



“Ask Dr. J”



The “Ask Dr. J” columns are authored monthly by Jennifer Christian, MD, MPH, President of Webility Corporation. See previous columns at www.webility.md.

Dr. J’s columns also appear in the monthly Bulletin of the Disability Management Employer Coalition (DMEC). To purchase a book of Dr. J’s collected columns, go to www.dmec.org.

The columns often summarize issues discussed by the Work Fitness and Disability Roundtable, a free, multi-disciplinary e-mail discussion group moderated by Dr. Christian. Apply to join the Roundtable at www.webility.md.

November 2005 – Evidence-based Clinical Decision-making in Return to Work

Dear Dr. J:

If doctors should practice evidence-based medicine, shouldn’t they also write evidence-based return to work notes?

Louis in Lafayette

Answer – Part I:

Totally right, Louis! However, let’s just take a few minutes to make sure we’re talking about the same thing. There are actually two different kinds of “evidence” to talk about:

- The evidence produced by scientific research on HOW the physician should go about formulating his/her guidance to the patient/employer/insurer/court.
- The data upon which the physician bases that guidance.

Let’s start with some basics: What does the phrase “evidence-based medicine” really mean? And, what do we mean today when we use the phrase “evidence-based” clinical decision-making in stay-at-work or return-to-work setting?

A caveat before we go on: Please be aware that I have strong opinions on these issues, and those opinions have colored the paragraphs that follow! I suggest you check with others who know the state of the art in evidence-based medicine, and see whether they agree with me.

The best short definition I’ve seen for evidence-based medicine is Dr. David Sackett’s: He defines it this way: “Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. . . . integrating individual clinical expertise with the best available external clinical evidence from systematic research.”

However, the phrase “evidence-based medicine” has become a “buzz word” and like all hot topics, has been picked up by most everybody in healthcare who wants to sound cool. Once a phrase becomes popular or seems to be important, people start applying it to a variety of things, most of which are not the same as the thing the phrase was originally coined to describe. The term often gets distorted and misused. (“Managed care” is an earlier example, “case management” and “disability management” are others).

Few people realize that both of these areas are full of **illusions about certainty**. The current state of the science is PRIMITIVE in the area of return to work. There has been very little research done on the “most accurate” or the “most effective” way to determine functional ability, assign medical restrictions, and describe functional limitations. Likewise, the facts upon which physicians base their stay-at-work and return-to-work advice are usually vague, uncertain, inaccurate or non-existent. As an example, disability evaluations performed using the AMA Guides to the Evaluation of Permanent Impairment have not been shown to correlate with actual impairment of work capacity – at all! The elaborate, highly-complex and precise methodology prescribed by the AMA Guides obscures the fact that they are neither predictive of actual work capacity nor even predictive of actual functional impairment.

TABLE 1 - THE CURRENT STATE OF THE SCIENTIFIC “EVIDENCE” ON HOW PHYSICIANS SHOULD FORMULATE STAY-AT-WORK AND RETURN-TO-WORK GUIDANCE:	
<u>Type of knowledge concerning the best way for the physician to do the work</u>	<u>Availability</u>
Well-designed, unbiased scientific / medical research studies with clear results	Rare; almost none exist
Preliminary, weak, flawed, biased or conflicting scientific / medical research studies	Few; these articles have neither been systematically collected nor reviewed.
Guidelines based on rigorous systematic review of existing evidence in medical or other literature	<ul style="list-style-type: none"> • None exist yet. (The 2nd Edition of the ACOEM practice guidelines did not take an evidence-based approach to Chapter 5, Disability Prevention and Management, where guidance on formulating return to work advice is discussed.)
Codified expert knowledge / consensus opinion	<ul style="list-style-type: none"> • ACOEM consensus statement on the role of the treating physician in return to work (www.acoem.org) • ACOEM report: Preventing Needless Disability by Helping People Stay Employed (soon to be available) • AMA policy regarding physician’s role in return to work. • AMA Guides to the Evaluation of Permanent Impairment • Clinical reference material in Medical Disability Advisor by Presley Reed, MD
Authoritative advice by experts with or without references	<ul style="list-style-type: none"> • AMA Physician’s Guide to Return to Work • Miscellaneous articles and books by individual physician-authors • Medical school (isolated examples only) or

	continuing education courses (rare) <ul style="list-style-type: none"> • Advice from teachers / mentors
The physician's current personal fund of knowledge and familiarity with the world of work.	The most common evidence in widespread use today.

