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Making the Emergency Department Profitable With IT

How to center your hospital system's finance strategy around the ED and how an EDIS (Emergency Department Information System) can help.

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Emergency departments (EDs) are often looked upon as a hospital's "money-loser" — the place where CFOs agonize over ways to rationalize costs. This viewpoint is not surprising when you consider that many EDs are expensive, inefficient, overcrowded and struggling to keep their doors open. ED pressures could very well be exacerbated by an ever-increasing number of patient visits attributed to the aging population and a greater number of people becoming insured under healthcare reform.

Despite the ED's significant challenges, it is a unit that deserves a great amount of attention. It generates approximately half of hospital admissions¹ and 45 percent of a hospital's overall revenue, on average². Cutting costs in the ED will only take a hospital so far — instead, the hospital should focus on optimizing the ED's performance in order to maximize revenue potential.

There are three key ways in which a hospital can drastically improve an ED's performance and, thus, profitability: throughput, charge capture and coding. Improving these areas and making the ED the centerpiece of your facility's revenue enhancement strategies makes smart financial sense.

What follows is a description of how a hospital can leverage an emergency department information system (EDIS) to improve the ED's financial position while driving better results for the entire healthcare enterprise.

RAISING THROUGHPUT

Overcrowding is a problem plaguing many hospitals. The number of hospital-based EDs decreased 3.3 percent between 1998 and 2008, according to a study published in the May 18 issue of the *Journal of the American Medical Association*. During the same period, ED visits increased from 94.8 million to 123 million, or 30 percent. Overcrowding leads to an increased number of walkouts (patients who leave without being seen) and diversions (when a hospital stops accepting patients by ambulance because it is at capacity).

There are many short- and long-term consequences associated

with patients who leave without being seen (LWBS). Aside from obvious safety concerns (negative patient outcomes increase as wait times increase), walkouts and diversions equate to less income. The average facility charge for an ED visit is \$500³. Each hour spent on diversion may cost the hospital approximately \$1,000 in lost revenue⁴. Walkouts and diversions also rob the hospital of downstream revenue opportunities: a patient who is fed up with waiting or whose ambulance is diverted is less likely to visit again in the future or recommend the hospital to others. Since people typically get their first impression of a hospital from the ED, satisfied ED patients are more likely to return to the hospital for elective procedures, tests and deliveries, rather than choosing a competitor.

To prevent walkouts and diversions from occurring, hospitals must maximize throughput. The faster an ED can turn over its patients, the more patients it can handle each day, and the lower its LWBS rate is. Higher throughput increases an ED's capacity to see patients, allowing the facility to increase its potential revenue. Moreover, increasing throughput improves the quality of care because people who need to be admitted can enter the hospital faster. Ultimately, when a hospital can fill available beds more quickly, revenue increases.

Many pay-for-performance programs use throughput to measure a hospital's efficiency and quality of care. Such programs are becoming increasingly popular and lucrative for hospitals. The ED at Canonsburg General Hospital (CGH) in Canonsburg, Pa. received maximum reimbursement through Highmark BlueCross BlueShield's QualityBLUE Hospital Pay-for-Performance Program as a result of its impressive throughput rate improvement. CGH implemented a best-of-breed EDIS and leveraged the patient-tracking feature to improve teamwork; used system timestamps to measure and generate performance reports; and employed a "patient-arriving-by-hour" report to estimate staffing needs. As a result of these and other improvements, the ED reduced the average length of stay by one hour (21 percent); decreased door-to-doctor time by nine minutes (34 percent); and reduced downtime between shift changes by one hour (66 percent). In addition to the revenue generated from the pay-for-performance

program, the CGH ED saved a substantial amount of money as a result of increased throughput.

BETTER CHARGE CAPTURE

While seeing more patients will certainly increase revenue potential, it is essential to capture — on both the facility and professional side — an appropriate level of service charge. This can be a real challenge in a busy, fast-paced environment such as the ED.

Today, there are no rational standards for hospital assignment of evaluation and management (E&M) codes. Currently, Outpatient Prospective Payment System (OPPS) states that facility billing guidelines should be designed to reasonably relate the intensity of hospital services to the different levels of effort represented by the codes.

Many hospitals use a “point system” to determine the E&M component of facility charge. Each facility typically develops its own point system. Review of this type of system has yielded many missed opportunities to capture all interventions or resource items used in patient care. As a result, facilities undervalue their E&M services. Compounding the issue, nurses often have the burden of marking the “point sheet” at the end of patient care. This does not represent the best utilization of a nurse’s skills and takes away from patient care. Forward-thinking EDs are switching from point systems to a “threshold intervention” method of calculating E&M levels. The threshold method is more reflective of the intensity and resources used to care for patients.

Nursing clinical documentation is the basis for the E&M code calculation. A well-designed EDIS can raise average facility E&M coding levels because it imbeds the threshold intervention approach into its E&M code calculator, removing human error from the calculation and allowing the nursing staff to focus solely on patient care. This type of EDIS also standardizes patient documentation to enhance clinical care, regulatory compliance, patient safety and reimbursement. Content can be updated continuously to support current industry standards, and standardized documentation removes the guesswork and subjectivity from clinician workflow.

Rather than depending on nurses to check off boxes and coders to total the points, an EDIS can automatically capture all intervention-based resource elements. Some facilities have adopted the American College of Emergency Physicians (ACEP) facility guidelines. While an EDIS should not prompt nurses to document interventions for the sole purpose of justifying a higher coding level, it should alert them when they omit data implied by other elements they have documented. For example, if a nurse documents that an intravenous (IV) infusion was administered but does not record the IV start or stop time, the nurse should be prompted to enter that information. Without that information recorded, the ED will lose revenue.

