



TeleTracking

Patient Flow Automation for Healthcare™

Automation of Patient Flow Increases Hospital Efficiency

After decades of squeezing inefficiency out of hospital operations to stay afloat, the word from Washington is “squeeze some more.”

That seems to be the way most hospital executives are looking at healthcare reform. A recent study by hospital staffing company ANM Healthcare indicates that a majority of executives believe reform will hurt patient care and their bottom lines.

Reducing staff will become less of an option than in the past. Staff cuts and similar measures may help in the short-term, but could provide risks to care. A PricewaterhouseCoopers report projects that a 300-bed hospital with poor quality metrics could lose over \$1.3 million a year, starting in 2015, and because the results will be published online, losses could snowball because of damage to the hospital’s reputation.

This has left hospital executives scratching their heads. After buying into industrial efficiency concepts like six sigma and Lean Production, what else is there to do?

For starters, they can look to the origin of those concepts, which have their roots in industrial automation. The advent of efficiency programs was an acknowledgement by corporate leadership that technology alone was not enough to guarantee quality. Generally, the purpose of those programs was to make sure people and technology were humming along at the same pitch, in order to optimize the overall manufacturing process.

The same thing is happening in healthcare, only in reverse. After focusing on people-oriented efficiency programs for decades, a sizable number of forward-thinking hospitals have discovered that people alone can’t guarantee quality.

These hospitals have incorporated workflow technologies of various types into their operations with stunning success. The technologies speed processes, eliminate redundancy, provide valuable business intelligence, and perhaps more importantly, impose accountability on the people involved.

From inventory management to patient flow, accountability is making a difference in revenue returns. That’s because by recording current performance, the technology helps set the stage for incremental but steady performance improvement as people search for alternative processes.

An example is the growing use of logistic control technology in patient flow. In combination with process improvements, this technology relieves overcrowding, shortens ED wait times, eliminates time lags in the flow process, and allows patients to be quickly admitted to the right bed for the appropriate treatment. It also creates historical records of staff performance which allows them to be measured against expected performance standards.

Patient flow tools such as these allow hospitals to serve a higher volume of patients with existing capacity, essentially doing more with the same resources. They also help hospitals forecast human resource needs on a shift-by-shift basis, permitting further cost savings. This has a direct impact on the bottom line.

Most importantly, in the context of healthcare reform, they help ensure that patients have timely access to the kind of care they need at the quality level they deserve.

In a hospital setting, automation can overcome territorial barriers by linking departments together with effective communication and by providing valuable data and analytics that help with key decision making across the system or facility.

Capacity management and bed-tracking systems automatically trigger patient flow communications and alerts, drastically reducing the number of phone calls required to move a patient from Point A to Point B. By automatically alerting housekeeping when a bed needs to be cleaned, signaling admissions when it is ready, and paging transporters about a pending discharge, the systems tremendously reduce time lags and errors throughout the many steps of the process.

Some of the same features can have substantial impact in fighting hospital acquired infection, which is sure to be a key issue under reform. Currently, manual infection control processes can unintentionally create gaps in communication, leaving housekeepers and transporters vulnerable to inadvertent exposure to HAIs by entering an isolation room without warning.

However, the real-time nature of patient flow automation permits instantaneous alerts for all appropriate personnel, who can then take measures to greatly reduce the chance of inadvertent HAI exposure as well as the risk of spreading it into the broader hospital population.

This capability takes on greater importance given the fact that reimbursements for HAI-related hospital stays will be reduced by the US Department of Human and Health Services (HHS) starting in October 2012. The LOS for an infected patient currently is four times that of a non-infected patient. The Congressional Budget Office (CBO) estimates that this provision will save \$7 billion over the next ten years. HHS also plans to publish re-admission rates to force hospitals into addressing the infection problem more conscientiously.

A newer dimension of patient flow automation, Real Time Location Systems (RTLS), also will play a larger role in cost reduction through efficiency as payment bundling under healthcare reform places a greater focus on improving patient flow and discharge planning.

RTLS is already saving early adopters hundreds of thousands per year in unnecessary equipment costs by keeping much tighter control on inventory location, quantity availability and time lost in searching for devices. It also plays a role in reducing HAI exposure by tracking a wide range equipment, from beds and wheelchairs, to crash carts and IV stands, which may have been involved in the treatment or transfer of infected patients.

The automation of transfer center operations is another way to increase efficiency of patient flow in preparation for healthcare reform. Hospitals can reduce delays and administrative challenges, while eliminating diversions, increasing referral volume and enhancing patient outcomes.

While healthcare reform will take years to phase in, the time to prepare for this storm is now, with a renewed focus on improving the efficiencies of your hospital operations.

The combination of best practices with a workflow automation application, has proven to be a critical tool that assists organizations to achieve efficiency, reduce risk of error, improve delays and diminish lost admissions, all while improving relations with referring physicians.

The healthcare reform storm will soon be touching down. Hospitals can't fix what they can't measure. Arming your hospital with workflow automation and monitoring solutions centered on patient flow will not only help reduce overcrowding and improve operational efficiencies, but will help you deliver better patient care. At the end of the day, it's all about patient outcomes.

About TeleTracking

TeleTracking Technologies is the world-leading producer of automated patient flow solutions and services helping to relieve hospital overcrowding and improve throughput. TeleTracking's revenues have grown at an average rate of 24% since 2003 and have grown to over 225 employees throughout the United States, Canada and the United Kingdom. The privately-held, Pittsburgh-based firm has over 1,750 patient flow solutions installed and working in more than 800 of the best-known hospitals and health systems in the United States, Canada and the United Kingdom. TeleTracking

was first to recognize patient flow as a "continuum of actions and activities involving many people." It launched the automated patient flow industry in 1991 with BedTracking®, the first automated bed turnover solution and has since introduced a number of industry-standard firsts to its patient flow portfolio, including the electronic bedboard®, healthcare's first digitized way to manage patient placement and hospital census. TeleTracking interests also include its consulting division, Avanti Patient Flow Services, and its wholly owned subsidiary, RadarFind, a real-time location system provider with unique 'sensor network and smart tag' technology.

Recourses

¹ PricewaterhouseCoopers (PWC) Top 10 health industry issues in 2010 report. <http://pwchealth.com/cgi-local/hregister.cgi?link=reg/top-ten-health-industry-issues-in-2010.pdf>

² Healthcare Reform: Moody's Report Indicates Hospitals May Take It on the Chin. <http://www.healthleadersmedia.com/content/FIN-250453/Healthcare-Reform-Moodys-Report-Indicates-Hospitals-May-Take-It-on-the-Chin>

³ FierceHealthFinance, What issues will impact hospitals long-term? February 17, 2010. <http://www.fiercehealthfinance.com/signup?sourceform=Viral-Tynt-FierceHealthFinance-FierceHealthFinance>

⁴ HR 3590, Title III, Subtitle A, Sec 3025, p. 290. December, 2009.

⁵ AMN's 2010 Survey of Healthcare Executives: Initial Response to Healthcare Reform on Cost, Quality, www.amnhealthcare.com