident Council interview, observations of dining and kitchen, and reviews of the facility's infection control practices, demand billing proc-

ess, and quality assessment and assurance program. (Additional facility-level investigations, including abuse prohibition, environment, nursing service sufficient staff, resident funds, and admission, transfer, discharge are completed only if triggered during Stage I.) These onsite data are used together with MDS data to construct resident-centered outcome and process indicators, called Quality of Care Indicators (QCIs).

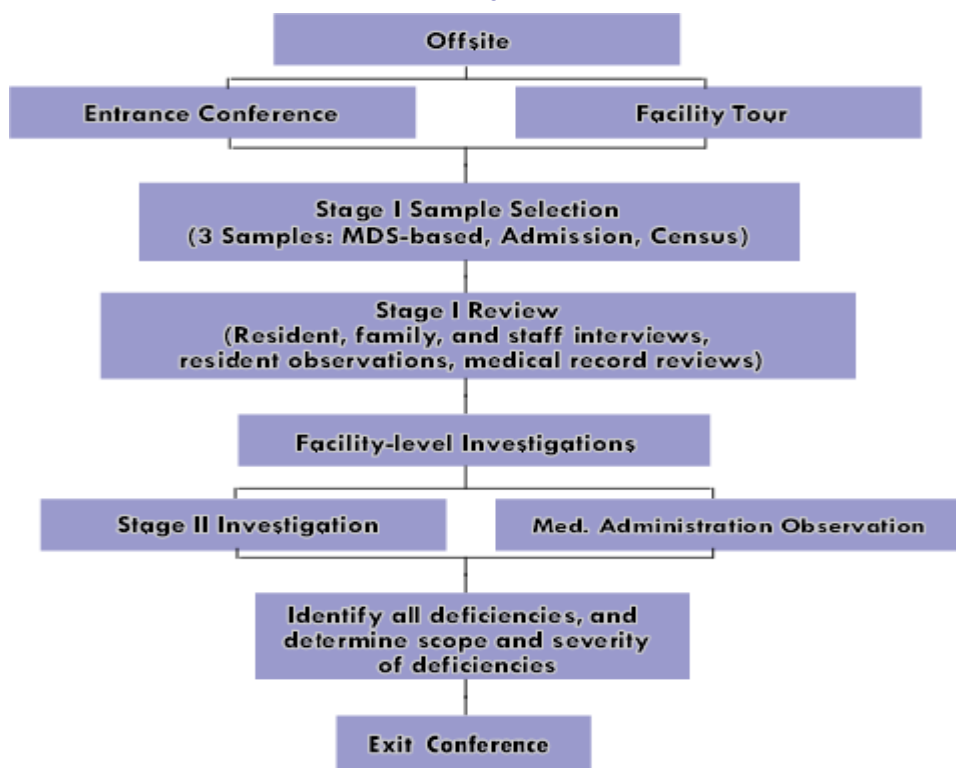
Upon completion of Stage I, the QIS DCT is used to calculate the QCI results, which identify Care Areas that will require further investigation during Stage II. When the rate of a QCI exceeds a specified national benchmark or "threshold," that QCI identifies or "triggers" a Care Area for Stage II investigation. The results of Stage I provide the team with a list of the potential facility and resident care problems and preliminary information on each, but a complete Stage II investigation is required to determine

whether deficient practices exist.

Stage II involves a more in-depth resident-level investigation of Care Areas identified at the conclusion of Stage I. Investigations follow a set of investigative protocols that assist the surveyor in completing an organized and systematic review of the triggered Care Areas. The protocols consist of probes that guide the surveyor through the investigation and assist in determining whether the facility is in compliance with the associated regulations (i.e., whether the "critical elements" of care are in place). Once the surveyor completes each investigation and determines whether each of the critical elements was met, all findings are entered into the QIS DCT. For each unmet critical element, the QIS DCT displays possible F tags for citation and requires the surveyor to enter relevant findings and assign an appropriate severity level. Concurrent to the Stage II investigation, medication administration is observed for ten residents selected

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**FIGURE 1: OVERVIEW OF THE QIS PROCESS**



## DESCRIPTION OF THE QIS—CONTINUED

for review during Stage II. If no Care Areas are triggered during Stage I, certain facility-level investigations must still be completed.

