Revenue recovery: A proactive approach to tackling medical equipment management with greater efficiency

Unplanned downtime involving diagnostic imaging or surgical equipment often forces hospitals to postpone scheduled procedures, which can hinder patient and clinician satisfaction, and threaten an organization's financial health. These consequences make it more important than ever that medical devices are available for diagnostics and treatment when clinicians and patients need them.

According to Jay Khan, executive vice president of operations at TRIMEDX, patient satisfaction is top of mind for every healthcare executive, but many may not realize the extent to which equipment issues can inconvenience patients and tarnish their healthcare experience if an appointment is delayed or cancelled.

"Patients often schedule appointments weeks ahead of time, may need to arrange daycare coverage for their kids or coordinate a ride to the hospital," he said. "Once you show up, the last thing you want is for your procedure to be rescheduled because the medical equipment is not available."

The COVID-19 pandemic has further heightened health systems' sense of urgency to ensure equipment is readily available for imaging and surgical procedures.

In anticipation of larger patient surges due to COVID-19, most healthcare organizations postponed or cancelled elective surgeries. Now, hospitals must work through a backlog of elective surgeries safely and efficiently. Mr. Khan noted the pandemic has also prevented many patients from seeking care in hospitals due to fears of contracting the virus, accelerating the shift to outpatient and home-based care via telemedicine.

These factors are placing increased stress on clinicians and complicating medical device management across the U.S. healthcare system. Avoiding equipment downtime during patient appointments will be a crucial part of re-instilling patients' trust in hospitals and promoting a positive patient experience.

"Because of the pent-up demand and the patient sensitivity around the virus and its infectious nature, we want to make sure [unplanned downtime] is not the reason they have to be turned away from the hospital," Mr. Khan said. Surgeries and diagnostic imaging tests are also large revenue generators for hospitals. Any downtime during scheduled appointments for these procedures creates frustration for clinicians and equates to a day of lost revenue, according to Mr. Khan. With health systems under unprecedented economic pressures from the pandemic, hospitals simply can't afford to lose revenue over device issues that could've been prevented.

As hospitals ramp up surgical volumes, leaders must ensure the organization is at full operational capacity to meet demand. To operate safely and profitably, hospitals need every piece of equipment to be running and easily available to best support the recovery of the surgical business.

A robust clinical asset management program includes predictive identification of issues

TRIMEDX has partnered with health systems to install smart technologies that can identify device or equipment issues before they occur, creating a more proactive approach to clinical asset management.

The goal is to change the paradigm from clinicians being the first to notice a device malfunction to preventing equipment issues from disrupting patient care in the first place.

TRIMEDX's smart technologies continuously monitor equipment health status to predict potential issues. Once an issue is detected, the technology creates a proactive work order to notify the hospital's clinical engineer that a repair or maintenance is needed. The clinical engineer can then schedule a time with department leaders to work on the equipment that does not interfere with patient care activities.

"We remotely monitor the health of equipment just like clinicians can remotely monitor the health of patients," Mr. Khan said. "Then we can plan a proactive repair before the equipment even starts to exhibit performance degradation."

A clinical asset management program that generates proactive work orders will result in fewer patient care disruptions from unplanned downtime. This delivers major benefits to patients, clinicians and health systems. Patients can have confidence they are getting the care they need, when they need it. The process also streamlines workflows for clinicians by avoiding the need for rescheduling and ensures health systems can recognize maximum revenue for these procedures.

"This technology allows us to do what we need to do in a proactive way, creates a quality experience for everyone and reduces operational expenses for hospitals," Mr. Khan said.

These clinical and financial benefits will be particularly relevant as healthcare leaders face the daunting challenge of maintaining a network of devices scattered across a much broader geographic footprint amid the rise of outpatient and home-based care.

"We used to be able to just go to a patient's hospital room to fix an equipment issue, but now that room may be in someone's home," Mr. Khan said. "As care starts to move out of acute care settings and as patient behaviors continue to evolve, delivery systems need to re-think how to support the proliferation of these devices closer and closer to patients' homes."

Mr. Khan said proactive work orders will be a vital tool to help healthcare leaders manage this new layer of complexity, maintain financial health and ensure patients are receiving high-quality, safe care regardless of their location. ∎