EDITORIAL

Challenges in Measuring Adherence to Clinical Practice Guidelines

Whether 'tis nobler in the mind to suffer the slings and arrows of outrageous fortune, or to take arms against a sea of troubles and by opposing end them?
—Shakespeare, Hamlet

Family physicians have expressed a broad range of concerns regarding practice guidelines and other clinical policies. These concerns include (but are certainly not limited to) skepticism about the scientific accuracy of recommendations, uneasiness about infringement on autonomy in clinical care, and apprehension regarding potential adverse consequences if wrongly applied by third parties.1-4 But practice guidelines are here to stay, and the wise physician will carefully choose approaches that are well suited to the task of responding appropriately to the panoply of guidelines which daily cross our paths. The options described in Hamlet's familiar soliloquy need not be the only alternatives for responding to practice policies that are less than ideal. The slings and arrows of unacceptable guidelines should not be suffered, nor should we be foolish enough to believe that opposition to the concept of practice guidelines is likely to result in their disappearance.

One characteristic in which some practice policies fall short of ideal relates to the practicability of measurement of physician adherence to guidelines. In this issue of the Journal, James and colleagues describe their efforts to address several logistic issues related to measuring adherence to practice guidelines.5 They examine the Agency for Health Care Policy and Research (AHCPR) clinical practice guideline for evaluation and care of patients with heart failure in an attempt to develop review criteria incorporating the perspective of family physicians. Their efforts illustrate some of the challenges and limitations inherent in the measurement of selected aspects of physician performance.

The development of the AHCPR heart failure guideline has been described in detail elsewhere.6 After the guideline was developed, the AHCPR panel was asked to select which of the guideline's practice recommendations it felt were suitable for retrospective utilization review and quality assessment, and then to develop performance measures and standards of quality for use in monitoring compliance with their recommendations.

The report describing that process is fascinating reading.7 When asked to convert its 34 recommendations to measurable review criteria and standards of quality, the AHCPR panel was able to describe only eight appropriate criteria. In the words of staff for the panel,

...the most striking finding of Phase II of the heart failure guideline effort is the extent to which panelists objected to the use of most guideline recommendations for the purposes of assessing practice patterns. Objections were based on three premises: (1) there is a significant prospect for misuse of the recommendations by payers, attorneys, and administrators; (2) the recommendations cannot cover every conceivable clinical circumstance, so clinicians must remain free to interpret the guideline in light of individual patient characteristics; and (3) utilization review programs are already a major hassle for physicians and the use of additional recommendations could make the situation worse.

Other challenges to the process included concern about the lack of documentation even though services had been provided, questions about feasibility of monitoring, and disagreement of panelists with the panel's own recommendations.

It is little wonder, then, that a panel of 11 family physicians and 1 cardiologist struggled with developing review criteria for the same guideline. Although the authors characterize their methods


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as “explicit and rigorous,” the subjective nature of
the exercise is evident in the analysis. For in-
stance, James et al indicate that the satisfaction
of the family physician advisory panel with the
guideline was high and that it was considered to
be valid and useful as an educational resource for
family physicians. It is not clear, however, how
these conclusions were reached. Was this satisfac-
tion assessed by the panel’s global subjective judg-
ment arrived at through free-ranging discussion?
Was a Delphi-like approach used? Were explicit
measures and definitions of satisfaction and use-
fulness developed? Even the AHCPR panel that
developed the guideline apparently had reserva-
tions about the application of some of its compon-
ents, and one wonders how rigorously the au-
thors sought to establish disagreement with
certain aspects of the guideline.

