By Vince Ciotti and Dick Schopp

The Biggest IT Mistakes Made by Small Hospitals

Since electronic medical records (EMRs) and computer provider order entry (CPOE) have become the ne plus ultra *lately in healthcare IT, small hospitals have been spending millions of their scarce and hard-earned dollars on them—often, unwisely.*

At a Glance

When purchasing an IT system, small and rural hospitals should avoid such common mistakes as:

> **Choosing the wrong size vendor or system. Smaller hospitals should consider vendors of roughly matching size. Why? Large vendors command hefty prices of $10 to $100 million from academic medical centers and integrated delivery networks. In contrast, small vendors typically can offer a complete HIS for under a million dollars to critical access hospitals.**

> **Paying too much for products or services. Even small hospitals can afford to negotiate. Vendors set their list prices high, expecting providers to negotiate for a lower dollar amount.**

> **Overestimating ROI based on larger providers' experiences. Smaller hospitals do not generally achieve the amazing ROI claims made by IT vendors.**

Below are the biggest mistakes we have seen small facilities make in acquiring hospital information systems (HIS), and the steps necessary to avoid repeating them.

Wrong Size

The biggest mistake is acquiring the wrong size system from the wrong size vendor. Just as small hospitals are very different from large ones in terms of the breadth of services, size of staff, and financial resources, so do HIS vendors vary enormously in terms of the size and complexity of their systems, financial size, and number of employees. There are roughly three tiers of HIS vendors.

Large. These vendors have revenues in or near the billions of dollars, many thousands of employees, and products of enormous complexity, installed primarily in large hospitals with more than 300 beds, academic medical centers (AMCs), and multi-hospital integrated delivery networks (IDNs).

Medium. These vendors have revenues in the hundreds of millions of dollars, employees numbering about a thousand, and products of medium sophistication installed primarily in "typical" community hospitals of 100 to 300 beds.

Small. These vendors have revenues in the tens of millions of dollars, several hundred employees, and products with simpler design and complexity installed primarily in small hospitals with less than 100 beds.

The foremost reason a hospital should consider vendors of roughly matching size is the price the large vendors' systems command: AMCs and IDNs readily spend $10 million to $100 million for a complex HIS, which is how the large vendors that serve them have grown to their billion dollar size. Implementing these wide and deep systems requires devoted staff for many years, at levels often exceeding what AMCs' large (100+ FTEs) IT departments can muster, and requiring additional costly FTEs from "consulting" firms. When implemented, these sophisticated systems' complex file building, screen painting, and report writing can require a large number of IT personnel to maintain and support, tasking the budgets of even large hospitals that spend as much as 5 percent of their annual budgets on IT.

Contrast this with the typical experience of providers that choose medium-sized vendors' systems, where capital costs are usually $2 million to $10 million for a 100- to 300-bed facility. Small vendors typically can offer a complete HIS for under a million dollars to critical access hospitals. Annual maintenance fees likewise vary directly with a vendor's size, with large firms charging up to 30 percent of their license fees, medium vendors charging about 20 percent, and small vendors charging in the range of 12 percent to 14 percent. Add in the costs of additional IT staff required to run the sophisticated larger systems, and you can readily see why small hospitals tend to buy systems from small vendors. The accompanying chart illustrates this congruence between vendor and hospital sizes. Note: There are exceptions to these simple size categories. For example, one very large HIS vendor has built a new HIS from scratch targeted specifically to the small hospital market.

Even the smallest vendors set their list price at a higher level than they intend to close for, expecting some discounting and negotiations.

Overpaying

Another mistake small hospitals make is that they pay too much for products and services. Smaller facilities often believe they have no clout with vendors, and so they pay list price or close to it. In truth, even the smallest vendors set their list price at a higher level than they intend to close for, expecting some discounting and negotiations to lower their net.

Also damaging to negotiation leverage is the common practice of announcing a "winner" in the selection process, usually called a vendor of choice (VOC), and *then* starting the negotiating process. This practice effectively ends concessions before they begin, as vendors will only offer their lowest price when they feel they might lose the deal. To get provide negotiation leverage, small hospitals should announce two finalist vendors and then negotiate concurrently between them. Yes, it does take more time to go back and forth from one vendor to the other to negotiate contract terms and

conditions in detail, but it's the only way to get a fair deal—and 20 percent to 30 percent off of list price. When you consider a small hospital typically spends about $1 million on a system, that's no small change.

Overestimating ROI

The third most common and perhaps the saddest mistake that small hospitals make is to believe the amazing ROI claims in magazine articles or IT conferences concerning EMRs and CPOE. Vendors and consultants regularly tout the millions of dollars their systems and implementation services can yield, with payback promised in only a few short years (if the CIO and CFO survive that long). Large AMCs with significant endowments can afford the risk and investment associated with the substantial process reengineering and work flow analysis needed to achieve these levels of ROI. Also, should the project not deliver, such organizations can simply go back to their endowment funds and try another system. Smaller organizations don't have the safety of such resources.

Consider, too, that stultifying bureaucracies and gross inefficiencies at large healthcare facilities typically have created the wasted time and efforts such ROI projects typically claim to have "saved"

purchasers. Compare 30 or more nurse stations at a large teaching hospital with the single patient care unit at most critical access hospitals, and you can see how difficult it might be to achieve large ROI in a small, well-run facility. Granted, there are always improvements one can make in any facility and an IT conversion can be a fine catalyst to change outmoded processes. However, this certainly isn't grounds to tell your board that an entire IT investment can be recouped in a few short years. Instead, it's best to consider IT to be an investment in modern technology, like a 64-slice MRI, and leave the inflated ROI promises to the salesmen.

Buyer Beware

Many good objectives can be accomplished with IT in the small hospital setting: EMRs and CPOE can help reduce medical errors and improve quality of care. But the financial risks of overspending for a system or not having the resources to properly implement and support it can offset any benefits in the same few nanoseconds the system takes to process an order. As always, caveat emptor.

Vince Ciotti is a principal, H.I.S. Professionals, LLC, Orlando, Fla. (vciotti@hispros.com).

Dick Schopp is a principal, H.I.S. Professionals, LLC, Chicago (rschopp@hispros.com).

Three Tiers of HIS Vendors

	Annual Revenues	Number of Employees	Typical Client Bed Size	Typical Price Range for Total HIS	Maintenance Fees as % of License Fee
Large	$300M to $2 billion	2,000 to 6,000	300+ beds, AMCs, and IDNs	$10M to $100M	25% to 30%
Medium	$100M to $250M	1,000	100 to 300 beds; community	$3M-$10M	18% to 24%
Small	$10M to $100M	100 to 1,000	100 beds and under; CAHs	$1M to $2M	12% to 14%

Three Tiers of Hospitals

	Traits	Typical Bed Size	Number of Nurse Stations per Facility	Typical Size of IT Dept.	Typical Annual IT Budget
Large	Tertiary care medical centers, AMCs, multi-IDNs	300 to 2,000 acute care beds	30+	100 to 1,000 FTEs	$10M to $100M
Medium	Urban, suburban, community	100 to 300 beds	10 to 20	10 to 100 FTEs	$2M to $10M
Small	Rural, community, CAHs	25 to 100 beds	1 to 10	Fewer than 10 FTEs	$1M and under