Continuous Quality Improvement in Nursing Homes: Public Relations or a Reality?

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This article makes the case that many nursing home programs labeled as continuous quality improvement (CQI) efforts do not use trademark methods that have made CQI so effective in other settings. Confusion about the distinction between quality assurance and quality improvement is one barrier to implementing effective CQI programs in nursing homes. Another is that federal regulations and reporting systems prompt nursing homes to focus on outcomes as opposed to care processes. Indeed, data available about care process quality in nursing homes are useful only for regulatory compliance and, perhaps, quality assurance activities designed to avoid survey deficiencies. A radical change in how care processes are documented is needed if CQI is to become a reality in nursing homes, rather than an empty program label. This article discusses how care processes related to daily care provision can be efficiently measured and the data used in CQI programs. It focuses especially on daily care processes implemented by nurse aides because of their paramount importance for enhancing quality of care and life and because research suggests that consumers view this care as both important and problematic.

CQI is widely considered the paradigm that guides quality improvement efforts in long-term care settings, at least partly because of its credibility as an effective approach to improving work quality in other settings. However, one of the most important components of CQI—a focus on process measurement—is often absent in nursing home programs, even those labeled as CQI efforts. A major reason why so-called CQI programs in many nursing homes fail to actually use CQI methods is confusion about the difference between quality assurance and quality improvement.

Although nursing home providers have a long history of conducting quality assurance activities, they may fail to understand the important distinction between quality assurance and quality improvement because of the common use of the word “quality.” In fact, the approaches are quite different, and failure to understand their differences can be a barrier to implementing effective CQI programs. A first step toward overcoming this barrier is to understand the basic difference between quality assurance and quality improvement.

QUALITY IMPROVEMENT VERSUS QUALITY ASSURANCE IN THE INDUSTRIAL SECTOR

The classic distinction between quality assurance and quality improvement arose in the industrial sector, which also is where CQI methods were first developed. The term “quality assurance,” which initially dominated quality control thinking, was used to define surveillance or monitoring efforts aimed at removing defective products before they left the production facility. These monitoring efforts did not identify the work processes or factors that contributed to the production of defective goods; as a result, they led to neither improvements in the production process nor the prevention of poor outcomes. At best, they helped ensure that defective products did not reach consumers. This point is critical to understanding the difference between CQI and quality assurance. In contrast to quality assurance, CQI methods are designed to prevent defective products (or poor outcomes); thus, they focus on measuring and improving work processes that significantly influence outcomes.

Key aspects of process measurement distinguish quality assurance and quality improvement and are germane to the argument that true CQI methods are seldom used in long-term care settings. First, in CQI programs, care processes are measured systematically and within a formal analytical framework that identifies the factors that contribute to variability in the process’s quality. According to the quality assurance paradigm, workers are not given feedback about the frequency of bad outcomes, as they might be in a quality assurance program, with the hope that they can somehow magically identify and improve the defective work processes that led to these poor outcomes. Instead, the CQI paradigm requires that workers be given a method for ongoing monitoring and analyses of work processes, and feedback is focused on how well the processes are implemented. Second, to enhance the value of feedback to workers, CQI programs focus on identifying factors that contribute to poor process implementation. There is no inherent pressure to document that care processes were implemented as planned. How do these distinguishing CQI characteristics relate to nursing home care?

QUALITY ASSURANCE AND QUALITY IMPROVEMENT IN LONG-TERM CARE SETTINGS

Long-term care providers focus heavily on monitoring quality indicators that describe outcomes thought to be
related to care quality, even though it is widely acknowledged that other factors such as resident acuity can also influence these outcomes. The few indicators that do involve a care process (for example, incontinence without a toileting plan) do not specifically describe the process (for example, how often or when to toilet a resident). Moreover, providers document care provision simply by checking a box, rather than describing in detail how the care plan was implemented. Providers are not given a formal method by which to monitor process quality; rather, it seems, the hope is that they will intuitively know how to accurately measure the daily care provided to residents and will be motivated to do so if given feedback about “defective products” in the form of poor quality indicators. It is assumed that poor outcomes are caused by poor care as opposed to resident acuity or disease—a contentious and arguable assumption. This approach meets the requirements for quality assurance but not those for quality improvement, because no data pertaining to care process quality are considered.

