Often Wrong, Never in Doubt

By Eric Postal, MD [2]

It’s better to be honest in radiology.

I recently found myself in a brief discussion with a colleague about our differing approaches, and I suspect underlying philosophies, regarding a routine state of affairs in our diagnostic radiological world. On the one hand, having referring clinicians (and patients!) looking to us for definitive answers, and on the other, having their images turn out less than definitive.

My colleague was of the mind that, unless the imaging was totally worthless, he was best fulfilling his professional role by making strong declarations in his interpretations, even if it meant making no mention of uncertainties in the diagnoses he was rendering. A pulmonary angiogram with poor contrast timing and plenty of patient motion, therefore, would be no less certain in its pronouncement of “no embolism” than a pristine exam.

I understand the appeal of it. We like certainty, because so much of our reality is less than. There’s a reason most of our successful politicians (and wannabes in current primary races) do well, as they routinely make confident pronouncements on subjects they can’t possibly know everything about. For instance, promising specific courses of action they will take a year from now if they make it into the Oval Office, notwithstanding all that might happen between now and then. Including access to new information they’d (hopefully) receive during super top-secret briefings after being sworn in. So much do folks crave bold rhetoric about the world being black and white, rather than shades of gray, that those (political and otherwise) who take a more nuanced, reasonable approach—underscoring what we don’t yet know, what might change, and hedging bets to minimize losses—are commonly disregarded as being indecisive, weak, and mealy-mouthed. To the point that, even when a previous misstep has become painfully obvious, many persist in their erroneous course of action because “you don’t change a horse in midstream,” and doing so might make one seem a “flip-flopper” or “waffler.”

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I daresay we owe our patients, clinical colleagues, and radiological profession at least a little more respect than the typical political aspirant does to his would-be constituency. Yes, we might share the politico’s desire for popularity—he wants more votes, we want more referrals. But patients generally look to us with greater hope and expectation. Indeed, they should—and not just because broken campaign promises have become so commonplace as to be the rule rather than the exception—since medicine is considerably more scientific.

One wouldn’t, for instance, begrudge a NASA official the ability to express uncertainty as to whether a drone headed for Mars might land properly and function as intended. Nor a financial planner to caution his clients that a prospective investment might perform less than ideally, or an auto mechanic to be less than 100% sure that he’ll be able to find out why one’s car is making a strange
new noise. Indeed, such unbridled confidence might strike us as too good to be true, maybe a sign that the individual in question was not sufficiently considering all possibilities, or even trying to pull a fast one.

In other words, we—and others regarded as skilled, if not experts, in their fields—are not only sought out for our knowhow, but our honest appraisal of what we can do, and how reliably we can do it. Failing to address uncertainties when we are aware of them is asking for trouble...for instance, if one is in the practice of obtaining “informed consent” from patients but less than conscientious about detailing risks as well as benefits of proposed procedures. Indeed, we’re educated and trained so that we’ll not only be aware of our imprecision and uncertainty, but reasonably aware that it can be quantified. From undergraduate courses in statistics through “evidence-based medicine” CME, there’s really no avoiding concepts like standard error (or deviation), confidence intervals, sensitivity/specificity, positive (or negative) predictive value, etc. To have even a passing familiarity with this stuff, and then to pretend that it doesn’t apply to the work we do on a daily basis, seems Pollyannaish if not downright hubristic.