There may be less unanimity among family
physicians regarding the acceptability of the
guideline than this study suggests. The AHCPR
guideline recommends that all patients with a di-
gnosis of heart failure should receive an initial as-
essment of left ventricular function by echocar-
diography, radionuclide ventriculography, or
contrast ventriculography. This recommendation,
accorded a B-level grade (supported by well-con-
ducted case-control studies, uncontrolled or
poorly controlled studies, or conflicting evidence
tending to favor the recommendation) apparently
means that the practice is not supported by ran-
domized controlled trials or well-conducted co-
hort studies. Some studies have suggested that
family physicians are less likely than other spe-
cialists to report adherence to this recommendation.8

Investigators at PRO-West, the Medicare qual-
ity improvement organization of Washington
State, recently conducted an assessment of con-
gestive heart failure care in 74 Washington State
hospitals during 1993. Although patients at-
tended by family physicians were less likely than
patients treated by cardiologists to have an
echocardiogram while hospitalized, the use of an-
giotensin-converting enzyme (ACE) inhibitors
was similar across specialties (unpublished data,
PRO-West, Seattle). Findings were similar in a
comparable study conducted by PRO-West in a
smaller number of hospitals in Alaska.9 Whether
such differences reflect lack of agreement with
guidelines after careful consideration, lack of
knowledge, or other factors is not known.

James et al describe their efforts as a translation
of the heart failure guideline into review criteria.
It would be more accurate to state that an attempt
was made to decide which recommendations
could be developed for review criteria. The re-
view criteria in Table 3 are actually the original
text AHCPR recommendations. The Institute of
Medicine defines review criteria as “systemati-
cally developed statements that can be used to
assess the appropriateness of specific health care de-
cisions, services and outcomes,” and distinguishes
review criteria from the guidelines themselves.10
The confusion between guidelines and review
criteria has been discussed elsewhere.11 Thus,
while the authors have addressed the potential for
measurability using a standard approach, consid-
erably more work would be required to show the
validity and reliability of specific medical record
criteria that could be used for physician
profiling and related activities.

James et al excluded 19 recommendations on
the basis of an assumption that compliance could
not be assessed by review of available data sources
(presumably the medical record). Many of these
recommendations are related to patient education
and counseling. It is not clear, however, that all of
these exclusions are necessary. For instance,
counseling regarding dietary sodium was appar-
tently excluded on these grounds, yet one of the
papers cited by the authors12 describes the extent
to which medical records reflected advice to re-
strict salt intake among Medicare beneficiaries
with heart failure (36.6 percent for fee-for-service
patients and 49.4 percent for health maintenance
organization patients). Physicians might not doc-
ument certain types of counseling, but it is incor-
crect to conclude that they cannot provide such
documentation.

This observation notwithstanding, James et al
accurately observe that current medical records are
frequently lacking with regard to documenta-
tion of counseling and recommendations. If these
interventions are indeed important, the appropri-
ate response should be to improve the medical
record rather than to discard the recommenda-
tion as being unmeasurable. The development of
checklists or other standardized forms incorpo-
rating the heart failure guidelines might stimulate
physicians both to provide and to document care
based on valid recommendations. Such a system,
which has long been in place for obstetric care,
represents an approach that will be familiar to many family physicians. The advent of the electronic medical record will provide numerous opportunities to assist physicians in recognizing, adhering to, and documenting recommendations based on good guidelines.

What can the practicing family physician learn from the study by James et al? First, they show that the task of developing criteria to assess adherence to practice guidelines, even those developed using high-quality methods, is fraught with difficulty. Physicians active in health plan, hospital, or office-based quality improvement activities should heed this lesson.

Second, the perfect should not be the enemy of the good. Others have begun to use the AHCPR guidelines as a tool to improve care for patients with heart failure treated by family physicians. These investigators measured some aspects of care that the authors of the present study considered not amenable to medical record review. When used to stimulate quality improvement activities, rather than to grade physician performance or make decisions regarding reimbursement, medical review criteria need not be perfect.

Third, findings in several of the studies cited above suggest that family physicians have an opportunity to improve outcomes among patients with heart failure by increasing the use of ACE inhibitors. James et al convincingly argue that measurement of this evidence-based aspect of care is feasible using medical records as maintained in everyday practice. Even family physicians who are not enamored of guidelines and performance measurement might examine this aspect of their own care for patients with heart failure. No payer, third party auditor, or research institution needs to know, but patient outcomes just might improve.

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References