Use of the quality assurance paradigm extends to the nursing home’s primary source for data about care process quality: the medical record and other daily worksheets in which staff self-report the care provided to residents. The medical record is the primary record of a nursing home’s compliance with federal regulations. Consequently, facilities go to great lengths to ensure that medical records include all the information necessary to pass a federal survey. Quality assurance personnel expend extensive resources to ensure that the staff writes care plans and then documents that residents received the care. This chart monitoring is intended to ensure that care was actually provided but rather that care was documented. In practice, there is little or no effort to audit whether care processes are accurately documented in the medical record (for example, did the resident really get feeding assistance?) because this task is labor intensive and may reveal information that increases a facility’s liability risk.

This auditing failure helps explain research observations that residents often do not receive the care documented in charts and care plans. It also explains why caregivers are reluctant to report situations in which they were unable to provide necessary care. For example, despite evidence that many nursing homes have low staffing levels and their workers are short-staffed on many shifts, it is rare to see medical record documentation that critical care such as feeding or toileting assistance was not provided. The point here is that the medical record—the primary data source for process quality in nursing homes—is not useful for CQI purposes if the goal is to improve the care that residents receive. In addition and at best, the chart monitoring that occurs reflects a quality assurance approach as opposed to a quality improvement approach, because the intent is not to improve process quality as experienced by the resident but rather to ensure that chart documentation is not “defective” to the point that a deficiency would be written.

It seems obvious that as long as the primary purpose of medical records and other care process worksheets is to demonstrate regulatory compliance, then these documents will not generate information useful for analyzing why care process implementation is sometimes poor and, in fact, will provide information useful only for avoiding regulatory sanctions. Thus, new methods for monitoring, analyzing, and storing care process information are needed to achieve CQI in nursing homes.

**PROCESS MONITORING ISSUES TO CONSIDER**

A care process monitoring system useful for CQI must measure aspects of care that define quality. In this regard, the quality of daily care received by residents is largely defined by 4 domains: (1) how frequently or consistently care occurs (for example, are residents provided toileting assistance throughout the day); (2) how long it occurs (for example, do staff hurry residents through meals or spend the time necessary to maximize enjoyment and food intake); (3) how well staff interact with residents when care is provided (for example, do staff talk to residents in a positive and warm manner); and (4) how well staff provide care consistent with a resident’s preference (for example, do staff offer a resident a choice about when to get out of bed). In addition to being accurate, the monitoring system also must be specific to each of these 4 quality domains. As typically documented, medical record data fail to meet any of these criteria.

Consider, for example, that incontinence care is typically documented in a resident’s chart as having been provided “as needed” during the 7 AM to 3 PM shift. Feeding assistance for a resident is often documented by checking the appropriate box on a preprinted worksheet. Such documentation is non-specific in that it fails to make clear, for example, how often incontinence care was provided or for how long feeding assistance was offered. Findings reported in the clinical literature indicate that residents want and need 3 to 4 assists to the toilet per day to maintain continence, and feeding assistance for a resident at high risk for weight loss should be provided for at least 15 minutes. In addition, there is evidence that the medical chart documentation for these and other daily care areas is inaccurate. With respect to feeding assistance, for example, I study reported that 40% of high-risk residents received less than 1 minute of assistance, notwithstanding chart reports that assistance was provided. Furthermore, any discussion about specificity cannot be limited to measures of care frequency and duration. Also important is detailed and specific information about quality-of-care issues such as how well the staff interacts with residents (for example, do they converse with residents during mealtimes or give residents a choice of times for getting out of bed in the morning). The quality of the interactions between staff and residents is critical for improving quality-of-life outcomes. Unfortunately, medical records and other work documentation systems in use in nursing homes rarely provide accurate, specific information about these interactions.

**HOW SHOULD CARE PROCESS INFORMATION BE MONITORED?**

The 2 monitoring methods used to document care process quality in nursing homes depend on different data sources.
The first method uses staff self-reports; the second, observations of care by individuals not involved with care delivery.

Process Monitoring by Staff Self-Report

Direct care providers in nursing homes traditionally have self-reported care activities such as incontinence care or repositioning. We have argued in this paper that these reports are so inaccurate and non-specific that one is tempted to abandon this reporting system altogether. However, it can be argued that staff documentation of care delivery may increase the probability that care occurs and that such documentation, despite its inaccuracies, is necessary for compliance purposes. Both arguments have some merit, but the fact remains that as long as care providers feel pressure to document that all care is provided, no staff reporting system will be useful for CQI purposes. This holds true even if electronic reporting systems are used.