However, it's remarkable how, in the return to work or impairment evaluation setting, one person's opinion turns into the next person's objective fact. It seems almost miraculous – like water turning into wine. A doctor writes down some words and numbers on a slip of paper after making at best an educated guess – or even a totally wild guess – about a worker's ability to work, or their protective medical restrictions, or their anatomical/physiological impairment, or their functional limitations. Those words and numbers suddenly become a hard and fast edict, an immutable fact, or worse, "the final truth" in the eyes of the insurer, the employer, and a court.

If we want to improve the way the stay-at-work and return-to-work process works, we need to abandon the illusion that the doctor's first guess is non-negotiable and the correct one. We also need to stop taking the employer's first "no" response to a request to arrange temporary modifications to permit on-the-job recovery or make changes to accommodate workers with indefinite or permanent loss of functional ability.

We need to begin to look at the stay-at-work and return-to-work process as a dialogue – to acknowledge that what's going on between the employer and doctor is an exchange of information between the parties with the goal of enriching each other's knowledge of the situation. The communication exchanges should continue in iterative fashion until the parties arrive at the best possible solution under the circumstances – meaning, the employee is able to stay at work or return to work, or it is clear why not and the parties have agreed that the most appropriate solution is another outcome.

People who do not know much about the scientific method often have unrealistic expectations about how the scientific community does its work, what scientific research is, and what scientific evidence is like. It is understandable but incorrect to assume that:

- a. all the important questions/issues in medicine have been researched
- b. the research that has been done is good and has shown clear results
- c. the results of the latest scientific research are generally available to clinicians who should simply look up what to do and then do that!

First of all, it is nuts to expect that the only treatments that will be approved or should be given are those supported by scientific medical evidence if you define "evidence" as established and "settled" research results. For one thing, in many areas, no research at all has been done on a topic. If an issue hasn't been studied, by definition there is no "scientific evidence". We must remember that in order for research to be done (a) someone must want to do it and (b) someone must pay for it. The funded research agenda in this country has generally NOT included questions about return-to-work decision-making.

The British Medical Journal published a tongue-in-cheek article purporting to report results of a randomized controlled study on the effectiveness of **parachutes!** Obviously, it would be unethical not to mention inhumane to assign human beings to a control group and then push them out of an airplane in order to prove that parachutes save lives!

Experts say that only about 4% (yes, four percent) of all medical care delivered today in the US has a solid evidence basis. Compared to other areas of medicine such as diabetes or depression or heart disease, there is a dearth of research that has been done, and very little high quality evidence derived from research available for physicians as they evaluate the functional implications of various medical conditions, forecast medical risks and benefits of working, assess functional ability, and write activity/work prescriptions (restrictions and limitations).

This is how science works: Until someone decides to take a “rigorous” look at an area of life, people simply do their best – they make up their own way, or imitate the way that others do it, or do it the way that “authorities” say is the right way. Authorities often come up with explanations and theories about why things are the way they are.

The basic idea of the scientific method is to start with an assertion or a theory and then test it or compare it with another idea by observing, documenting, measuring, and comparing the results. When someone decides to start researching in a new area, the first studies they do are generally simple, quick, and rather crude. Almost always, no one is willing to fund big and complicated studies until it is pretty clear that there is likely to be paydirt – significant findings that makes the huge investment worthwhile. So, it is APPROPRIATE and GOOD for the first literature in a new area of inquiry to consist of case reports, case series, case-control studies. You could call these “pilot studies.”

What’s not good is to accept the findings of this type of pilot study or exploratory research as “proven.” Unfortunately, however, a lot of research never goes beyond the exploratory stage due to lack of interest by researchers or funding agencies. When the question arises whether to make big public health or system-wide investments in something, more solid evidence is needed – and the closest we ever come to a “gold standard” is when we have consistent results from a series of well-designed randomized controlled trials. It’s REALLY RARE to have that much evidence, though.

It really takes a LOT of work to assemble all the available studies, assess each one’s strengths and weaknesses, weigh them all against each other, see what they say as a whole, and come up with a reasonable overall assessment of what the evidence says you should actually do. In medical school, we did not learn much about how to read medical articles critically. However, after medical school, I went to public health school and took a year each of biostatistics and epidemiology courses. (My motto was “learn how to tell b---s--- when you hear it.”) I STILL defer to those who are really experts in evaluating research design. It’s simply ridiculous to expect every practicing clinician to learn how and have to the time to do this for themselves.

Look for Part II of the answer in December’s bulletin!

Smiling,
Dr. J

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