

Finding Gaps in Quality and Value (Part 2)

By Sheri Strite and Michael E. Stuart, MD

In Part I of this series, we described the problem of inappropriate care in the United States and how solutions to cost and quality in health care can be effectively dealt with at the organizational level.

We began a consideration of the sequential phases of evidence-based quality improvement work, starting out with readying an organization for evidence-based quality improvement. Now, let's look at details of using the five A's¹ of evidence-based medicine to identify and close quality and cost gaps in health care organizations.

Once an organization creates the structural components, such as committees and work groups, and establishes processes for those groups, and once it ensures that staff have the needed knowledge, skills and tools to carry out the five A's of evidence-based clinical improvement (Asking, Acquiring, Appraising, Applying, A's Again), each group can begin to identify "fixable" or "closable" quality, cost, satisfaction and uncertainty gaps in clinical care.

The sequential steps in this evidence-based process are outlined in Table 1.

The Institute of Medicine outlined six quality domains (Table 2) which are useful in determining areas within an organization where there may be quality gaps and where quality may be improved.²

The size of the gap should justify the effort it will take to close it. To determine the size of the performance gap in a potential work area, groups need to compare internal organizational data (usually obtained from organizational databases) with the best available evidence (obtained from content resources, such as sources for guidelines, clinical recommendations or the medical literature itself.)

All the data must be appraised for validity unless they come from a trusted source such as Cochrane, Clinical Evidence or the Database of Reviews of Effects (DARE)—and must be updated and assessed for usefulness.

TABLE 1 	
Identifying Quality, Cost, Satisfaction and Uncertainty Gaps	
Ask & Acquire: Identify gaps and uncertainties; select projects	
Clinical improvement projects find and close gaps in key areas such as health care status, satisfaction of clinical staff and patients, utilization and cost	
Look for gaps between current and optimal practice based on internal organizational data and the best available evidence, or areas of clinical uncertainty	
At times gaps may be created by regulators.	
Generally you will benefit by preparing a written statement containing your preliminary best guess of the following:	
<ul style="list-style-type: none">• Rationale (introduction, background, summary of need/gap based on evidence)• Summary of what the project will accomplish• Required resources• Projections of outcomes (quality, cost and other considerations)• Implementation plan• Measurement plan	

TABLE 2



Quality Domains from the Institute of Medicine (IOM)

Domains	Requirements for Improving Quality
<p>Safety – avoiding injuries to patients from the care that is intended to help them</p>	<p>Requires attention to reducing errors.</p>
<p>Effectiveness – providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse).</p>	<p>Requires the identification of those interventions that should be put into practice through application of usable medical evidence which is valid and useful.</p> <p>Requires the identification of medical practices for which there is insufficient evidence or evidence of no benefit or harm through analysis of usable medical evidence.</p>
<p>Patient-centeredness – providing care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions.</p> 	<p>Requires attention to providing information to patients on issues of import to them such as benefits, harms, risks, costs, uncertainties and alternatives. Successful engagements between clinicians and patients include providing information along with warmth, empathy, respect, and frequently facilitating patients' choices while attending to individual patient preferences for decision styles. Successful communications with patients effectively supply knowledge, facilitate decision-making and/or describe potential actions to be taken.</p> <p>Requires sensitivity to patient care, comfort and emotional needs from the patient's point of view.</p>
<p>Timeliness – reducing waits and sometimes harmful delays for both those who receive those who give care.</p>	<p>Requires attention to access, coordination of care and patient pathways through the health system along with potential mechanisms for how care is made available to patients (i.e., in person visits, group visits, Web site care centers, self-management protocols, etc.).</p>
<p>Efficiency – avoiding waste, in particular waste of equipment, supplies, ideas, and energy.</p>	<p>Requires attention to all processes used in health care to reduce complexity and redundancy.</p>
<p>Equity – providing care that does not vary in quality because of personal characteristics, ethnicity, geographic location, and socio-economic status.</p>	<p>Requires a respectful approach to the individual and the individual's needs. It also requires respect for various populations.</p>

