A Blink in Healthcare

Malcolm Gladwell has done it again! In June of 2001, in this space, I wrote, "Occasionally...I have reviewed a book that is relevant to our readership. Rarely, have I read a popular book that has more relevance to health care than Malcolm Gladwell's, *The Tipping Point* published late in 2000. The central thesis of *The Tipping Point* contends that ideas, behavior, messages, and products are often spread like outbreaks of an infectious disease."¹

Gladwell's newest book, *Blink*, has as its central thesis that great decision makers aren't those who process the most information or spend the most time deliberating but those who have perfected the art of "thin slicing" – filtering the very few factors that matter from an overwhelming number of variables.² As with *The Tipping Point*, I believe that *Blink* is more than just pop-cognitive psychology but rather could serve as a cleverly presented blueprint to implement much needed changes in health care. Let's examine more closely the concepts of thin slicing, less is more, and the ability to know our own minds.

Gladwell relates compelling examples to draw parallels between thin slicing and the malpractice crisis. For example, imagine you are given two choices. "The first is to examine the physician's training and credentials and then analyze their records to see how many errors they have made over the past few years. The other option is to listen in on very brief snippets of conversation between each doctor and his or her patients."² Gladwell's challenge to the reader is to figure out whom among the physicians covered by an imaginary insurance company is most likely to be sued.

The answer, of course, is the option to listen in on very brief snippets of conversation. How could this be true? Gladwell reports on research from around the nation including some in the medical literature that is very counterintuitive to the scientific model. It is possible, using videotapes and computer analysis, to zero in on the conversation between surgeons and their patients. After these videotapes have been so-called "content filtered," all that remains is a kind of garble that preserves intonation, pitch and rhythm but erases content. Using that slice and that slice alone, Gladwell reports that if the surgeon's voice was judged to sound dominant, the surgeon tended to be in the group that was sued significantly more often. If the voice sounded less dominant and more concerned, the surgeon tended to be in the non-sued group.

He goes even further. While explaining that "malpractice sounds like one of those infinitely complicated and multidimensional problems, but in the end, it comes down to a matter of respect, and the simplest way that respect is communicated is through tone of voice, and the most corrosive tone of voice that a doctor can assume is a dominant tone."² Gladwell admonishes readers to thin slice new physicians and, if you get the feeling a physician is not listening to you, listen to that feeling!

What about the notion of "less is more." Here, Gladwell relies upon the work of Lee Goldman, a well-known researcher and currently Chief of Medicine at UC San Francisco. The so-called "Goldman criteria" are a well-established set of algorithms for assessing patients presenting with chest pain and sorting out those at the highest risk for myocardial infarction. Gladwell brilliantly weaves these Goldman criteria, derived largely from Bayesian logic, into a story about the chaotic Cook County Hospital Emergency Room in Chicago, Illinois. By applying less is more

(the Goldman criteria) to patients presenting with chest pain, the Cook County ER noted a dramatic improvement in their diagnostic accuracy and ability to triage patients more appropriately. This is probably of no great surprise to our readers, but it was the context in which Gladwell put this that resonated with me. He noted that, "Extra information is more than useless; it's harmful; it confuses the issues. What screws up doctors when they are trying to predict heart attacks is that they take too much information into account."²

Gladwell goes on to describe the resistance to Goldman criteria even decades after they have been relentlessly retested in different environments. He understands our cultural resistance to the standardization of care and acknowledges the fact that many doctors believe algorithms just don't "feel" right. Gladwell notes that truly successful decision making relies on a balance between deliberate and distinctive thinking. We are the beneficiaries of years of Goldman's painstaking deliberate decision making using computers and large patient populations. The second lesson is that in good decision making frugality matters. Goldman's research proved that in picking up patterns, less is more. I think the less is more concept is actually firmly rooted in modern cognitive psychology. Cognitive psychology is the science that examines how we reason, formulate judgments, and make decisions.

Physicians are exposed to certain short cuts in reasoning at the bedside, often called heuristics.³ Sometimes, something called the "availability heuristic" leads us to make an inappropriate diagnosis. The availability heuristic is driven by the ease with which examples spring to mind. In other words, in the Lee Goldman example, we are sometimes hampered by cases with which we have had experience and lack ability to integrate information about new cases. A second shortcut in reasoning, the "anchoring heuristic," may also be occurring. This heuristic leads people to stick with initial impressions once they are solidly formed and ignore competing facts.³ In any event, I think Gladwell has translated the heuristics of cognitive psychology and the heuristic of a missed diagnosis into language we can more readily process and understand.

As for our ability to know our own mind, this was probably the toughest healthcare lesson I distilled from *Blink*. It goes something like this. Imagine if you were asked to describe the characteristics of your favorite jam and to rank all of the jams you may be given in a taste test. Most people would find this mundane example to be very trying, and we would claim that we know unconsciously what good jam is. We simply can't define it on paper. In fact, cognitive psychologists, according to Gladwell, have shown that we can be readily influenced about our ranking of the jam we prefer. In fact, we can adjust our true preference to be in line with a plausible sounding reason; for example, the idea that the texture of one jam is superior to that of another. What does all of this jam have to do with medicine?

It struck me that this ability to know our own mind plagues us when it comes to our conversation about the quality of medical care. Here's how it works. Gladwell contends that introspection messes up our reactions. If one were to ask, who is the best doctor or worst doctor on a particular medical staff, we might instantly jump to a conclusion but be bedeviled by the challenge to write our reasons for those choices on a piece of paper. Gladwell goes on to explain that, "This does not mean that when we are outside our areas of passion and experience, our actions are invariably wrong. It just means that they are shallow. They are hard to explain and easily disrupted. They aren't grounded in real understanding."² Luckily, he draws upon

research from around the world that says people who had a way to structure their first impressions, the vocabulary to capture them, and the experience to understand them usually make better decisions. I believe this ability to know our own mind, or lack thereof as the case may be, is a major roadblock to our collective attempts at internalizing a workable definition for the quality of medical care. Once we have solid evidence-based tools, we will be able to overcome this lack of ability to know our own minds.

Like *The Tipping Point*, *Blink* is not for everyone. Its provocative message regarding how we think challenges many of the tightly held, seemingly scientific aspects of our clinical decision making at the bedside. Whatever one's thoughts about *Blink*, I believe that if we would enhance our individual and collective ability to rapidly recognize and respond to the unexpected, we could go a long way toward improving quality and reducing medical errors. Gladwell has probably unknowingly looked into the soul of clinical practice and has given us a language to begin to understand its unfathomable complexities and stark humanity. As usual, I am interested in your views and you can reach me at <u>david.nash@jefferson.edu</u>.

References

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- 2. Gladwell M. Blink The power of thinking without thinking. New York: Little, Brown and Company, 2005.
- 3. Redelmeier DA. The cognitive psychology of missed diagnoses. *Ann Internal Med.* 2005;142:115-120.