



Socrates on Quality

Following several hours of vigorous exercise on a warm afternoon in the spring of 410 BCE, Socrates converses with Asclepeo, a young medical student attending the Hippocrates School of Medicine in Athens. Asclepeo is telling Socrates about several recent lectures at the school on the subject of quality in healthcare.

Socrates: A wonderful afternoon, Asclepeo, perfect weather and time well spent exercising. Now, let us exercise our minds since we have finished exercising our bodies. How are you progressing at the medical school? Has any specific topic captured your interest?

Asclepeo: Yes, Master Socrates, I was particularly interested in several lectures that were given recently by members of our faculty on the topic of quality medicine. The professors at the medical school are trying to teach us methods for practicing high-quality medicine.

Socrates: Indeed, how interesting. And what exactly is this thing called quality?

Asclepeo: I learned, Master Socrates that quality is a good characteristic of things or events, and that it is very highly desired. The professors said that if I practiced high-quality medicine, more of my patients would recover from their illnesses, and those who recovered would feel better and be happier than if they had received poor-quality medicine.

Socrates: Indeed, Asclepeo, practicing high-quality medicine certainly sounds like a worthy goal. Did your professors tell you what were the elements of high quality and how you could measure these elements to see if patients were actually receiving high-quality medicine?

Asclepeo: Well, Master Socrates, I must admit that I was rather confused about what the actual elements of high-quality medicine were. The term they used to describe these measured elements of quality was “metrics”. The problem was that the different professors liked different metrics, and they disagreed about which elements or metrics should be measured to see if quality medicine was being practiced. So, I

really do not know what to think about this. There also seemed to be quite a lot of disagreement about how to measure these quality metrics. One professor showed us observations supporting a certain metric while another faculty member preferred a different metric.

Socrates: Again, most interesting, Asclepeo. And were you shown evidence that the presence of these metrics was related to something good for patients?

Asclepeo: Master Socrates, that was the most confusing part of the lectures. Most of the metrics measured did not predict improvement in the number of events that the professors called “outcomes”. I gathered that these outcomes were things like survival or measures of patient happiness and well-being.

Socrates: That does seem to be quite strange, Asclepeo. It would appear that the professors want to teach you to practice high-quality medicine, but they evidently cannot agree how to measure this thing called quality.

Asclepeo: Yes, Master, and one of the professors criticized the others and said that they really did not understand how to measure quality accurately. But the next day, another professor stated the same thing about the man who had criticized him the day before. We students were left wondering if any of them really knew how to measure quality. We wondered how we could ever practice high-quality medicine if there was no agreement between the professors concerning how to measure it and how to use it.

Socrates: Indeed, that certainly seems true. Did your professors discuss any observations that might help you? For example, could mathematics help to sort out which if any of these metrics might predict patient “outcomes” with greater accuracy?

Asclepeo: That, Master Socrates, was another confusing part of the lectures. The mathematically calculated observations that had been made often contradicted each other with some reports showing improvement in quality with a certain metric and other reports saying that this metric was worthless for predicting high quality. My classmates and I want to practice high-quality medicine, but it seems that no one can help us do this.

Socrates: Yes, that certainly sounds confusing. Did you happen to ask your professors if there was any way to recognize quality so that you could then follow the correct approach to achieve the practice of high-quality medicine?

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Asclepeo: Well, Master Socrates, we did ask one of the professors how he recognized quality so that we might learn to do the same thing. He said that he just recognized good quality whenever he saw it. And that it was the opposite of bad quality.

Socrates: Was that answer any help to you and your classmates in recognizing high quality yourselves?

Asclepeo: No, Master Socrates, that answer only confused us more.

Socrates: Well what did you and your friends decide after hearing the lectures and talking with each other?

Asclepeo: We decided, Master, that there needs to be a lot more study done in this area using mathematics and our own powers of observation. Hopefully, in the future we will be able to recognize quality just like our teacher was able to do.

Socrates: Yes, Asclepeo, it certainly sounds like a lot more work is needed in this area before it will have any value for the healthcare system.

As always, I welcome responses to this rather satirical editorial on our blog at amjmed.org. Supporting evidence for the questions raised in the Socratic dialogue can be found in the articles listed in the Suggested Reading list.

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Suggested Reading

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14. Writing Group for the CHECKLIST-ICU Investigators and the Brazilian Research in Intensive Care Network (BRICNet). Effect of a quality improvement intervention with daily round checklists, goal setting, and clinician prompting on mortality of critically ill patients. A randomized clinical trial. *JAMA.* 2016;315:1480-1490.
15. Huffman MD, Mohanan PP, Devarajan R, et al. Effect of a quality improvement intervention on clinical outcomes in patients in India with acute myocardial infarction. The ACS QUIK randomized clinical trial. *JAMA.* 2018;319:567-578.