

# Total Cost Of Ownership

## *Exposing the “Hidden” Costs of an Emergency Department Information System (EDIS)*

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## **All EDIS offerings are not created equal. The amount of time and resources needed to implement and maintain them vary widely. Savvy hospitals look beyond the invoice price to determine the total cost of ownership.**

Hospitals across the nation are talking about electronic health records, trying to figure out what to do and how to allocate the time and budget resources to execute their plans. In the emergency department (ED), the EDIS is now taking center stage.

Healthcare reform is expected to increase ED patient volume significantly, adding 30 million newly insured citizens to a healthcare system already understaffed, overfilled and bursting at the seams. If this occurs, patient volume will surpass the capacity of primary care, causing more and more people to seek help in the urgent and emergent care settings. The most acute cases will flood the ED, forcing hospitals to address inefficiencies. When this happens, the right EDIS could mean the difference of a hospital adapting and becoming more efficient or closing its doors.

Implementing an EDIS could help address many of the challenges that hospitals face, both now and in the future. Automation could eliminate extra time spent locating lost charts and delayed or lost bills. The right workflow could eliminate manual processes, allowing hospitals to reallocate staff. Data captured could help hospitals demonstrate Meaningful Use to qualify for much-needed ARRA reimbursement. The improved accuracy and level of detail in clinical documentation provided by an EDIS can also help hospitals prevent reimbursement lost through “never events” and improve defensibility during RAC audits.

Today, hospitals face the critical decision of selecting an EDIS to provide these key benefits in a cost-effective way. To help make the best choice, hospitals should be sure to compare total cost of ownership.

### **Beyond Licensing Fees**

Unfortunately, too many facilities are falling into the trap of looking at only licensing fees when evaluating the cost of an EDIS. However, it is critically important to consider all of the costs of selecting, implementing and maintaining an EDIS, adding up all direct and indirect costs to determine the total cost of ownership of each solution.

To determine the total cost of EDIS ownership, hospitals must examine three key factors:

- Content development
- Implementation time
- Maintenance costs

## Content Development

One of the first questions a hospital reviewing EDIS options should ask is: “What *exactly* will each vendor provide?”

The answer can be more complex than one might expect, particularly in terms of content. Some vendors provide all EDIS content. Others offer “configurable” content, which gives hospitals the ability to drive content structure and selection while burdening them with the responsibility of content development. These types of systems also take clinicians away from patient care in order to perform the administrative tasks of content development. Moreover, the additional training and education required to ensure the necessary expertise in areas such as workflow optimization, clinical decision support and regulatory compliance can be very costly for an individual facility.

Clinician time devoted to content development adds up quickly: the labor costs of redirecting three to five full-time clinicians can cost as much as \$300,000 per year. If hospitals cannot spare clinicians and need additional resources, they may be forced to hire consultants to do the work. In other words, hospitals must have a clear understanding of their existing clinician capabilities and availability in order to calculate the true cost of content development.

Complete, quality content should be an important part of any EDIS selection. Many EDISs offered by enterprise vendors and best-of-breed vendors are intended for individual departments such as the ED, but require significant content build and maintenance by hospital clinicians. Complete, quality content enables more complete documentation, improving patient care while promoting accurate reimbursement. In the end, the depth and breadth of content can have a significant impact on revenue.

## Implementation Time

It’s also important to consider how long it will take to get an EDIS up and running, as extended implementations can cost hospitals more in time, expenses and lost opportunities.

Hospitals must consider the staff required for the implementation. This not only includes IT and ED staff, but also registration, health information management (HIM) and other ancillary departments. The time commitment required for each employee and associated labor costs should be factored into the total cost. In addition, a larger hospital staff requirement means the project will be more difficult to schedule and execute, increasing overall costs.

The probability of implementation delays can be very costly and should be factored into any decision. Other departments may be waiting for IT upgrades, particularly with an enterprise system. Many of the resources needed for those other projects may be tied up in a long EDIS implementation. In addition, for hospitals counting on ED data for ARRA reimbursement, timing is essential. A quick, successful implementation is a critical step in demonstrating meaningful use.

The final piece of implementing an EDIS is acceptance and adoption by ED clinicians. Training is imperative, and hospitals need to anticipate the training and learning curve associated with implementing each system. Usability plays a significant role in amount of training required. An intuitive system requires less time for clinicians to feel comfortable using it while one that’s more challenging to use takes additional time and resources to train and incentivize employees to use it. Furthermore, with the volume of staff rotating in and out of the ED, training is not a one-time event but an ongoing concern. Hospitals should plan with the long-term view in mind.

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## Maintenance Costs

Even after a hospital has implemented an EDIS, the work is not finished—and costs can continue to accumulate. For example, all EDIS solutions require system and content upgrades over time. However, not all vendors include upgrade costs in the licensing fee, with some tacking on an 18 to 20 percent annual maintenance fee. Also, if content updates are handled by the hospital, there can be additional labor costs, both for education and training as well as time spent developing and implementing new content.

Meanwhile, regulatory compliance requires a significant level of time and attention. Hospitals failing to adhere to new regulations risk accruing long-term costs in a variety of ways, from lost reimbursements to repayments identified in RAC audits. Vendors providing automatic updates reduce the risk of noncompliance. Automatic updates also decrease labor costs for ED staff to research and develop new content as new regulations take effect, as well as the IT staff time needed to implement updates. Without automatic updates, a hospital will absorb those labor costs, and, if using an enterprise system, may face delays in implementation. The staff may choose to wait and bundle ED updates with others across the system.

## Bottom Line

Any hospital implementing an EDIS should be prepared to dedicate time and resources to a successful implementation. At the same time, hospitals should expect EDIS vendors to be clear and upfront about the scope of work required, from both the vendor and the hospital. Experienced, reliable vendors will work with hospitals to present the total cost of implementing an EDIS, allowing each organization to make a fully informed choice about how to best meet the needs of patients, clinicians, the ED and the hospital.

## Discussion

For questions regarding how to determine the total cost of an EDIS or to connect with hospitals experienced in making EDIS selections, please contact:

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### Taking Action – Six Strategies for Uncovering the “Total Cost” of an EDIS

- 1. Ask potential vendors for help** – They should have a tool that helps you determine the full scope of costs based on all of the involved factors.
- 2. Go beyond the demo** – What you see isn't always what you get; an EDIS solution offering “configurable content” often requires a hospital to build its own content, so make sure you understand exactly what each vendor offers.
- 3. Check references** – Talk to hospitals using each EDIS solution under consideration. Get a sense of the experience they've had implementing and using the solution.
- 4. Examine through an ED lens** – Evaluate the ED focus of each vendor and solution. The more tailored a solution is to ED use, the more quickly and efficiently it can begin meeting your ED's unique needs.
- 5. Determine impact of timing** – Outline the estimated implementation time for each vendor and solution to see when the ED will start realizing the solution's benefits and estimate the likely staff time needed during implementation.
- 6. Consider other IT initiatives** – Different EDIS solutions require varying levels of hospital IT support; understanding what's needed will help you determine what's workable for your hospital.

