

Value, Technology, and Our Role As Surgeons: It's Time for a Call to Action



To the Editor:

Recently at this year's AAOS annual meeting during the combined AANA/AOSSM specialty day, a speaker posed a question to the audience: "How many of you make decisions about technology based on cost?" Not a single surgeon in the room of thousands raised their hand. The speaker's conclusion was that it was "good that no one is constrained by cost."

We all went into surgery in part because of an affinity for using our hands and technology to help patients in amazing new ways. However, is it really "good" that physicians have no accountability or interest in unmitigated technology cost? Are we entitled to the luxury of the latest incremental improvement, no matter what the premium cost to our system and our patients? This concept, although apparently ubiquitously accepted by sports surgeons, defies common sense when viewed from a system perspective. How long can we afford to be ignorant of opaque technology cost and pretend that our only concern is the medical treatment of the patient while our reimbursements, which provide clinical care and stem from the same source, continue to decline? Perhaps some decision making from the person most accountable to the patient and competent to assess technology is in order? Perhaps we should engage our industry partners to value cost containment as much as usability, the "wow" factor, and theoretical surrogate end points for clinical success, such as wear simulation rates in total joints or pullout strength of screws. To quote C. Everett Coop, "Americans have three incompatible basic demands when it comes to health care: immediate access, the latest high-tech medicine, and a limited price."¹ It is generally accepted that only 2 of these demands may be satiated at 1 time. We have some hard decisions to make.

Humans have always been superb technology makers and tool users. However, we are not the only example of a complex organism evolving tools to improve its quality of life. Take as an example *Megaloceros giganteus*, the now extinct Irish elk. The gigantic antlers of this once magnificent animal were initially excellent tools for securing a mate and fighting off predators. Selection pressures increased the size of its antlers to such a span and great biological cost, they may have contributed to its demise by decreasing its ability to adapt to climate and resource changes, as well as additional hunting pressures.^{2,3} We must take heed of this metaphor and ask

ourselves, is technology driving medicine, or is medicine driving technology? Only the surgeon can decide.

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Synthetic Grafts—Where Is the Common Sense?



To the Editor:

With great interest, we recently read the article entitled "Synthetic Devices for Reconstructive Surgery of the Cruciate Ligaments: A Systematic Review" published in the May 2015 issue of *Arthroscopy*.¹ Thank you for acknowledging our skepticism about the resurgent use of synthetic grafts in your editorial commentary.² At first blush, this systematic review of synthetic implants, particularly the Ligament Augmentation and Reconstruction System (LARS) device (Surgical Implants and Devices, Arc-sur-Tille, France), shows quite good results, almost too good to be true. However, this highlights one of the inherent problems with systematic reviews. In other words, the science and methodology are sound and well intentioned, but they tend to encompass investigations with bad science, significant confounding, or notable conflicts of interest. Many of the included papers that are reviewed reveal subtle sources of bias: selection bias in sedentary patient recruitment, reporting bias with a lack of patient-reported functional activity