Improper and insufficient documentation of procedures can be costly: many EDs lose as much as \$30,000 to \$40,000 per month in lost infusion and hydration services alone. By eliminating common human errors in charge capture, an EDIS can more than pay for itself. For example, PeaceHealth St. Joseph Medical Center in Bellingham, Wash., experienced drastic improvement in charge capture after it implemented an EDIS. The hospital went from having approximately 30 IV start/stop documentation errors per day to only one, saving the facility \$666,855 per year.

IMPROVED CODING

If the hospital employs the ED doctors, the Hospital Information Management (HIM) department typically takes on the responsibility of coding. If the doctor works for an independent practice or staffing company, the practice or a third party will handle the professional coding. In either of these scenarios, the EDIS should be interfaced with the billing application or an enterprise data repository so that coders can verify the patient records.

By suggesting E&M codes based on thorough documentation, an EDIS makes the coders’ work more efficient. An EDIS solution can also provide coding summaries that assist coders to quickly and efficiently abstract what occurred and choose or confirm the correct codes. Last but not least, an EDIS facilitates appropriate coding because the records are accessible and legible — unlike some paper charts and charge slips.

An EDIS vendor should thoroughly train ED clinicians and ancillary staff on the use of its product. But the vendor would be remiss not to offer training to the HIM department and to third-party billing company coders.

Additionally, hospitals should request that the EDIS vendor or an outside coding consultant periodically review the ED’s charge master to see if it is up to date. In many cases, facilities are missing codes in their charge master that they could use for additional billing, or they still have codes in their charge master that have been deleted from CPT. Even if an ED has the best documentation and the best coders, it cannot bill for codes that are not in their charge master with a dollar amount assigned.

Looking ahead, it is undeniable that the transition to ICD-10 will greatly affect EDs. ICD-9 contains approximately 13,600 codes, while ICD-10 contains roughly 69,000. Many vendors will have to perform extensive content build and revisions in order to comply with ICD-10. Therefore, it’s recommended that hospitals search for a solution that is complete and ready to use “out of the box.” With the right electronic health record (EHR) system that offers specific, standardized documentation, ICD-10 will improve reimbursement for hospitals. Indeed, fewer rejected claims could mean \$200 million to \$2.5 billion in additional reimbursement for hospitals⁵.

Following the transition to ICD-10 in 2013, there will be a period when hospitals will inevitably lose revenue unless they

can mitigate the productivity loss. One study estimates that ICD-10 could slow down providers by as much as 15-20%.⁴ Those that have an EDIS strategy will be better suited to manage the complexity of adding tens of thousands of new codes. However, the EDIS must be easy to use and not require extraneous mouse clicks and screens that would reduce efficiency. It should also alert users when documentation is missing to ensure that all elements and the higher level of specificity are captured for maximum reimbursement. An increase in denied claims would slow cash flow and raise bad debt; the need to rework improperly coded claims would also take a toll on staff productivity. To avoid these problems, hospitals are well advised to install an EDIS with ICD-10 capability prior to the October 2013 deadline.

RETURN ON INVESTMENT

A well-run ED should perform periodic reviews of its entire revenue cycle management operation. There are always areas for revenue enhancement, and it is important to ensure that the ED is taking advantage of those opportunities. An EDIS should ultimately add value in three key areas: efficiency, quality of care, and coding and billing optimization. If it creates value in those ways, it should bring a return on investment in less than a year.

PeaceHealth St. Joseph Medical Center (referenced earlier) estimated that its EDIS has an annual financial benefit of more than \$1.1 million. The main components of this improvement include \$226,000 in transcription savings, \$192,000 due to the

elimination of non-billable charts, savings of \$666,000 attributed to improved infusion documentation, and \$54,000 in savings as a result of reducing its LWBS rate. Additionally, the ED's average door-to-doctor time has dropped 36 percent, increasing throughput and patient satisfaction.

Another ED in Mississippi that treats approximately 25,000 patients a year was losing money before it implemented an EDIS. After implementation, the ED reduced wait times, increased throughput and optimized its coding process. In addition, the ED hired its EDIS vendor to conduct a charge master gap analysis. As a result of the analysis, the EDIS vendor recommended that the hospital added 174 codes on the facility side and 172 codes on the professional side. The combination of all of these changes had a dramatic impact on the ED's financial picture: in the first year, the ED projected a potential increase of \$2 million in facility and professional fee revenue.

CONCLUSION

Hospitals derive immense benefits from having an efficient, well-run ED that can take care of patients quickly and well and that can maximize appropriate admissions. High throughput, comprehensive charge capture, and automated coding based on complete documentation will maximize ED revenue and the ED's overall financial contribution. Technology specifically designed for the ED's unique requirements can help hospitals achieve all of these goals.

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- 1 *Annals of Emergency Medicine, Volume 56, Issue 2, Pages 150-165, August 2010*
 - 2 *National Health Statistics Reports, Number 26, August 6, 2010*
 - 3 *Annals of Emergency Medicine, Volume 48, Issue 6, Pages 702-710, December 2006*
 - 4 *Annals of Emergency Medicine, Volume 48, Issue 6, Pages 702-710, December 2006*
 - 5 *RAND Science and Technology Policy Institute, "Cost and benefits of implementing ICD-10," 2011*

