Technology Takeover

You may have seen it on television or in the news recently. Some of the best players ever to play *Jeopardy!* were dominated by Watson – I.B.M.'s super-computer. It seems Watson's "knowledge" may make its way to the medical community sooner than we all thought.

An article in the *New York Times* [1] reports that I.B.M. is planning to collaborate with Columbia University and the University of Maryland to develop a Watson-like computer that acts as a physician's assistant service. Adding voice recognition, doctors could ask questions and the computer would provide a medically-correct answer. Some in the medical community predict this could change how doctors are trained and what they're expected to know.

"I have been in medical education for 40 years and we're still a very memory-based curriculum," says Dr. Herbert Chase, a professor of clinical medicine at Columbia University who is working with I.B.M. on the physician's assistant and was quoted in the *NY Times* article. "The power of Watson-like tools will cause us to reconsider what it is we want students to do."

On his blog, Dr. Kevin Pho commented [2] that having a technology like Watson available for doctors makes the traditional "memory-based curriculum" and closed-book certification exams for doctors obsolete.

"If I don't know the answer when I'm with a patient in the exam room, I look it up, or ask someone who does," Pho writes. "In this era of patient safety and emphasis on reducing medical errors, it doesn't make much sense to rely on rote memory to practice medicine."

Pho argues that board certification exams to test doctors should be open-book, and evaluate how well physicians can find necessary information, not what they can recall from memory. The comments posted in reaction to Dr. Pho's blog, though, suggest some disagree that this technology validates changing requirements for doctors to acquire a certain level of memory-based medical knowledge.

As one reader commented, in a field such as surgery, there simply isn't time to look up particular information. Watson-directed queries might work when caring for a stable patient, "but when a patient is tanking or they lose their airway, there's not even time to open up your iPhone."

There is no question that Watson-like technology could enhance doctors' work. The ability for a physician to quickly and easily find out information could improve decision-making and patient care.
However, the idea of changing the training of doctors and the knowledge base required of them seems to be too large of a jump. There is something to be said for earning 'MD' after your name to prove you have learned what you need to for patients to entrust you with their lives.

In my opinion, Watson-like technology should only be used as an aid for physicians, especially in the OR. Technology cannot 'take over' for a surgeon. Surgeons need to have the knowledge base to act quickly, efficiently and correctly, without relying on a computer to give them the answers. This knowledge is what makes surgeons and other doctors unique, what sets them apart from the rest of us and qualifies them to care for patients.

Would Watson-like technology be helpful for surgeons? Should it change the way in which surgeons are trained and educated? E-mail me at amanda.hankel@advantagemedia.com [3]

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