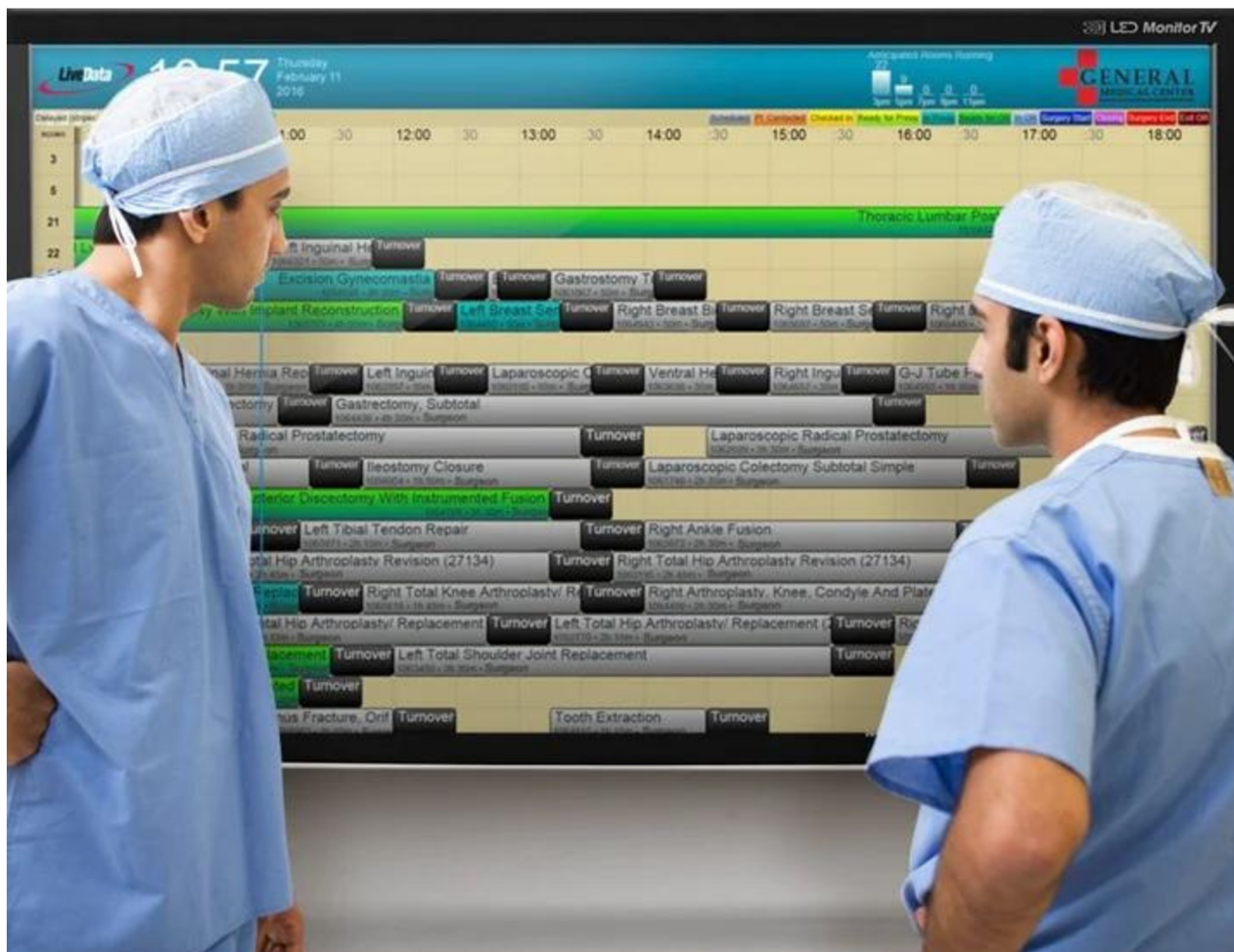*LiveData*

Lessons Learned from a Million Surgeries

HOW REAL-TIME DATA BOOSTS PERIOPERATIVE WORKFLOW AND IMPROVES KPIs BY 30+%

Two clinicians reviewing the day's surgical calendar at a glance using LiveData OR-Schedule Board™.

To serve their communities, hospitals are under constant pressure to take additional cases. LiveData builds tools to solve hospital growth and efficiency challenges, increasing OR capacity while maintaining productivity and patient safety.

The real-time power of LiveData PeriOp Manager™ gives clinics visibility into hospital OR calendars. It digitizes delayed manual processes, helping clinic schedulers seamlessly book time while making it faster for hospital schedulers to follow up. LiveData's associated reporting on block utilization, case scheduling accuracy, first-case-on-time-starts, and turnover also drives KPI improvements. **After one year of deployment in a large nonprofit hospital, LiveData resulted in:**

2+ extra cases per OR per month

168+ additional cases per year

$1,740,000+ margin increase

How to Enhance Situational Awareness

Situational awareness is the perception of the events occurring around you in a particular environment. Knowing what's going on around you helps you make better decisions, whether you are flying an airplane or performing surgery. Situational awareness is the cornerstone of the Joint Commission's surgical time out requirement, putting OR team members on the same page and promoting patient safety.

