BENCHMARKING AS A MANAGEMENT TOOL IN DECISION MAKING

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Efforts to provide optimal care while controlling overall costs have led multiple health care disciplines to invest in outcomes evaluation and monitoring. The comparison of outcomes to internal and external measures is known as benchmarking.1 Benchmarking, a well-known business tool, is a term used to describe ongoing value measurement in industry-specific best practices.

Benchmarking is recognized as an essential technique for achieving continuous improvements in processes, performance measures, and operating efficiencies. These measurements are important for knowing an organization’s current status in comparison with competition or national trends. Additionally, a benchmark serves as a foundation of knowledge about current medical practice patterns that may guide decision making about future endeavors. In a business environment such as managed care that has a fundamental need for controlling cost, benchmarking can identify areas for improvement that can lead to practice innovations necessary to survive.2 Benchmarking is integral to organizational and management strategies whose ultimate goal is to improve, and not simply measure, performance.3

Benchmarking data in managed care is usually provided by retrospective evaluation of medical and pharmacy claims. Data collection, data warehousing, and electronic records research are essential activities to the benchmarking process. These, when used in conjunction with evidence-based guidelines, represent important components of efforts to improve patient outcomes and control costs of medical care.

Managed care pharmacy has demonstrated an increasing need for evidence-based guidelines to implement best practices in
formulary management, disease management programs, drug-use reviews, and other such activities. Table 1 shows some examples of online evidence-based resources. Evidence-based guidelines help professionals and patients choose the best available health care treatment options. In an era of increasing health care costs, the combination of benchmarking and the utilization of evidence-based guidelines provide managed care pharmacists with tools to assess whether practitioners and the health care system are providing quality care for their patients.

Factors that have influenced the growth and development of database studies are:

- the emergence of electronic records research,
- advancements in technology and computer capabilities,
- growth of medical research and outcomes-based clinical studies,
- concern about the rising costs of health care with a perceived nominal improvements in health outcomes,
- easy access to medical information via the Internet, and
- increased utilization of health care resources by various patient populations.

Evidence-based guidelines are developed by systematically reviewing and appraising available literature from multiple medical literature databases. It is a structured, yet multifaceted process of assuring that recommendations are based on evidence instead of anecdotal experience or other unscientific methods. Parameters such as quality, reproducibility, comprehensiveness, and type of study (e.g., clinical trial, meta-analysis, or case study) are used to grade the levels of evidence. For economic and decision analyses, the Centre for Evidence-Based Medicine at Oxford University has grouped the various sources into 5 levels of evidence.1 (Table 2)

This supplement presents information that illustrates the relationship between evidence-based medicine and benchmarking and explains how a benchmarking analysis is a useful management and decision-making tool for managed care pharmacists. The first article explains how to conduct a simple database study, including the strengths and weaknesses of a retrospective analysis. Following is a discussion that presents database management and applications of benchmarking from the perspective of managed care. Finally, case studies are presented to illustrate the application of the benchmarking process and its usefulness to managed care pharmacy.

DISCLOSURES

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REFERENCES


### TABLE 2

<table>
<thead>
<tr>
<th>Level of Evidence</th>
<th>Description of Evidence</th>
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<tbody>
<tr>
<td>1</td>
<td>Systematic review (with homogeneity) of level 1 economic studies. Analysis based on clinically sensible costs or alternatives; systematic review(s) of the evidence, and including multiway sensitivity analyses. Absolute better-value or worse-value analyses.</td>
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<tr>
<td>2</td>
<td>Systematic review (with homogeneity) of level &gt;2 economic studies. Analysis based on clinically sensible costs or alternatives; limited review(s) of the evidence, or single studies; and including multiway sensitivity analyses. Audit, or outcomes research.</td>
</tr>
<tr>
<td>3</td>
<td>Systematic review (with homogeneity) of level 3 studies. Analysis based on limited alternatives or costs, poor quality estimates of data, but including sensitivity analyses incorporating clinically sensible variations.</td>
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<tr>
<td>4</td>
<td>Analysis with no sensitivity analysis.</td>
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<tr>
<td>5</td>
<td>Expert opinion without explicit critical appraisal, or based on economic theory or “first principles”.</td>
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