After all facility-level and Stage II resident-level investigations have been completed, the team analyzes the results to determine whether deficient

practices exist. An exit conference is then conducted, during which the facility is informed of the survey findings.

## DIFFERENCES BETWEEN THE QIS AND TRADITIONAL SURVEY PROCESS

### TRADITIONAL SURVEY PROCESS

#### Information requested of facility upon survey entrance

- Quality Measure/Quality Indicator Report
- Roster Sample Matrix Form (CMS 802)

#### Tour

Gather information about concerns that have been pre-selected, new concerns, and other candidates for the sample. Determine whether residents pre-selected for the Phase I sample are still present in the facility.

#### Sample selection

- Residents selected offsite based on facility's QIs of concern. Sample size is determined by facility census.
- Determine whether any pre-selected concerns should be dropped and whether any pre-selected residents should be substituted based on review of Roster/Sample Matrix and findings from the tour.
- Determine which pre-selected Phase I sample residents are interviewable and number of reviews to complete based on census.
- Select residents for review type.

#### Survey structure

Phase I involves both comprehensive and focused reviews. Phase II involves focused and closed record reviews.

#### Review process

Surveyors complete the Resident Review, which includes selected investigative protocols for key regulatory tags.

#### Automation

At this point, most data collection is done on paper; computers are used only for the Statement of Deficiencies.

#### Group interview

Meeting with the Resident Group or Council (includes review of resident council minutes to identify concerns).

### QIS PROCESS

#### Information requested of facility upon survey entrance

- Alphabetical list of residents and their room numbers.
- List of new admissions and discharges over last 30 days.

#### Tour

Initial brief review to gain information about the resident population, staff, and facility layout. The purpose is not to select a sample of residents for review nor to gather detailed information regarding specific concerns.

#### Sample selection

Four samples selected by the QIS DCT, including:

- MDS Offsite sample – residents with an MDS within 180 days prior to survey.
- Random Admission sample – 30 residents admitted more than 30 days prior to survey who had an MDS within 180 days prior to survey.
- Random Census sample – 40 residents currently in facility selected through offsite and onsite activities.
- Surveyor-initiated sample – residents selected at surveyor's discretion.

#### Survey structure

Stage I involves a preliminary investigation of all regulatory areas in Admission, Census, and Surveyor-initiated samples; Stage II involves further investigation of triggered Care Areas in Stage II sample chosen based on Stage I findings.

#### Review process

Follow consistent protocols for making observations, conducting interviews, and reviewing charts in Stage I; also includes specific structure for Stage II review and documentation.

#### Automation

Each team member uses tablet PCs throughout to record findings that are synthesized and organized by computer.

#### Group interview

Group interview replaced by Resident Council President/ Representative interview, supplemented by individual resident interviews.

## HISTORY AND DEVELOPMENT OF THE QIS

The University of Colorado's Division of Health Care Policy and Research and the University of Wisconsin-Madison's Center for Health Systems Research and Analysis developed the QIS with information systems support provided by Maverick Systems, Inc., and Alpine Technologies through a contract from CMS for which RTI International was the prime contractor.

The QIS process, tools, software, and training materials have undergone extensive revisions and refinements over the years through pilot, feasibility, alpha, and beta tests led by teams of researchers, state surveyors, and CMS staff in numerous facilities throughout the country. The QIS Demonstration will enable CMS to further refine and improve upon the QIS process before determining whether to proceed with national implementation.

Under the QIS Demonstration, the University of Colorado will be responsible for providing surveyor training and

technical support, with additional technical support provided by subcontractors Alpine Technologies and Iowa Foundation for Medical Care. The demonstration evaluation will be conducted by Abt Associates, Inc., and the UCLA Borun Center for Gerontological Research, with assistance from the University of Colorado. Remtech Services, Inc., is participating in the development of training methods.

During the Demonstration, a CMS team will provide oversight and guidance on all aspects of the QIS Demonstration implementation, evaluation design and performance, and refinements to the QIS process, as well as communication with participating states, their stakeholders, and other interested parties.

Questions regarding the QIS Demonstration Project may be directed to Fred Gladden at 410-786-3033 or [FGladden@cms.hhs.gov](mailto:FGladden@cms.hhs.gov).

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