With the experience of over a million surgeries, LiveData knows that improvements to situational awareness increase surgical efficiency. This is true in the OR and throughout the surgical department. For maximum improvement, key information about surgeries including up-to-date schedule, patient status, and OR readiness should be:

• Delivered in real-time

• Provided with appropriate detail

• Communicated simply.

LiveData has documented the impact of improved situational awareness. Hospitals that focus on the delivery of key information as part of their surgical workflow see up to a 50% improvement in their efficiency and safety KPIs.

"Situational awareness is a person's ability to examine his or her environment and process information on a deeper level to gain an acute understanding of adverse elements that may affect goals and desired outcomes."

BMJ, (Goldenhar LM, Brady PW, Sutcliffe KM, Muething SE. Huddling for high reliability and situation awareness. BMJ Qual Saf. 2013; 22(11): 899- 906.)

Lessons for PreOp

At a glance, the nurse looks at his preop patients displayed on the kiosk. He can see that Patient A has two more critical milestones before surgery. Patient B has three. OR 2 is ready for Patient B, but OR 1 is still being turned over. Reacting to what he's seen, the nurse heads to Patient B to complete the final tasks.

36%

When nurses can quickly and clearly see the status of preop patients as well as the OR readiness, they can easily prioritize their next tasks to make sure patients and operating rooms are ready at the same time. This in turn increases on-time starts and helps drive utilization of clinical resources. LiveData PreOp Board™ provides this view, either as a large digital display in the preop area or on a nurse's WOW (Workstation on Wheels).

Hospitals using LiveData saw an average 36% increase in first case on time starts

Performance data compiled from LiveData hospital sites

Lessons for the Hallways

The OR Manager looks at the schedule board in the hallways and the status of her five ORs. Dr. Franklin is running late in OR 4, but OR 3 looks like it's headed into turnover early. She can see the staff from OR 3 are qualified to help with the surgery scheduled for OR 4. Back at her computer, she drags the next scheduled surgery into the soon-to-be-ready OR 3, knowing the schedule boards in the hallways will automatically update. This OR change will keep the nursing teams on track to finish on time today. She also knows that moving the case will be accurately reflected in her analytics tool, improving utilization of OR 3 while maintaining the service block utilization metrics that are important to the surgeons.

34%

Surgical departments saw block utilization increase by 34% using LiveData

Performance data compiled from LiveData hospital sites

When the OR Manager and the clinical team can see a dynamic, real-time view of the surgical caseload, they can make adjustments to scheduling, staffing, and other resources. This improves OR utilization, improving surgical KPIs and surgical access. LiveData OR-Schedule Board provides real-time updates to the schedule, automatically communicates schedule changes, and can predict rooms running at the end of staff shifts - for example 3:00, 5:00, 7:00, and 9:00 pm - to reduce unplanned overtime and proactively manage the end of the day.

Lessons for the Operating Room

The circulating nurse looks up at the large monitor on the wall. Before they even start the briefing, she reviews the list of team members who will be working with her. With everything in place, they start the briefing. With a click from the device in her hand, she moves the team through the time out checklist, displayed on the monitor for everyone in the OR. They watch the progress against the checklist. She likes that she's standing with the rest of the team and not stuck seated behind a monitor and keyboard. As they finish the checklist, she moves into a view that shows the patient's heart rate, temperature, and oxygen saturation clearly displayed for the duration of the procedure so everyone can see the data, reducing surgical interruptions as the team calls out for this information from the anesthesiologist.

In 2004, the Joint Commission developed a universal protocol including "time outs", for the prevention of wrong site/procedure/person surgery. Displaying the time out requirements and simplifying their input all have proven to lead to increases in patient safety compliance and has been designated as a best practice by the Joint Commission (Delgado, H, Using Data to Improve Safety, Quality, Efficiency and Utilization, 2015, OR Manager Conference). When the briefing/debriefing and time out checklists are on display in front of the entire surgical team, the team is more likely to complete them and more likely to focus on the process. The nursing team can easily input data with a click, rather than being stuck behind a keyboard at a documentation PC, knowing the data is being entered into the EHR due to bidirectional integration, eliminating double documentation.

And if the team chooses to enable intraoperative capabilities, key patient information can be displayed from the biomedical devices in the room, showing key patient vital signs, call outs are reduced and interruptions and distractions are minimized.

LiveData OR-Dashboard™ with Active Time Out® provides the features described above improving surgical safety and enhancing team communication.

"Specifically, communication and teamwork failures in surgery were identified as a contributing factor in 38% of incidents in non emergency procedures…"

Journal of Multidisciplinary Healthcare (Gillespie B, Gwinner K, Fairweather N, Chaboyer W, Building shared situational awareness in surgery through distributed dialog, J Multidiscip Healthc. 2013; 6: 109–118)

The LiveData Difference

Time outs, schedule boards, and preop milestone tracking exist in a variety of forms in every perioperative unit. What differentiates LiveData is the clear, concise, and up-to-date insight it provides to the perioperative team to simplify decision making, prioritization, and overall efficiency. With simplified input of important milestone data and automated EHR integration, data is up-to-date and doesn't require double documentation.

LiveData PeriOp Manager includes tools to increase situational awareness and OR efficiency from when the patient is first scheduled for surgery through their entire perioperative journey. For more information about LiveData visit our website or contact us at info@livedata.com.