

A Closer Walk With Health Care Guidelines: Does the Shoe Always Fit?

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Digesting guidelines can be a humbling experience. Sometimes they can be so generic so as to make their usefulness debatable, a most extreme example being the age-old adage from Patrick McManus: "There's two good times for fishin.' When it's raining, and when it ain't." Other times, they can be so exacting as to ruthlessly overrun the patient's needs and values like a Panzer division. Consider, for example, some of the most exacting diets that we have been bombarded with, so many of which have come and gone in just a few years - along with some of those who have ingested them.

The problem is, each patient is an individual. While evidence-based medicine has undergone a "greening" effect to accommodate both the physician's and patient's personal experiences and values - a topic [described in considerable detail](#) in this space previously.¹ - numerous studies have emerged recently which demand that the *progress* of the patient undergoing treatment be closely monitored. This is to allow constant revisions in the course of treatment along the way, rather than following a prescribed blueprint set in stone.

The first of these studies dealing with dynamic treatment plans emerged from Tuttle and indicated that there were as many as three approaches to be considered by the clinician in guiding decision-making, all of which were responsive to the patient's immediate condition, rather than that seen upon the initial visit: 1) protocol-based, abandoned only if the patient's response was poor; 2) a clean-slate approach with each visit; or 3) systematic reassessment of the patient's progress.

In other words, it was suggested that it was more reasonable to use a patient's response to treatment to inform ongoing clinical reasoning as opposed to following a rigid, predetermined protocol. Tuttle proposed a methodical approach, reassessing change only as it relates to functional goals. Regarding issues related more specifically to chiropractic, changes in active range of motion or pain centralization were considered to be better indicators than changes in pain intensity or the assessment of joint position. In addition, there [appeared to be limited evidence](#) to support the use of changes in segmental stiffness to guide ongoing treatment.²

When considering matters pertaining to complementary and alternative medicine (CAM), the problem becomes even more complex. In a study that assembled data from five randomized controlled trials evaluating six different CAM therapies with 884 participants, conjoining traditional quantitative outcomes with qualitative data from 327 individuals who completed post-treatment interviews yielded a startling conclusion. Basically, positive outcomes were not captured by standardized quantitative measures. Instead, a number of other factors had to be scrutinized: (1) increased options and hope; (2) increased ability to relax; (3) positive changes in emotional states; (4) increased body awareness; (5) changes in thinking that increased the patient's ability to cope with back pain; (6) an increased sense of well-being; (7) improvements in physical condition unrelated to back pain; (8) increased energy; and (9) increased patient activation. A small fraction of these benefits [were considered to be life-transforming](#).³

But the biggest salvo fired into the flank of rigid concepts of evidence-based guidelines comes from none other than [Jerome Groopman](#), the chief of experimental medicine at the Beth Israel Deaconess Medical Center in Boston and chair of medicine at Harvard Medical School. In a scorching review published in February of this year in the *New York Review of Books*,⁴ Groopman enumerated a growing list of repeated failures of expert panels to identify the so-called "best practices" in medicine. Some of these include:

- Medicare specification to tightly control blood sugar in critically ill patients in intensive care: These were shown not just to be wrong, but resulting in higher death rates compared to more flexible treatments and higher levels of blood sugar.
- Government-mandated normal blood sugar levels in ambulatory diabetics with cardiovascular disease: Fewer deaths resulted when blood sugar levels were allowed to vary.
- Medicare recommendations for hip/knee replacement by orthopedic surgeons: These were shown to have no effect.
- Federally prescribed measures for the treatment of patients with congestive heart failure: These were shown to have no effect.
- Federally mandated standards requiring patients on dialysis to receive statins to prevent stroke and heart attack: These were shown to have no value.
- Medicare recommendations requiring all patients with pneumonia to receive antibiotics within four hours of arrival at the emergency room: With the rushed diagnosis involved with this mandate, cases of heart failure or asthma were sometimes overlooked. Furthermore, this regimen was found to trigger some cases of antibiotic-induced colitis.
- Administration of erythropoietin to treat anemia: Deriving this recommendation from a meta-analysis, the author himself later found the benefits to be minor, with an increased risk of stroke or heart attack.

The solution to this dilemma is to take another look at medical recommendations that can readily be standardized without much further debate. The conclusion that one can make is that those recommendations which can be standardized are those that are not significantly altered by the condition of the patient. A perfect example would be the prescribed procedure for preparing and inserting a catheter into a blood vessel, avoiding infection.

What is it that leads to overreaching and getting burned sometimes in some of these "best practices"? According to Groopman, there are three common reasons why this may occur:

- Overconfidence bias: This is sometimes known as the "Pygmalion Complex" - falling in love with one's own work and skills.
- Confirmation bias: The tendency to discount or dismiss contradictory data.
- Focusing illusion: Otherwise known as missing the forest for the trees, such as the past example of prescribing estrogen as the single remedy to restore feminine youth.

Remember also that a keystone of traditional concepts of evidence-based medicine, the systematic literature review, is open to query and change. In an analysis of 100 such systematic reviews, [Shojania found](#) that a significant percentage required periodic updating: 50 percent in 5.5 years, 23 percent in 2 years, 15 percent in 1 year, and even 7 percent by the time of publication.⁵ This would suggest that even the most rock-ribbed elements of traditional concepts of evidence-based medicine are susceptible to change.

Groopman points out that this debate as to what constitutes meaningful "best practices" has reached the upper echelons of the Obama administration regarding U.S. health policy. Peter Orszag, director of the Office of Management and Budget, argues that behavioral economics should guide the delivery of health care, with the need to alter the providers' behavior through the aggressive promulgation of standards and financial incentives. Cass Sunstein (a professor of law),

on the other hand, supports a form of "libertarian paternalism" in which default options in health care should serve no more than "nudges" to reaching a private, individual decision in a health care encounter. In an interview on National Public Radio just two days before the passage of the Senate version of the health care bill, Obama himself contends that reformers should sustain physicians as healers and that no federal bureaucrat should come between doctor and patient in clinical decision-making.⁴

As Obama suggested so many times in his presidential campaign in 2009, *change* is the keyword for charting the best course of health care. Indeed, Carolyn Clancy, head of the Agency for Health Research and Quality, has pointed out so many times that clinical trials often do not reflect the real world. This is simply because they fail to account for changes in the course of illness. Such is to suggest that the most effective treatment plans in health care are not those which stipulate a forced march through a lockstep regimen, but rather something that closely listens to the patient through the entire course of clinical therapy and responds accordingly.

References

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