The electronic systems currently in use or under development enable employees to record care at or near the point of service by using electronic notepads or similar devices. These systems reduce the need to record care from memory and, thus, may improve data accuracy. Additionally, time-stamp methods can document that care was recorded during time intervals when it was reasonably expected to occur (for example, every 2 hours in the case of repositioning). Electronic systems also greatly facilitate the types of analyses needed for process improvement because the data can be quickly aggregated by resident groups, shifts, or staff members. These analytical abilities are critical functions for effective CQI. However, use of an electronic reporting system, no matter how sophisticated, will not weaken the regulatory incentives that can lead to inaccurate documentation if the electronically produced data are entered into the medical record and used for compliance purposes. Furthermore, even absent incentives for workers to report care that they did not provide, electronic systems appear to be best suited for recording care frequency and duration but not quality of care. It is unclear, for example, how one could use an electronic reporting system to document such quality-of-care information as whether or for how long care providers maintained eye contact with residents. This and similar social interaction variables can be best measured through direct observations by individuals who are not involved with care delivery.

Process Monitoring Through Direct Observation

Direct observational systems that support CQI include the following features:

1. The individuals who conduct the observations do not provide direct care; hence, they have less incentive to document that all care was delivered.
2. Observations are scheduled at times when the observer is most likely to identify factors that may limit staff ability to provide care since the goal is to identify problems that can be acted on to improve care. This goal is to be contrasted to the compliance goal of documenting no problems with care implementation. For example, in the domain of eating assistance it is best to observe at low-staffed time periods such as the evening meal to determine if the number of staff present limits the quality of assistance.
3. The observation findings are not documented in each resident’s medical chart. Rather, they are analyzed within independent systems that aggregate the data over different groups of residents (or floors) or groups of staff (for example, those working the second shift).

Specific examples of how observational protocols can be used to monitor process quality in a manner that is useful for CQI have been reported in numerous care domains and in detail in several articles in this edition of the Journal. It should also be noted that federal survey procedures encourage surveyors to collect quality information through observations, although the procedural instructions to surveyors are very ambiguous. Indeed, the absence of specific instructions about how to observe care process quality and a general lack of awareness that standardized methods are needed to collect accurate data remain barriers to using observational data in CQI efforts. The belief appears to be that nursing home supervisors or survey staff can walk about the facility and, drawing on their clinical expertise, collect accurate information about care frequency, duration, and quality. The data collection procedure is not that simple, however.

The measurement standards that guide the collection of accurate observational data are as rigorous as those that apply to other measurement procedures. Of paramount importance is that the data is reliable (that is, do 2 individuals agree about what was observed, and do they convert their observations into the same quality conclusions?) and valid (for example, does the care observed reflect what happens throughout the day?). To truly achieve CQI, the nursing homes industry needs more standardized observational protocols, similar to those described by Simmons in this Journal, that generate data useful for CQI.

Simmons and other authors in this Journal use a framework with 4 features that make their protocols useful for CQI:

1. Observation rules are specifically defined so that there is high agreement between different observers; that is, the data collected are reliable. Additionally, the variables that can be reliably measured include social interaction quality measures.
2. The framework identifies specific observation schedules that have been proven to produce accurate data about care quality.
3. Rules to convert basic observational data into quality conclusions have been identified.
4. The framework includes a simple analytical system that facilitates the identification of factors that may influence the quality measures.

This same framework should be applied to the development of observational protocols for other care domains.

CONCLUSIONS AND SUMMARY

A primary characteristic that differentiates CQI from quality assurance is CQI’s focus on care process measurement and
analysis as opposed to outcome measurement. Current efforts in nursing homes to improve quality primarily use a quality assurance approach in that the emphasis is on outcome measurement; attention is paid to care process measures only after poor outcomes have been detected. Furthermore, even if providers were intent on monitoring process quality in keeping with recommended CQI methods, poor systems are in place to do so. The solutions to these problems are obvious. To achieve true CQI in nursing homes, data about care process implementation that is used primarily for improvement purposes rather than regulatory compliance is needed. It is doubtful that the traditional practice of monitoring care through staff self-reports will generate data useful for quality improvement even if such monitoring is done electronically and protected from regulatory review. Data collected using reliable and valid direct observational protocols are necessary for effective CQI. There is a need to develop more protocols similar to those described in this Journal if CQI is to become a reality rather than an empty program label.

REFERENCES