Quality Assurance and Performance Improvement (QAPI) in Healthcare for Older Adults

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WHY: The approach to Quality Assurance and Performance Improvement (QAPI) in healthcare organizations has undergone an evolution and transformation over time. The goals, however, are the same: safe delivery of high quality healthcare; a sound monitoring and evaluation process against evidence-based standards of care; and improved outcomes. The intent of this first issue in a series of Try This: Quality Improvement is to familiarize the reader with the terms, principles, and approaches to improving quality and performance in the practice setting - with a focus on care for the elderly. Subsequent issues will focus on improving relevant clinical initiatives as they pertain to older adults.

BEST APPROACH: The quality evolution has transformed the manner in which monitoring and evaluation are conducted within health care organizations. Current methodologies reflect the movement from Quality Assurance to Quality Improvement. While Quality Assurance programs focused on the products or outputs of processes with an emphasis on inspection and quality control, Quality Improvement gives front line staff a voice at the table and an opportunity to improve care. Performance Improvement focuses on performance within a healthcare organization relative to clinical or non-clinical processes or outcomes. Some former quality terminology such as “CQI” (Continuous Quality Improvement) and “TQM” (Total Quality Management) both endorsed and embraced the principles of QAPI. Regardless of terminology, regulatory requirements at the federal and state level increasingly foster the need to improve safety, care, and efficiency while decreasing cost and utilization within our healthcare delivery models.

Quality Management is the umbrella term for a comprehensive quality initiative that includes activities such as credentialing, infection control, regulatory compliance, in addition to Quality Improvement. A Quality Management initiative requires the use of appropriate statistical processes control tools and a scientific approach to inquiry. It does not, however, require the same rigor as that of scientific research, which is important to keep in mind when formulating the components of a program, developing a monitoring tool, and analyzing data.

MORE ON THE TOPIC:

QAPI Programs
Every QAPI program requires an organized plan for Performance Improvement with a goal of establishing a process to systematically monitor and evaluate the quality and appropriateness of systems and processes. PDSA which stands for Plan, Do, Study, Act (formerly PDCA – Plan Do Check Act) is the most commonly applied process for Performance Improvement. The process is based on the scientific approach and includes the following components:

PDSA
- **PLAN** – identify an opportunity and plan for change
- **DO** – implement the change on a small scale
- **STUDY** – use the data to analyze results of the change and determine whether it made a difference
- **ACT** – if the change was successful, implement it on a wider scale and continuously assess results. If the change did not work, begin the cycle again

Six Sigma, another commonly applied process for Performance Improvement, incorporates a rigorous use of data and statistical analysis to measure outcomes using the DMAIC model.

DMAIC
- **Define** a problem or improvement opportunity
- **Measure** process performance
- **Analyze** the process to determine the root causes of poor performance and determine whether the process can be improved or redesigned
- **Improve** the process by attacking root causes
- **Control** the improved process to hold the gains
A QAPI plan must also define, in writing, the various components that include:

- **Scope of Service** - a statement describing the types of services provided within the organization. The scope of service ensures that monitoring is relevant to the types of services provided and processes implemented.
- **Objectives** - defined for the program including what you plan to accomplish and/or improve by the monitoring and evaluation process.
- **Authority and Responsibility** - the job title(s) for people responsible for the QAPI and for those persons accountable for plan implementation, monitoring and analysis of results. This statement holds key stakeholders and managers accountable.
- **Committee structure** - used to define a communication strategy for data and analysis of findings.
- **Reporting** - defines the process for reporting of findings and development of action plans. A table of organization is also useful to convey this information.
- **Additional Components relevant to the QAPI**, e.g. incident reporting, infection control data or additional data and information from programs outside the QAPI program.
- **Confidentiality** - a statement about maintaining confidentiality of documents and findings, and protecting documents under the protections of Quality Assurance.

The monitoring component of the QAPI requires an approach to measuring achievement related to the functions, processes, and related outcomes. To reflect what is being monitored, an indicator statement is developed. Indicator statements describe what is being monitored or improved, or state the desired outcome. Indicators are used to evaluate changes in clinical practice; ensure follow-up monitoring of identified clinical issues; provide base-line data regarding care/service where improvement is needed; and provide further assessment after actions have been taken.

Indicators evaluate expectations of performance that derive from Standards of Care, Standards of Practice, Protocols, Policies, and Procedures. Indicators and monitoring tools must demonstrate the following characteristics in order to provide meaningful data to be used for the analysis and recommendations for performance improvement:

- Reliability - accurate over time
- Easily obtainable (data collection sources may include administrative data, medical records, incident reports, claims data, infection control reports, pharmacy reports, lab reports, financial data and patient satisfaction surveys).

### Data Collection Tool

**Indicator Statement (example):** *Assessment components are documented to decrease Catheter Association Urinary Tract Infections.*

<table>
<thead>
<tr>
<th>Criteria/Element for Evaluation</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>1 Dates of insertion and removal of catheter is documented.</td>
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<tr>
<td>2 Type of catheter is documented.</td>
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<tr>
<td>3 Reason for catheter insertion is documented.</td>
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<tr>
<td>4 Justification that catheter is still necessary is documented.</td>
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<tr>
<td>5 Post void residual after catheter removal if patient is unable to void in 6-8 hours.</td>
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</tbody>
</table>

**TOTAL SCORE**

After tabulating all data, and indicating the number of yes (compliance) and the number of no responses (non-compliance) to each criterion and ensuring the not applicable information is correct, the formula to determine overall adherence to the best practice is:

\[
\text{Yes/(Yes + No)} \times 100 = \% \text{ Percent}
\]

**Example:** Twenty records were reviewed, with 5 criteria each. There were 100 items reviewed. After tallying all 100 responses there were 80 “yes” responses, 15 “no” responses, and 5 “not applicable” responses, the formula is:

\[
\frac{80}{95} \times 100 = 84\%
\]

### Statistical Process Control Tools

Once the data are collected, in order to facilitate the display and analysis of data, statistical process control tools may be used. An example of the more common and familiar tools are: Flow charts, histograms, bar graphs, control charts, pareto charts, and pie charts.