Quality Monitoring Program: Early Warning System for Long-Term Care Facilities

As Required by
Health and Safety Code, Section 255.005

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1. Introduction

Chapter 255 of the Texas Health and Safety Code requires the Texas Health and Human Services Commission (HHSC) to establish an Early Warning System (EWS) for long-term care facilities (LTCFs). Section 255.005 requires HHSC to assess and evaluate the effectiveness of the EWS, and to report annually to the Governor, Lieutenant Governor, and the Speaker of the House of Representatives.

The EWS was first implemented in 2003 and uses statistical data to predict which nursing facilities (NFs) may have conditions that could be detrimental to the health, safety, and welfare of residents. The EWS is required to identify NFs as low or high risk. Every NF is assigned an EWS score; the higher the EWS score, the higher the facility's risk of a poor outcome on its next regulatory inspection or survey.

The Quality Monitoring Program (QMP) has a team of quality monitors comprised of nurses, pharmacists, and dietitians. Quality monitors use the EWS scores to prioritize visits to NFs and conduct initial and follow-up quality monitoring (QM) visits for higher risk facilities and facilities with a history of resident care deficiencies. During the initial QM visit, quality monitors evaluate the overall quality of care and quality of life in the facility. Quality monitors partner with facility staff and provide educational and technical assistance to improve quality of care and resident outcomes.

QMP staff promote evidence-based best practices by working collaboratively with providers to identify opportunities for quality improvement beyond minimal compliance with state and federal regulatory standards. QMP is not a regulatory program.

2. Early Warning System Model

The current EWS model was developed in 2022 and accurately predicts NF risk levels 70 percent of the time, an improvement over the previous model (63 percent). The model compiles information from multiple sources to forecast the level of risk (the EWS score) that an NF will perform poorly upon inspection. In general, the highest risk facilities (NFs with the highest EWS scores) are scheduled for QM visits. The risk calculation for any given NF may change upon updates of survey and complaint investigations, as well as minimum data set (MDS) data.[1] The model receives data from the following sources to determine a facility's EWS score:

- Findings from a facility's annual survey and complaint investigations, including the total number of selected deficiencies cited in the previous three years;[2] and
- Quality measures from MDS resident care assessments.

No financial indicators were identified as strong enough predictors to be included in the model.

In addition to QM visits scheduled according to EWS scores, other types of information may trigger a visit from QMP staff, including:

- Preadmission Screening and Resident Review (PASRR) referrals from within HHSC or a local intellectual and developmental disability authority (LIDDA);
- Referrals from the Texas Department of State Health Services (DSHS) regarding outbreaks of infectious illnesses or cases of multi-drug resistant organisms in NFs; and/or
- Medicaid managed care organization referrals.

EWS scores for each NF are updated at least quarterly to determine the priority of QM visits for the following quarter.

HHSC reassesses EWS scoring criteria at least annually and compares predictions to actual outcomes. Possible data sources and variables from those sources are

[1] The MDS is a federally mandated, standardized clinical assessment of each resident's functional capabilities and health needs.
[2] HHSC Long Term Care Regulation (LTCR) conducts annual surveys and complaint or incident investigations in NFs to ensure compliance with state licensure and federal certification regulations.

identified. Examples of data sources are previous deficiencies or quality measures from the Centers for Medicare and Medicaid Services (CMS). Variables are combined and tested in models predicting performance of nursing facilities as defined by the number, scope, and severity of federal deficiencies. The model that does the best job of predicting nursing facility performance is retained.

QMP staff are investigating how to obtain resources to modernize QMVisit, the web-based program used by clinical staff to enter visit findings and by managers to scheduling site visits. QMVisit was created in 2002 and despite numerous updates, continues to have limitations. For instance, QMP staff cannot easily extract data related to incremental quality improvements made by individual NFs across visits or on a state-wide basis. Reporting from the system is limited and difficult to retrieve. HHSC is currently investigating a modernized solution that would allow for more automated scheduling, enhance reporting functionality, and provide robust information for data-driven decision making. This could include tracking and trending NF outcomes from QMP visits.

3. Quality Monitoring Activities

Quality monitors perform the following types of in-person support and technical assistance to NF staff:

- QM Visits
- Rapid Response Team (RRT) Visits
- In-Service visits

Quality Monitoring Visits

QMP quality monitors – nurses, pharmacists, and dietitians – conduct initial and follow-up QM visits for higher risk NFs, or those with a history of resident care deficiencies. QM visits are not a regulatory activity. During the initial QM visit, quality monitors evaluate the overall quality of care and quality of life in the NF. Specific clinical areas are addressed during the visit; the selection of a particular clinical area may be based on a facility request or the quality monitor's review of recent quality measure reports for the facility. Based on this evaluation, quality monitors partner with facility staff and provide educational and technical assistance to improve quality of care and resident outcomes. Quality monitors schedule a follow-up visit within 45 calendar days to ensure progress toward improvements. If a facility's EWS score continues to put it among the top 25 percent highest risk after the 45-day follow-up visit, the facility will continue to receive regular QM visits, often quarterly, until the EWS score drops below that threshold.

Facilities can also request a QM visit, but QMP cannot help NFs prepare for a Long-Term Care Regulation (LTCR) survey or be included as part of a plan of correction (POC) to address deficiencies cited during a survey or investigation.

