



TECHNOLOGY

TECHNOLOGY AND THE
PHYSICIAN-PATIENT RELATIONSHIP

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Ethical analyses of new technologies tend to focus not just on the technologies themselves but on the ways we will use them. For example, the National Institutes of Health Web page on the ethics of CRISPR gene-editing technology notes that, while ethicists generally agree that CRISPR should be used in gene therapy, they have expressed concerns about its potential use in a regime of eugenics.¹ Yet, as a growing literature in science and technology studies has indicated, technology is not a mere means, a neutral tool capable of being used for any ends humans might specify. The substitution of complex technologies for traditional clinical tools carries implicit ethical values that influence our subsequent choices.

Consider the difference between two devices that general internists use daily: the stethoscope and the electronic medical record (EMR). The stethoscope fits the philosopher Martin Heidegger's description of a "simple tool."² As we use it, the stethoscope itself recedes from our attention, focusing our senses on the sounds of the patient's bodily functions. It becomes, in a sense, an extension of our bodies, and it brings us closer to the patient's own physical body. By contrast, the EMR tends to interpose itself between our patients and us, drawing our attention away from each patient toward a collection of facts about that patient. Often a series of "best practice advisories" generated by the patient's basic characteristics provides a to-do list for a clinic visit before we get to know the patient and her own values and preferences. The increasing demands of the EMR have led physicians to spend more time at the computer than at the bedside, and medical educators like Abraham Verghese have consequently expressed concern that the next generation of physicians may not learn how to perform an adequate physical examination.³

As this example suggests, the EMR is not simply an electronic version of the superannuated paper chart. Rather, it alters the physician-patient relationship and

reframes the way we pursue the goods of medical care. The EMR leads physicians to view their patients primarily in terms of those characteristics that can be captured electronically and processed by algorithms, such as age and cholesterol level. It removes these data from the context of the patient's unique life experience and treats the metrics as of utmost importance, obscuring the patient's story behind a cloud of data points. Increasingly, the EMR also exposes physician and patient data to third parties such as insurers whose reimbursements are tied to indices of "quality care" captured in best practice advisories, thus rewarding those physicians who complete such measures even at the expense of attending to the actual patient. As Verghese argues, such technologies also attenuate our human capacities for excellence, especially as we neglect time-honored aspects of medical care such as the physical examination.

Technologies, such as the EMR, also promote the kind of "solutionism" common in Silicon Valley in which complex human issues are reduced to technological problems and solved accordingly, as though we are just one "killer app" away from alleviating a previously intractable problem like poverty.⁴ Yet, as we physicians know well, our patients' complaints often cannot be resolved so easily. The vexing problem of chronic pain, for example, has proven more difficult to treat than experts once thought, contributing in part to the present epidemic of opioid misuse and overdose. The danger of technological "solutionism" for physicians is that when we encounter a problem that resists algorithmic logic we will discount or overlook it, thereby failing to respond to the needs of the actual patient in front of us. For physicians who subscribe to this ideology, the acknowledgment of such problems will become difficult precisely because it would threaten the conceit that modern medicine will overcome human vulnerability by the application of increasingly sophisticated technology.

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In response to these issues, physicians need not take the Luddite option and smash their office computers. Rather, we should begin by recognizing and testifying publicly to the foundational importance of the human physician-patient relationship. In a technological age, it is tempting for us physicians to think of our craft as a mechanical endeavor providing maximally efficient diagnosis and treatment. At our best, however, we can bridge the gap between our patients' personal experience of illness and the science of medicine. At times, technologies like the EMR can outperform us in the completion of certain tasks. Yet, the EMR cannot embed its technical logic within a healing human relationship. Such a relationship arises between two persons who share a common humanity, particularly the experience of vulnerability to disease and death. This relationship therefore makes possible the pursuit of virtues that would be otherwise unavailable, such as compassion, understood etymologically as "suffering-with."

A discourse that identifies the benefits of the physician-patient relationship may allow us to redesign or

redeploy technologies in a way that reinforces, rather than undermines, these goods. In particular, physicians may be able to justify interventions that promote the physician-patient relationship without appealing primarily to efficiency or cost-savings as a rationale, as is often the case presently.⁵ For example, we might argue that the documentation requirements for billing, a system made possible by the advent of the EMR, leads us to devote too much time to the computer instead of the patient, and as Vergheze points out, the EMR often contains and even replicates inaccurate information anyway. Only if we explicitly describe the benefits of the physician-patient relationship can we align technological and financial incentives for the appropriate use of technology. For those of us who hope to avoid being replaced by an artificially intelligent "iDoctor," such discussion about these goods could not be more urgent.

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