TABLE 3

The 5 “As” of EBM—Detailed Steps

<p>Clinical Content How to decide on the clinical content for your improvement project. What does the evidence say?</p>	
<p>Ask & Acquire: Apply systematic strategies to obtain evidence, filtering for strength of study design and for relevance</p>	
<p>Search for the best available evidence. This may be in the form of guidelines, clinical recommendations, studies of studies or original articles.</p>	<p>Formulate questions and search strategy and, pose those questions to the medical literature and to other sources for content to systematically obtain all potentially useful content</p> <p>Prioritize sources. It may be efficient to first consider guidelines, then systematic reviews and then primary sources.</p>
<p>Filter for appropriateness of study design and relevance.</p> 	<p>Review title and/or abstract to identify potentially useful content, screening for most appropriate method and applicability to patients and circumstances for care.</p> <p>Acquire selected information: If obtaining secondary sources such as guidelines, clinical recommendations or systematic reviews, you also need to search for important studies that may have been published in the primary literature after the date of the published article’s literature search.</p> <p>For committees and work groups, abstract key elements of study into an evidence table or evidence summary to help facilitate appraisal.</p>
<p>Assess work needed.</p>	<p>Are you comfortable that you have potentially sufficient evidence that can be adapted from another source, or will you need to develop your own content from the primary and secondary sources in the medical literature, and do you have the necessary resources available for this work?</p>
<p>Appraise: Critically appraise studies and content for validity.</p>	
<p>Assess validity (closeness to truth) and usability of information.</p>	<p>Become mindful of the pitfalls of the medical literature, research, clinical practice guidelines, QI improvements and other sources of content.</p> <p>Understand strengths of different methodologies for research, guideline development and clinical improvement projects.</p>

	<p>Assess selected content for relevance to population and your circumstances for care.</p> <p>Evaluate content for validity. This requires doing a formal analysis of study type and study methodology which is best done using a quality critical appraisal tool.</p>
<p>Appraise: Examine results of valid studies and content</p>	
<p>Examine the results of valid studies</p>	<p>“Usable Evidence” = Valid + Useful + Usable For valid studies and content, examine results by considering the following categories.</p>
	<p>Is the evidence:</p> <p>Useful • Effective</p> <p>Clinically significant – directly benefits patients in areas of morbidity, mortality, symptom relief, functioning and quality of life</p> <p>Size of study results – measures of outcomes (aka “estimates of effect”)</p> <p>Efficacy versus effectiveness (e.g., outcomes resulting from idealized conditions in research = efficacy/versus what is likely to happen in the real world = effectiveness)</p>
	<p>Appropriate • Relevant to patients</p> <p>Patient perspective – benefits, harms, risks, costs, uncertainties, alternatives</p> <p>Applicability – to which patients and under what circumstances</p>
	<p>Usable • Acceptable</p> <p>Will clinicians and staff accept this and apply it appropriately? Will patients accept and adhere to treatment?</p>
	<p>Actionable (e.g., is there FDA approval, is the change affordable, is it doable in your organization? Will you actually be able to apply the information and successfully implement the change?)</p> <p>Summarize validity and other results of your assessment, making a summary judgment.</p>
<p>Apply: Summarize and synthesize the evidence using systematic methods for combining information obtained from different sources</p>	

In Part I of this series, we indicated that frequently physicians, as well as quality improvement professionals and other decision-making health care professionals, lack the skills to effectively and efficiently search for, critically appraise and synthesize scientific evidence using processes that yield valid, useful and usable content likely to improve desired outcomes.

Individuals doing quality improvement work may benefit from training that can successfully provide the skills and tools for evaluating the medical literature. Training should improve competencies in finding and utilizing studies with appropriate designs, valid methods and useful results.

An approach we have found useful is to teach these skills using the five "A"s of evidence-based medicine:

- Ask – How to construct effective clinical questions
- Acquire – Tips and strategies for systematically capturing potentially useful content through awareness of the best sources for information, application of successful search techniques and filtering strategies
- Appraise – Concepts and methods for evaluating content for validity, usefulness and usability, along with organizational considerations (e.g., cost, legal, marketing, public relations and other value considerations)
- Apply – Using valid and useful content, how to synthesize the body of evidence, creating information, decision and action aids for use by clinicians, patients and others
- "A"s Again – When and how to repeat the process to ensure information is current

These sequential steps are summarized in Table 3 and can be made easier by utilizing various tools.

After completing the evidence synthesis, we strongly recommend making evidence-based estimates regarding local quality and cost outcomes followed by the development of information, decision and action tools, implementation plans and measurement plans. We will describe the details of these steps in Part III of this series. (Watch for it in the May/June 2005 issue of *The Physician Executive*.)

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References:

1. Modified by Delfini Group, LLC (www.delfini.org) from Leung GM. "Evidence-based practice revisited." *Asia Pac J Public Health*. 2001;13(2):116-21.
2. Institute of Medicine, Crossing the Quality Chasm, Washington, D.C.: National Academy Press, 2001.

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