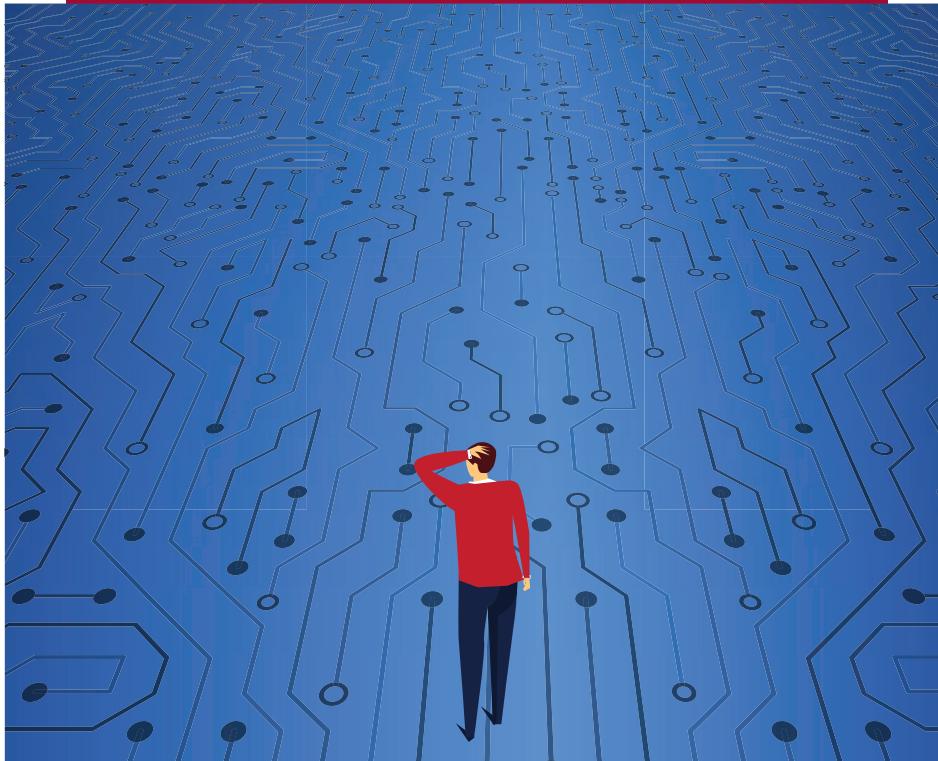


# Trustee Insights

## HEALTH INFORMATION TECHNOLOGY



## Understanding the True Cost of Clinical Technology

**Hint:** It's not really about the price

BY ANTHONY J. MONTAGNOLO

For the past few years, “prices” in health care have generated some eye-popping headlines in the press — most notably drug prices. It is not news to anyone in health care that the prices providers pay for drugs and for health care technology seem to rise every year. Further, providers face the daunting task of needing to buy ever-increasing amounts of

technology just to keep pace with clinical innovation.

For decades, our organization has researched prices paid by providers for everything from gauze pads to MRI systems, and we have provided guidance on how to purchase technology cost-effectively. Not surprisingly, providers focus aggressively on getting the best possible purchase price, which, in theory, makes good sense. In practice,

though, this approach may ironically get in the way of making the most cost-effective decision.

Why? Simply put, true costs include much more than the initial purchase price. Providers generally know this but still do not apply this concept effectively or consistently. Briefly, the concept of life-cycle costs originated many years ago and is not really a novel concept at this point. But it is worth revisiting because it makes a huge difference in determining what choices are truly the most cost-effective.

### Life-cycle Cost Analysis

Without getting too detailed, the idea behind life-cycle costs is to understand all the costs incurred over the life of the product. The initial purchase price is a critical cost



### TRUSTEE TALKING POINTS

- Smarter technology decisions are essential to your organization's long-term success.
- The true costs of technology should be measured in terms of both value and values.
- Your management must understand all the costs incurred over the life of new devices.
- A narrow focus on the purchase price could inhibit cost-effective decision making.

to account for, but one must also look at the cost of maintenance or service contracts, the cost of required disposables or ancillary devices, the implementation costs, the cost of integration with other systems, the cost of training, and so forth. Frequently, those additional costs make a huge difference when summed over the life of the device — so much so that what looks like the least expensive alternative,

analysis in an environment in which people are stretched for time. Quite simply, one cannot make a cost-effective technology decision if the true life-cycle costs are not evaluated. Trustees should request to see that supply chain management uses life-cycle costs as a standard operating procedure in its analysis of alternative proposals.

More specifically, trustees should ask the leadership to set a threshold

concept that has been maligned by some thinkers, it must be applied to technology decisions in the era of decreasing reimbursement and risk sharing we now face.