In fiscal year 2022, QMP field staff vacancies continued to affect the number of visits conducted. While all pharmacist and dietitian positions are currently filled, 12 QMP registered nurse (RN) positions are vacant, approximately 38 percent of all RN positions in the program. HHSC experiences challenges attracting and retaining sufficient numbers of clinical staff to conduct all planned visits due to current position classifications and salary levels. HHSC will explore potential solutions to recruit and retain QM field staff.

QMP shifted to telephonic QM visits in March 2020 due to the novel coronavirus (COVID-19) public health emergency (PHE). The telephonic visits proved valuable to NFs and allowed HHSC to monitor facilities when on-site visits were not feasible. However, a telephonic visit is not a complete substitute for an in-person QM visit.

By April 2021, QMP staff were again conducting on-site visits. In fiscal year 2022, most of the visits were carried out on-site; however occasional telephonic visits were also conducted. Tables 1 and 2 provide data on initial and follow-up QM visits, including on-site and telephonic visits.

Table 1. On-Site QM Visits – September 2021 through August 2022

Visit Type	Number of Visits	Number of Unduplicated Facilities
Initial QM Visits	321	321
45-Day Follow-Up On-Site Visits	264	264
QM On-Site Visits	1014	515
QM Follow-Up On-Site Visits	22	22
Total On-Site Visits	**1621**	**N/A**[3]

Table 2. Telephonic QM Visits - September 2021 through August 2022

Visit Type	Number of Visits	Number of Unduplicated Facilities
Initial QM Telephone Visits	2	2
45-Day Follow-Up Telephone Visits	8	8
QM Telephone Visits	17	17
QM Follow-Up Telephone Visits	2	2
Total Telephonic Visits	**29**	**N/A**[3]

Rapid Response Team Visits

For facilities with EWS scores that indicate the highest risk, QMP sends rapid response teams (RRTs). Facilities at high risk include those that have three deficiency citations in a 24-month period related to abuse and/or neglect that

[3] The number of unduplicated NFs is by visit type only. A facility may have had multiple visits within this timeframe, but of different visit types.

constitute an immediate threat to health and safety. Once an RRT is triggered, QMP will conduct a series of visits, typically over a period of six months.

Unlike a QM visit, a full team of quality monitors (one from each discipline) conducts the initial RRT visit. Staffing an RRT is a more complex undertaking and requires assembling a team from offices across the state to visit a single NF. When an RRT goes on-site, the facility must also make more administrative and clinical staff available than on a QM visit to assist and learn from the state staff.

Because of the greater need for improvement and the extra effort required from HHSC and NF staff, the RRT visit is more comprehensive. The team conducts a broader review and provides more education and assistance than during a regular QM visit. Follow-up RRT visits are conducted by one or more team members and are more focused, depending on the identified needs.

Due to the PHE, RRT visits were not conducted in FY 2021 to ensure staff safety and allow NF staff to focus on resident care. The highest risk facilities received a QM visit instead of an RRT visit. RRT visits resumed in fiscal year 2022. Table 3 provides data on initial, follow-up, and final RRT visits, including on-site and telephonic visits.

Table 3. RRT Visits - September 2021 through August 2022

Visit Type	Number of Visits	Number of Unduplicated Facilities
Initial RRT Visits	66	12
RRT On-Site Follow-Up Visits	199	11
RRT Telephonic Follow-Up Visits	1	1
RRT Final Visits	21	5
Total Visits	**287**	**N/A[4]**

In-service Visits

During in-service visits, quality monitors provide educational presentations to NF staff, offering evidence-based information in an interactive manner. The information

[4] The number of unduplicated NFs is by visit type only. A facility may have had multiple RRT visits within this timeframe, but of different visit types.

provided supports quality improvement in multiple areas, such as fall prevention and reducing the use of anti-psychotic medications.

4. Conclusion and Next Steps

The current EWS model for NFs was developed in 2022, and the 70 percent accuracy of the model is an improvement over the previous model. The QMP team continues to evaluate the NF EWS model by examining and statistically analyzing potential changes designed to improve the accuracy and quality of its predictions.

Vacancies for clinical staff, specifically RNs, remain a challenge for QMP. HHSC is conducting a review of clinical positions across the agency to develop an enhanced recruitment and retention plan. QMP leadership continues to post vacancies and interview candidates whose applications meet the initial criteria for the position.

HHSC is investigating opportunities to modernize QMVisit to allow for more automated scheduling, enhance reporting functionality, and provide robust information for data-driven decision making.

List of Acronyms

Acronym	Full Name
CMS	Centers for Medicare and Medicaid Services
COVID-19	Novel Coronavirus
DSHS	Department of State Health Services
EWS	Early Warning System
HHSC	Health and Human Services Commission
LTCF	Long-Term Care Facility
LIDDA	Local Intellectual and Developmental Disability Authority
LTCR	Long-term Care Regulation
MDS	Minimum Data Set
NFs	Nursing Facilities
PASRR	Preadmission Screening and Resident Review
PHE	Public Health Emergency
POC	Plan of Correction
QM	Quality Monitoring
QMP	Quality Monitoring Program
RN	Registered Nurse
RRT	Rapid Response Team