A new report card on surgery information systems is out, the first in 3 years. The report from KLAS Enterprises reviews the 8 top surgery software systems. KLAS is an independent firm that compiles user ratings of health care software. The new report, titled Surgery Management 2010: In Pursuit of Advanced Functionality, is based on interviews with 509 providers (users) at 426 organizations.

Adoption of the basic functions has hit a plateau; nearly 90% of respondents are using scheduling and nurse documentation. Surgery departments are now branching into other applications where hospitals can improve efficiency and profitability, KLAS notes. Among these are revenue cycle management, materials/inventory management, and patient tracking.

Most-used functions

Here’s a look at the most widely adopted functions:

- **68%** of respondents are using some type of revenue management tool as part of their surgical information system. Examples are systems that allow departments to pull charges directly from physician preference cards. Epic, Surgical Information Systems (SIS), and Meditech had the highest percentage of customers using these tools.
- **66%** of respondents use their surgical information system for inventory/materials management, up from 53% in 2007. Cerner and McKesson saw the biggest increase in adoption.
- **51%** use patient tracking systems—electronic boards that track patients’ status through surgery. But there’s a big range—91% of Cerner customers use patient tracking, while only 29% of Unibased System Architecture (USA) customers do. Other vendors fall in between.
- Anesthesia documentation is catching on but slowly, adopted by **27%** in this study versus only **5%** in 2007.

Thumbs up, thumbs down

Scheduling software, the function most ORs have been using the longest, is the area users are most satisfied with. Also highly rated are patient tracking and medical device integration, though these are still in limited use.

Tissue tracking and inventory/materials management cause the most frustration. Only **66%** of organizations KLAS interviewed use inventory/materials management software in surgery, while **27%** have automated tissue tracking.

Inventory/materials management “is an area that is still struggling,” Mark Allphin, research director, clinical/ancillary for KLAS, told OR Manager.

“We saw in the study that the complexity of getting the OR system interfaced with the materials management system and getting everything just so tends to be difficult.”

For tissue management, part of the challenge is defining tissue management, he says. “A lot of systems have the ability to keep an implant log, but that is different from track-
ing tissue from the loading dock to the point of use,” which standards and regulations require.

Many users report they are still tracking tissue on paper or using third-party software until their vendor’s functionality improves, KLAS finds. This is the first time tissue management was included in the surgery system ratings, and Allphin acknowledges the information is limited.

**Advanced reporting**

Though not specifically measured in the study, advanced reporting of data from their OR software is increasingly important to users, KLAS found in its interviews.

In general, the enterprise vendors (Cerner, Epic, and Meditech) “do not let them easily access the data they want,” KLAS finds. The nonintegrated systems, especially GE Healthcare, Picis, and SIS, “tend to perform much better in this area.”

**Vendor ratings shift**

Ratings for OR software vendors have seen a shift since the 2007 report (chart). Cerner and McKesson have dropped in the ratings. McKesson, number 3 in 2007, is now last at number 8. Cerner is down from 5th to 7th.

Leading the list are USA and Epic OpTime. The other vendors, Meditech, Picis, Surgical Information Systems, and GE Centricity Perioperative, remain in the middle of the pack.

In market share, Meditech is first with 731 installations followed by McKesson with 592; Cerner with 425; and Picis with 331, according to HIMSS Analytics. Epic is fifth with 303 installations, and USA has 19 (chart).
System maintenance and ease of use seem to be the biggest frustration users have with McKesson’s Horizon Surgical Manager (HSM), Allphin says. “We spoke with several sites that felt the system was more costly to maintain than they expected,” he notes.

“Customers also complained that the nurse documentation was not user friendly and took too long to complete.”

There was also optimism. “Several Horizon customers expressed confidence that future versions of HSM would resolve many of these issues,” Allphin adds.

Cerner continues to have success in selling its integrated software suite, as hospitals look to achieve a comprehensive EHR, KLAS finds. If the whole hospital adopts Cerner, the OR tends to go with Cerner’s SurgiNet system.

“We do hear about the positive impact integration has on SurgiNet,” Allphin says. “But a lot of customers are not as happy with the surgery-specific functionality.” In fact, he notes, SurgiNet received the lowest average rating for functional strength in the study, which refers to users’ satisfaction with particular features and capabilities of the software. Among frustrations KLAS says users expressed about Cerner were implementation and support after the implementation.

On the other hand, customers who have been using SurgiNet longer “seem to be much happier with the system,” Allphin says, and like its flexibility.

Cerner has made a jump in the number of customers using its materials capability—up to 73% from 20% in 2007. SurgiNet also had the highest adoption of nurse documentation and OR resource scheduling.

“With their mature customers, they are making strides,” Allphin observed. “It would seem the new customer base is what has caused some of the drop in their scores.”

How ratings are compiled

KLAS says the performance ratings are based solely on input from users of the software, which is compiled in a live database that is updated daily.

Software users (managers or above) submit their evaluations confidentially using a structured process. KLAS then conducts phone interviews to verify that the person submitting the evaluation is a manager or above (or has been approved by the manager to submit the data) and is not a consultant or a vendor. KLAS says it validates the data using quality screens.

For the 2010 report, 39% of those submitting data were OR directors or managers, 31% were IT directors or managers, and 15% were chief information officers, with the rest consisting of CEOs, chief medical officers, administrative directors or managers, physicians, and RNs.

KLAS data and reports are available for purchase. Hospitals that submit data can access data at a reduced rate. More information is at www.KLASresearch.com.