



TeleTracking™

Patient Flow Automation for Healthcare™

Coming Together for Quality Care

*The Growing Importance of
Healthcare Systems Integration*

Summary

Healthcare reform is rapidly accelerating the integration of hospital information systems in a way the marketplace could not.

Reform legislation will tie reimbursement to higher performance. The Commonwealth Fund has projected this will reduce expenditures across U.S. healthcare by nearly \$600 billion in the first decade.²

As hospitals across the country recognize the Federal demand to elevate care and reduce costs, they are realizing the importance of information integration to accomplish those goals.

Fragmented system integration can adversely impact care with inadequate coordination, duplication of effort by staff, the loss of critical information for key decision makers, and the possibility of putting the patient at greater risk.

As cited in the AHA News, "The key to real healthcare reform is tackling barriers standing in the way of clinical integration. Healthcare reform offers an opportunity to achieve the type of systemic changes that can expand coverage, improve quality and care coordination, reward better care, promote innovation and reduce cost. But delivering on that promise requires the removal of long-standing barriers to clinical integration among hospitals, physicians and other caregivers."

One of the biggest barriers could come from vendors.

As hospitals seek an easier access path to shared data from their ADT, scheduling, ED and Patient Flow Automation technology, trends show many are adopting an integrated systems strategy and filling in the gaps with best-of-breed systems.

While interfaces are typically developed between the systems, it only provides for the exchange of some data of the two applications, and not necessarily all data from one application to another like a true integration. As a result, the interface may result in satisfactory use, though not necessarily in optimal performance and efficiency. There are also issues with interface each time one vendor upgrades its application. The interfaces must be reviewed and potentially modified to accommodate the new or different data elements or formats that may be included in the upgrade. The need for more truly integrated data for clinical decision support is critical. Getting vendors to cooperate with one another, in the best interests of their clients, seems to be a stumbling block.

Understandably, seamless integration of disparate systems presents its share of problems. There are turf issues involving duplicative services. There are proprietary issues and, of course, profit issues.

To overcome these issues, vendors need to confront the very real possibility that unless they cooperate with other vendors, their clients may not survive reform. It's better to have a smaller piece of the pie than none at all.

Staying Competitive in Healthcare Reform Era

Hospital CNOs and CIOs are looking for vendors who are truly committed to cooperating, because they know the linkage of granular data from disparate systems will be absolutely essential for decision-making, reporting, and compliance to survive and stay competitive in the new climate of healthcare reform.

Hospitals have been described as "high interruption environments" which create the potential for clinical errors.³ Laboratory studies show interruptions during a task can double the rate of errors, according to a report in the April 26, 2010 issue of *Archives of Internal Medicine*, one of the JAMA/Archives journals. The

researcher notes, that the studies are based on surveys and self-reports which have indicated the medication error rate might be as high as one per patient per day. And a study of three dozen U.S. healthcare organizations showed that medication errors occur in almost 20% of administrations.⁴

“The converging evidence of the high rate of interruptions occurring during medication preparation and administration adds impetus to the need to develop and implement strategies to improve communication practices and to reduce unnecessary interruptions within ward environments,” the authors write. The study showed that when nurses were not interrupted, procedural failure rates were 69.6 percent and clinical error rates were 25.3 percent, compared with procedural failure rates of 84.6 percent and clinical error rates of 38.9 percent if they were interrupted three times. In addition, errors became more severe as the number of interruptions increased. “Without interruption, the estimated risk of major error was 2.3 percent; with four interruptions this risk doubled to 4.7 percent,” the authors write.⁵ This high interruption rate should fuel the need for developing improved communication practices which can reduce unnecessary distractions in unit environments.

Biggest Opportunity and Greatest Challenge

Integration, then, may be the biggest opportunity and the greatest challenge hospitals will likely face over the next three years. Seamless integration of real-time, critical patient information will vastly improve communications and allow hospitals to enhance care coordination and improve patient safety. Proactive planning, alert messages that can be viewed in portals once the nurse returns to his/her station, and automated communication through integrated hospital systems can reduce the number of interruptions on the unit and ultimately improve patient safety. However, health information systems infrastructure will need to be modified to support the elevated coordination of patient care and to minimize inefficiencies.

A primary example of effective integration is automated patient flow, which many hospitals have adopted to improve overall capacity, patient throughput, and satisfaction levels. Pulling from the hospital’s ADT system, real-time staff input, and many other sources, automated flow technology gives hospitals the ability to identify bed status, transport needs and bottlenecks enterprise wide. Removing operational patient flow constraints streamlines bed turnover, speeds patient placement and transport, increases transfer admissions, and reduces patient backlogs.

In a recent client focus group session with TeleTracking clients which were all users of the same HIS Vendor software applications, the entire group of ten clinical managers from various hospitals all expressed a great concern for maintaining a robust system of automated flow options which allows them greater visibility to monitor patient care and safety. The ability to efficiently manage the patient transfer process and drill down through capacity data to measure each piece of the admission process, quickly identify bed placement, effectively understand how EVS impacts daily patient flow, and the critical need to quickly report admission and discharge statistics on an ongoing basis are mission critical needs which they cannot accomplish with the current HIS vendors applications.

While there are several producers of automated flow options, many facilities are finding that the best-of-breed solutions typically satisfy more of their users’ needs by providing richer functionality and accuracy for patient placement and bed placement cycle times. Best-of-breed patient flow systems, like the TeleTracking **Capacity Management Suite™** and **TransferCenter™** applications, provide automation features proven to enhance staff efficiencies, cut operating costs and increase revenue and inpatient satisfaction.

Frost & Sullivan Industry Analysts report that “integrated systems offer several advantages to the healthcare services arena such as better medical data management, cost-effective service delivery and, patient-centric healthcare. Additional benefits include enhanced security and confidentiality of medical data,

improved quality of healthcare service and patient safety.”⁵

In an integrated environment, hospital staff across units can take advantage of the rich patient flow data contained in the best-of-breed applications while using the advantages of their robust hospital enterprise-wide systems for managing health records and clinical data. In combination, these information solutions minimize maintenance costs, allow for continuous process improvement, and produce better outcomes. It’s a win-win for everyone—especially the patient.

A Commitment to Integration

TeleTracking’s commitment to customer service is deep-rooted in our culture and process-focused strategies. We understand that you can’t improve processes without the ability to have access to data analytics to measure them. Surviving in this climate of healthcare reform will demand more analysis and complex reporting. Key decision makers will desire more specific

and granular data for continuous improvement. While benchmarking and comparisons will be critical to give hospitals a competitive advantage and keep them a step ahead. With an integrated exchange of information between the best-of-breed hospital information and clinical systems with best-of-breed automated patient flow applications, hospitals will be better positioned for success under healthcare reform and to deliver an elevated level of patient care. Hospitals shouldn’t have to settle for less than optimal information for decision-making and process improvement. Now is the time to come together to create the integration.

As integration becomes more imperative to our clients success, we are committed to making integration a priority by opening our platform to other hospital information systems and extending an olive branch to all.

For more information about TeleTracking Technologies integration efforts, contact:

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