

**PHILIPS**

InfoView

# An integrated solution for effective asset management

## Executive summary

Assets in the healthcare environment present a significant expense to any organization – second only to labor costs, according to the Association for Medical Imaging Management. Clinical asset management for thousands of devices is a common stumbling block healthcare organizations are striving to overcome. Equipment downtime due to service requirements, misplaced, lost and recalled clinical assets can cause bottlenecks in patient flow, potentially impacting quality of care, employee productivity and financial performance. At the core of effective asset management is an accurate inventory, including location, service history and related costs for each asset.



Equally important, asset management involves the optimization of cost and performance. A data-driven approach to clinical asset management provides three core benefits to help healthcare management professionals achieve this seemingly elusive goal, including:

- Optimizing asset readiness
- Improving work order management
- Providing business intelligence for capital planning

### Optimizing asset readiness

Imagine a patient arrives at a large community hospital, and an emergency room doctor determines the patient requires an immediate CT scan. Just prior to the scan, however, the physician discovers that one of the hospital's CT scanners is undergoing its annual maintenance. As a result, the patient must be routed to another scanner with a backlog of patients, some of whom could have waited or been reprioritized, had their doctors been informed of the scheduled maintenance.

In addition to ensuring the readiness of imaging equipment, managing patient flow is a critical skill for healthcare organizations, as prolonged stays can increase costs for the organization. In fact, there was an average of 104 inpatient hospital admissions

per 1,000 people in 2014,<sup>1</sup> which cost hospitals an average of \$3,059 a day per patient.<sup>2</sup> Emergency departments (ED) account for the majority of inpatient admissions. In 2011, the latest year for which data is available, there were 44.5 ED visits per 100 persons in the U.S., according to the Centers for Disease Control and Prevention, which translates to a staggering 136.3 million visits total that year. All of that adds up to significant costs for even an average hospital stay, and becomes untenable when additional days are added as a result of unnecessary delays in diagnosis and treatment. A coordinated asset readiness process can improve patient throughput and allow patients to flow more seamlessly through the system.



Benchmarking against past equipment performance is a necessary step to improving asset readiness; although, accurate benchmarking requires a robust dataset to support it. Ideally management data collection will integrate data from similar facilities with comparable assets and operational dynamics. Smart benchmarking also helps healthcare facilities to identify important patterns of seasonal device usage and define strategies. For example, during flu season, a hospital may consider increasing the availability of infusion pumps. By aligning preventative maintenance plans to historical patient census flows, a healthcare technology management leader becomes a critical participant in strategic planning.

## Improve work order management

Effective clinical asset management tools take the guesswork out of technical questions that often plague hospital managers and biomedical engineers alike. For instance, when is the MRI scanner in the oncology ward due for maintenance, or do the ultrasound units in the maternity ward meet Det Norske Veritas (DNV) standards? Asset management tools offer visibility into individual device data points to assist in foreseeing potential issues and expenses such as upcoming maintenance appointments or equipment malfunctions. With looming audits and periodic changes in regulations, asset management is beneficial for compliance. By incorporating compliance and manufacturing guidelines, successful asset management systems can help healthcare organizations more easily meet guidelines outlined by the Joint Commission and DNV.

Looking at it from another perspective, the FDA typically recalls between 13 and 75 medical devices each day.<sup>3</sup> In 2015, the Economic Cycle Research Institute, a nonprofit organization devoted to improving patient care, identified recalled equipment as one of the top ten healthcare technology hazards for hospitals. Too often the appropriate action is not always taken immediately

following the recall of a medical device due to the weight of administrative work attached to the recall. An efficient asset management tool is needed to effectively inform clinical teams of the recall, define what impact the recall has on the organization's operations, and route service work orders to the clinical engineering team to correct or remove the device from service.

## Provide business intelligence for capital planning

In 2015, hospital CEOs ranked financial challenges as the main issue facing their organizations. Patient safety and quality ranked second, followed by government mandates.<sup>4</sup> Capital planning can be a pain point for C-suite executives, but it doesn't have to be that way. Smart data, such as historical service cost trends, age of equipment and equipment utilization benchmarks offer insights to executives amid capital planning. Clinical asset management tools provide customizable reports and dashboards delivered directly to the C-suite, helping to bridge the communications gap between those serving in the hospital rooms and those in the boardroom. Budgeting resources for the future of an organization, such as new and replacement equipment is made simple with fact-based information.

## An integrated and customizable tool

A holistic solution for asset management, incorporating service, scaling to specific needs, fostering valuable data insights and providing automation is crucial. Philips InfoView is an all-inclusive tool paired with Philips Multi-Vendor Customer Service solutions to provide information involving assets, including inventory, maintenance, compliance and costs across the equipment's lifecycle, helping decision-makers at every level – nurses, biomedical engineers and C-suite executives – deliver outstanding service.

One InfoView customer, ranked by Becker's as a top100 community hospital with more than 450 beds, learned the value of such customization firsthand when Philips deployed the tool in 2015. With nearly 10,000 clinical assets in rotation, the hospital was lacking a collaborative clinical asset program before working with Philips.

1. Kaiser State Health Facts. Retrieved 2016, from <http://kff.org/other/state-indicator/admissions-by-ownership/>.
2. Kaiser State Health Facts. Retrieved 2016, from <http://www.beckershospitalreview.com/finance/average-cost-per-inpatient-day-across-50-states-2016.html>.
3. Gaffney, Alexander. (2016, September 4). Regulatory Affairs Professionals Society. Retrieved 2016, from <http://www.raps.org/Regulatory-Focus/News/2014/09/02/20197/Massive-Recall-of-Medical-Devices-Largest-Ever-Recorded-by-FDA/>.
4. American College of Healthcare Executives, 2015. Retrieved 2016, from <https://www.ache.org/pubs/research/ceoissues.cfm>.

### **In merely six months, the InfoView deployment helped the hospital achieve the following:**

- Prior to deploying InfoView, the hospital received a 90 percent preventative maintenance completion for general biomed assets. **Following the deployment, completion improved to 95 percent.**
- **Improved visibility to biomed operations and hospital defined KPIs** have been realized through automated weekly dissemination of asset management reports to department leads and C-suite executives.
- **Overall improved accuracy in tracking medical equipment** through InfoView's high-quality customizable reports.

\* Disclosure: Results from case studies are not predictive of results in other cases. Results in other cases may vary.

## Conclusion

With continuous advancement of technology, hospital administrators recognize the impact technology has on the bottom line for a hospital and identifying a widespread disconnect between hospital managers and the hospital's clinical assets. An integrated solution for asset management offers benefits to improve both operational and financial performance. Healthcare organizations are in need of a holistic solution that spans the health continuum, incorporating service, scaling to specific needs, fostering valuable data insight and providing automation.

