

Quality Management in Health Care



ASSESSING PERFORMANCE

Topics Covered in This Lecture

- ▣ Techniques for evaluating performance
- ▣ How comparative data is used to evaluate performance

Performance assessment (sometimes called evaluation, appraisal, or rating) involves a formal periodic review of performance measurement results. If the performance measurement data collection strategy has been carefully planned, you should end up with data that provides a good understanding of performance.

In this lecture I'll cover some of the common ways that health care organizations assess their performance. I'll also describe the role of comparative performance data in assessment activities.

Analysis Phase

- Performance data should help people answer:
 - What is current performance?
 - Is there a trend over time?
 - Should we take any action? What action?
 - What is contributing to the most undesirable performance?
 - Are we focused on highest priorities for improvement?

Once you've collected the performance data and verified it for accuracy, it's time for the analysis phase. However, before the results can be analyzed the information needs to be assembled and presented in a meaningful way. The performance data should help people answer the following questions:

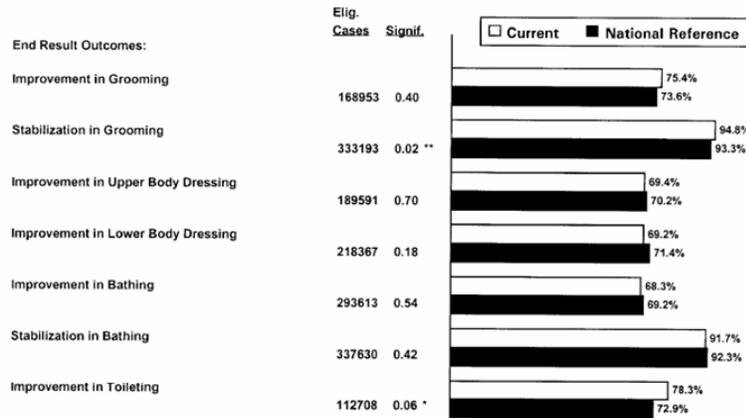
- What is current performance?
- Is there a trend over time?
- Should we take any action? What kind of action?
- What contributes the most to undesirable performance (the vital few)?
- Are we focusing on the highest priority actions?

The data should be grouped into a form that makes it easier to draw conclusions. This grouping or summarizing may take several forms: tabulation, graphs, or statistical comparisons. Sometimes, a single data grouping will suffice for analysis purposes.

Outcomes Assessment and Information Set (OASIS) Comparative Performance Data for Home Health Agencies

| | |
|---------------------------------|---|
| Agency Name: ALTERNATIVE AGENCY | Requested Current Period: 01/2001 - 12/2001 |
| Agency ID: HHA03 | Actual Current Period: 01/2001 - 12/2001 |
| Location: ANYTOWN, USA | Number of Cases in Current Period: |
| Medicare Number: 007003 | Number of Cases in Natl Ref Sample: 357978 |
| Medicaid Number: 999888003 | Date Report Printed: 02/28/2002 |

All Patients' Risk Adjusted Outcome Report

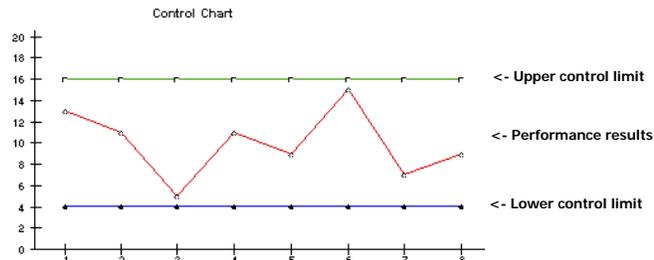


Providers participating in the performance measurement projects required by Medicare/Medicaid periodically receive reports detailing their performance compared to other project participants. On the slide you see an example of the type of comparative performance report that a home health agency receives as part of Medicare's OASIS (Outcomes and Assessment Information Set) project.

This report compares the patient outcomes achieved by one home health agency with "National Reference" data – which is the aggregate results from all agencies submitting data. Each outcome measurement includes a significance rating to assist the home health agency in determining whether or not their outcomes differ significantly from the other organizations.

Statistical Process Control – A Technique for Assessing Performance

Used to measure variation in a process



“A phenomenon will be said to be controlled when, through the use of past experience, we can predict, at least within limits, how the phenomenon may be expected to vary in the future”

Shewart - Economic Control of Quality of Manufactured Product, 1931

In the mid-1990s health care providers began to use a performance analysis tool that prior to that time was most commonly used in other industries – statistical process control. This statistical analysis tool helps people better understand and manage process variation. One way to improve performance is by reducing or narrowing the amount of variation that occurs.

The less the process varies, the more confident you can be about the results. Furthermore, variation is associated with an unstable process, which is more likely to produce undesirable (or “surprise”) results. A process is said to be “in control” when it operates within acceptable specification limits (displayed on the control chart as the area between the upper and lower control limits). For instance, if the time it takes you to drive to work only varies by a few minutes each day, the process of driving to is considered to be “in control” – which means you are unlikely to have too many surprises! Stable health care processes are a good thing also – they help to ensure that we achieve consistent results.

Control charts can be used to assess performance. By plotting performance results on the control chart you can determine if the results fall within an acceptable range of performance (as shown in the chart on this slide – data falls within the upper and lower control limits which have been statistically calculated based on past experience). When the performance results “fall outside” of these control limits, then you know something unusual is happening.

The control limits are estimates of the standard deviation, computed from the data and placed at equal distances on both sides of the centerline. The control limits are used to judge the extent of variation in the process. If the process remains consistent, the performance measures are expected to remain within the control limits. The upper control limit (UCL) and the lower control limit (LCL) for different types of control charts are calculated using special formulas that are beyond the scope of this lecture. Control chart software will automatically calculate the mean and sigma limits for your data set.