Ethical Use of Diagnostic Technology: Balancing What's New and What's Necessary

Commentary by JAMES GIORDANO, PhD, *Georgetown University Medical Center, Washington, District of Columbia*

Case scenarios are written to express typical situations that family physicians may encounter; authors remain anonymous. Please send scenarios to Caroline Wellbery, MD, at afpjournal@aafp.org. Materials are edited to retain confidentiality.

A collection of Curbside Consultations published in *AFP* is available at http://www.aafp.org/afp/curbside.

Case Scenario

For the second year in a row, my 38-year-old patient insisted on having a mammogram, even though she has no family history of breast cancer and no other risk factors. I recognized her anxiety and tried discussing it with her, but she was not interested in exploring the basis for her feelings. As it happened, the second mammogram showed a new density, which, after coned down views and a biopsy, was revealed to represent fibrocystic changes. After that, my patient increased her office visits, convinced she had a susceptibility to cancer. When the test became available, she began requesting breast magnetic resonance imaging (MRI), which I ordered against my better judgment. Recently, she was diagnosed with ductal carcinoma in situ (DCIS), and she is triumphant, insisting that she knew she would get cancer and that the MRIs saved her life. I can't argue with her perception of her illness, but I don't want to enter into a similar situation with another patient. Was it unethical for me to acquiesce to her requests? Is there an ethical ground for insurance to refuse payment for unnecessary tests?

Commentary

This case boils down to being realistic about what new screening tools and techniques can and can't do, and understanding their actual value in diagnoses. I'd argue that it is not unethical to accommodate a patient's requests, as long as the physician's approach to the patient, the pathology, the technology, and the decision-making process was pragmatically sound and prudent. However, careful negotiation, patient education, and relationship-building should support the physician's response.

Mammography is considered a standard screening tool for breast cancer.[1] Medicine will always develop increasingly more sophisticated tools, but they often serve different purposes and have varying levels of effectiveness. The current literature does not provide evidence to support routine use of MRI for breast cancer screening; however, the American Cancer Society recommends that women with noninvasive lesions of the breast (e.g., DCIS, lobular carcinoma in situ) discuss the benefits and limitations of yearly MRI screening with their physician.[2]

DCIS is a precancerous lesion with a low mortality rate.[3] Some argue that this localized pathologic finding should not be called cancer.[4] As a consequence of increased screening and number of screening methods, the diagnosis of DCIS has increased almost 20-fold in the past 20 years, and there has been a concomitant increase in overtreating these lesions as if they were cancerous.[5] In this case scenario, discussing these issues with the patient is important when providing information about the effectiveness of mammography, and whether MRI would provide any meaningful benefit—or difference—in her diagnosis or treatment. It's also important to take the time to explore why she was convinced she had a susceptibility to cancer, as the physician attempted to do. Such a discussion may enable a better depiction of this patient's intuitions, rationalizations, fears, and choices, and would be equally important to rule out hypochondriasis, somatization, or even delusory thinking.

Putting psychiatric consultation aside, what if the treating physician were adamant in refusing the subsequent MRI, and the patient sought another physician who

acquiesced to her request and provided the test—and a diagnosis of ductal carcinoma? Simply resisting her request without an open discussion of the risks and benefits of MRI could open the door for a host of potential legal issues. What if the patient had independent means to pay for such tests, even if they were of questionable necessity, or had health insurance that would pay? Could testing be justified?

These are the challenges physicians face in navigating and determining the use of resources and services for individuals and the public at large. It has been argued that as a public good, medicine must be genuine (i.e., do what it claims to do) and not be wasteful.[6] When dealing with new and scarce resources, a physician must work hard to balance these two concepts.

DETERMINING WHAT'S NECESSARY

There will always be exciting new medical tools and techniques. Additionally, patients have become increasingly savvy about the approaches to diagnosis and care that medical science can offer. These trends combine to encourage the use of new technologies, yet what can be done is not the same as what should be done. More is not the same as better. Although different can sometimes be an asset, at other times, using a number of differing techniques and technologies can waste time and resources, leading to overdiagnosis of clinically unimportant lesions, and resulting in less net benefit, or even real harm, on a variety of levels.