It may feel odd to try to assess the cost-effectiveness of technology because organizations can associate “new” technology with “better” technology; but this assumption is not always valid. The recent case of Theranos provides a stark and striking example of why we need more real cost-effectiveness evidence before we all jump on the proverbial bandwagon. In this case, Theranos claimed it had developed a revolutionary technology that could test patients for various diseases using only a pinprick’s worth of blood — rather than a more conventional blood draw.

The excitement around this technology led the company at one point to be worth \$9 billion. Its board of directors had included two former secretaries of state, a former secretary of defense, two former U.S. senators and several other equally high-profile executives. Unfortunately, it was eventually discovered that the technology simply did not work. It was “new” technology, just not “good” technology. The company is now defunct.

Clearly, in this case, not enough checks and balances were in place to make sure this technology proved its benefit.

### Making Wise Choices

Even if a technology does do what its maker claims, that does not mean it is actually worth doing. And by worth, I mean literally *worth*. While this may sound like a financial

based on initial price, may turn out to be the most expensive upon more careful analysis.

While life-cycle cost analysis will be understood by virtually all the technology buyers, we see organizations frequently (1) fail to do a life-cycle cost analysis altogether, (2) fail to do a life-cycle cost analysis properly, or (3) fail to act or understand the implications. While the costs of many of these technology decisions are clearly substantial, it seems that many organizations find it hard to find the time to do the analysis properly. The current strategy to reduce costs seems heavily weighted toward initial price negotiation rather than a more holistic view of costs.

Smarter technology decisions and better understanding of true overall costs are essential to long-term success. But these goals require disciplined thought and

upon which all capital purchases over a specific amount must have a completed life-cycle cost analysis as a matter of standard operating procedure. Also, trustees should ask whether the supply chain management team provides training and the necessary tools for its staff to understand and implement life-cycle cost analyses properly.

### Proving the Benefit

Assessing the true costs of technology alternatives provides the foundation for what should become an even more important task: assessing the cost-effectiveness or true value of the technology alternatives. Ultimately, the true costs of technology should be measured in terms of value, which implies an understanding of cost-effectiveness. While cost-effectiveness is a

analysis, it is actually much more than that. It is really an assessment of value and values — what we define as important. For example, we may judge something as having an unproven clinical benefit, but we may decide to acquire it because we are committed to the “value” of doing research in that area.

On the other hand, the opportunity to invest more wisely — and ultimately to reduce costs and get better outcomes — becomes possible when we carefully look at not just what we choose to acquire, but also at the level of sophistication and configuration we choose. Experts in our organization have seen overbuying on multiple occasions. This presents the opportunity for better, more efficient purchases. Oftentimes, overbuying happens unwittingly because quotations for technology are frequently long, confusing, and filled with options that may not be truly needed or useful. However, taking the time to break down what is actually being quoted and matching that to what is truly needed can save significant money.

For example, our staff saw an organization about to purchase a bi-plane catheterization system when it really only needed a single-plane catheterization lab. No department director or clinician apparently had taken the time to question the purchase when it was proposed

to senior management. But that unnecessary addition to the quotation was not difficult for our team to spot, and we ultimately saved that organization \$600,000.

To lessen the likelihood of these unnecessary expenditures, trustees should ask management to review its capital budget process to ensure there is an internal control review of each item — not simply from the internal department but also at the enterprise level — preferably by a clinical/technical individual or group to provide that check and balance.

## Conclusion

Trustees have two opportunities to help shift the mindset in their organizations. The first opportunity would be for trustees to help their organizations focus their clinical technology decision making on total costs of ownership — not on initial costs — by asking what the life-cycle costs are when reviewing decisions and budgets. The second opportunity would be for trustees to ask what process is being used to ensure that the benefit analysis considers cost-effectiveness and that critical checks and balances are used to help evaluate the specific configuration quoted in large technology purchases.

Given the size of many health care systems today, it may even be wise for health care leadership

## TRUSTEE TAKEAWAYS



For value-driven decisions about clinical technology, trustees should ask management to:

- Use life-cycle costs as a standard operating procedure for analyzing alternative proposals.
- Set a threshold upon which certain capital purchases must involve a life-cycle cost analysis.
- Provide training and tools for staff to understand and implement cost analyses properly.
- Review its capital budget process to ensure an internal control review of each new device.

to create a new senior vice president or director of clinical technology assessment whose focus is to ensure that clinical technology investments are truly beneficial and cost-effective. Smarter decisions about clinical technology will save significant dollars in large and small organizations alike if decision making is approached in this way. It may take a little time, but it will be “worth” it in the end.

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