

Modern Healthcare

From the **C-Suite** » Dr. Imran Andrabi

'Journey to zero'

Clarity and focus lead hospital to efficiency

By all external standards, 445-bed Mercy St. Vincent Medical Center in Toledo, Ohio, was a high-performing hospital. We recently won a top 100 hospital designation, earned a J.D. Power & Associates top performer award and rated equally well on other standards of performance, including patient satisfaction scores, regulatory compliance and core measure outcomes.

Like many other high-achievement hospitals, we had already initiated a Lean and Six Sigma department. Yet, patient throughput problems persisted, which negatively affected organizational performance.

To address the issue, we engaged strategic partners to address our silo-limited mindset and to identify potential operational improvements. These analyses found that we had layered one improvement program on top of the next at the expense of sustainable total hospital efficiency. The very same process improvement methodologies that were supposed to facilitate and enhance total operational performance were actually preventing it.

Because the improvement efforts were focused on different silos, performance did not translate to a systemwide initiative. As a result, competition for limited resources arose between departments and there was no senior executive with responsibility for owning patient flow throughout the enterprise.

We came to understand that despite processes having been worked on previously, there were many nonvalue-added activities ("white spaces") still inherent in our throughput processes. One example was the phone calls and time required for nurses to coordinate diagnostic, procedural and other patient services. Another was the cross-departmental coordination and phone calls necessary to facilitate a unit transfer. Once the root cause challenges were understood and prioritized, we were able to re-engineer our work flow and begin the transformation toward total hospital efficiency.

Our system aim became "patient first, journey to zero"—zero defects and zero rework in our patient throughput, quality and hospital-wide coordination processes. The clarity of our aim enabled us to see operations differently, which helped us launch a centralized care coordination hub to manage hospitalwide opera-

tions; integrate case management into operations and patient flow logistics; and designate clinical-care coordinators in each operational unit to interact with the hub.

We also considered physician throughput needs as we redesigned our processes. For example, it proved very important to the physicians that we create a central logistics hub and departmental clinical-care coordinators so patient movement and status notifications could be expedited.

In order to effectuate and sustain Mercy St. Vincent's improvements, the new processes were hardwired into an adaptive logistics software platform so the chaos of hospital operations could be effectively choreographed. By using technology to coordinate and integrate all the clinical and nonclinical patient movements and order executions, we achieved significant

value, including removing the burden of logistics and scheduling from nurses; and assuring key performance indicators were reported in real time so adjustments in staffing, flow and other critical components could be made.

In the two years since initiating total hospital efficiency, Mercy St. Vincent reduced its average length of stay from 5.2 to 4.6 days. The ALOS improvements saved us 10,400 days annually, giving us the ability to care for 2,260 more admissions with no additional capital or fixed costs. The total economic impact of these changes was \$48.4 million and a significantly improved operating margin. Because of this process change, our quality scores and patient-satisfaction scores went up while our nurse separation rate improved by 41%.

As we work through our third year, we continue to see ALOS measurements decrease and other savings accrue as more inefficiency is removed from the system. Our journey toward total hospital efficiency began with the realization that the disconnected processes and silos we thought were best practices were in fact contributing to work-arounds and wasteful white space. Having identified this waste, we were able to realign our organization and achieve remarkable performance improvement—something that is within reach of every hospital. <<



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