In response to this unhealthy trend, the Choosing Wisely campaign—a collaborative effort by 60 medical specialty societies—has issued more than 250 recommendations aimed at curtailing commonly used but unsupported tests, procedures, and treatments. See http://www.choosingwisely.org for more information. Physicians need not—and arguably should not—serve as economic gatekeepers[7]; instead, physicians contain costs by virtue of their role as stewards of knowledge and skill. As such, it comes down to staying up-to-date on what works, what doesn't, in what circumstances, and why, and using that information to guide clinical care and patient choices.

INSURANCE BENEFITS AND DIAGNOSTIC TESTING

There may be an ethical ground for insurance companies to refuse payment for unnecessary tests, but here, too, the ethical grounds are derived from your clinical judgment of what is necessary and what is not. Practical wisdom and fortitude are cardinal virtues of the physician that sustain the moral basis of medical practice.[8] Often, the opposite situation occurs, with the physician advocating to insurers for the use of certain techniques and technologies in his or her patients' best interests.

DRAWING A LINE

There are times when patients make unreasonable requests because of information they acquire from the Internet, other media, or friends and acquaintances. Sometimes they are adamant in their demands, to the point of straining the physician-patient relationship, which can lead to a physician acquiescing to patients' requests against better judgment. Putting a physician in this position is referred to as "trumping autonomy," and it is an ethical transgression of the relationship that the patient maintains with her physician. Although the patient's preference must play a role in a physician's decisions and recommendations, at some point it is necessary to execute a decision and take a stand. Doing so might mean having to tell a patient that you disagree with the request, opening the door for a discussion of why, and a possible referral for a second opinion.

A recent survey marking the two-year launch of the Choosing Wisely campaign suggests that balancing evidence in the context of the physician-patient relationship remains a challenge. At the same time, physicians are realizing that their practices must change.[9] With this in mind, it is crucial for physicians to articulate—and justify—their selection of diagnostics and therapeutics, as well as to enlist and sustain patient trust.

Address correspondence to James Giordano, PhD, at jg353@georgetown.edu. Reprints are not available from the author.

Author disclosure: No relevant financial affiliations.

REFERENCES

1. LeFevre ML, Calonge N, Dietrich AJ, Melnikow J. Mammography screening for breast cancer: recommendation of the U.S. Preventive Services Task Force. *Am Fam Physician*. 2010;82(6):602, 609.
2. American Cancer Society. http://www.cancer.org/. Accessed January 20, 2014.
3. Carlson RW, Allred DC, Anderson BO, et al. NCCN Breast Cancer Clinical Practice Guidelines Panel. Breast cancer. Clinical practice guidelines in oncology. *J Natl Compr Canc Netw*. 2009;7(2):122-192.
4. Esserman LJ, Thompson IM Jr, Reid B. Overdiagnosis and overtreatment in cancer: an opportunity for improvement. *JAMA*. 2013;310(8):797-798.
5. Virnig BA, Tuttle TM, Shamliyan T, Kane RL. Ductal carcinoma in situ of the breast: a systematic review of incidence, treatment, and outcomes. *J Natl Cancer Inst*. 2010;102(3):170-178.
6. May WF. Contending images of the healer in an era of turnstile medicine. In: Klein EP, Walter JK, eds. *The Story of Bioethics: From Seminal Works to Contemporary Explorations*. Washington, DC: Georgetown University Press; 2003:149-164.
7. Pellegrino ED, Thomasma DC. *For the Patient's Good*: *The Restoration of Beneficence in Health Care*. New York, NY: Oxford University Press; 1988.
8. Pellegrino ED, Thomasma DC. *The Virtues in Medical Practice*. New York, NY: Oxford University Press; 1993.
9. American Board of Internal Medicine Foundation. Unnecessary tests and procedures in the health care system. What physicians say about the problem, the causes, and the solutions. http://www.choosingwisely.org/wp-content/uploads/2014/04/042814_Final-Choosing-Wisely-Survey-Report.pdf. Accessed May 13, 2014. ■