



# University Hospitals

## University Hospitals Streamline Processes, Realizes Cost Savings and Bolsters Quality and Research Initiatives With Picis Perioperative Suite

As the region’s largest network of primary care physicians, outpatient centers and hospitals, University Hospitals, based in Cleveland, Ohio, needed an integrated, intelligent perioperative system to standardize processes, gain efficiencies, reduce costs and allow clinicians to improve the quality of patient care.

When it was time to upgrade from the previous system installed in 2006, University Hospitals evaluated several options and chose the Picis® Perioperative Suite to help them reach their current and future goals. “We needed a solution that would be easily scalable,” says Lou Ciraldo, Division CIO. The health system was confident they could customize and roll out the integrated modules of the Picis Perioperative Suite to meet the evolving needs of the 1,035-bed tertiary medical center and teaching hospital, along with the six community hospitals, that comprise the system.

### University Hospitals leveraged Picis Perioperative Suite to:

- Standardize and simplify processes across 43 ORs and 3 ambulatory surgery centers
- Enable to-the-minute anesthesia charge capture
- Increase of billable charges to 27% up from 0%
- Reduce submission of pro fee billing to 3 days
- Reduce PACU length of stay
- Realize efficiencies that allow clinicians to dedicate more time to patient care

In implementing the perioperative suite, University Hospitals' goals were to:

- **Realize efficiencies** without completely reworking existing patient flow
- **Gain visibility** into cost-per-case, supply costs, block utilization and more
- **Enhance** the ability to bill more accurately and maximize revenue
- **Support quality improvement** and research initiatives
- **Facilitate implementation** of best practices by standardizing processes
- **Support clinicians** in enhancing patient care

### Picis Solutions:

- Preop Manager
- OR Manager
- SmarTrack
- Anesthesia Manager
- Perioperative Dashboard
- Extelligence® OR
- Extelligence® Anesthesia

## Solutions

University Hospitals and Picis invested extensive preparation time in identifying best practices throughout the perioperative process prior to implementation. Understanding workflows helped ensure the solution would support and facilitate clinicians and staff in caring for patients without adding duplicative steps. A phased rollout allowed the University Hospitals and Picis team to bring new facilities on board gradually. "A lot of preparation went into it," says Lou, "We were able to scale the system appropriately and maintain a supportable environment as we brought new organizations on board."

### Enhancing Key OR Processes

After implementation, Picis had an immediate impact on streamlined scheduling, documentation, preference card management, billing and reporting at all phases of the perioperative process. Transitioning from manual, paper-based processes and documentation to the Picis electronic environment, enabled University Hospitals to make substantial progress toward their original goals around streamlining key OR processes.

For example, SmarTrack®, the patient/case tracking system, reduced the number of phone calls required to verify room readiness and patient status, improving the efficiency of the OR overall. "SmarTrack screens are a 'must' for us," says Laurie Canala, Director of Perioperative Services. "Our entire department runs on the SmarTrack boards, posted throughout the department, so we know where patients are throughout their entire experience of care." In addition, SmarTrack screens were customized, with different information, based on staff and clinician needs.

Picis also streamlined charting and documentation throughout all stages of the perioperative process. John Craker, Chief CRNA, notes that "Picis improved our ability to chart and make documentation easier to read while making it more consistent." The automatic capture of key data points directly from medical equipment enhanced anesthesiologists' efficiency. Clinicians were able to focus more time on patient care, especially during long or difficult cases.

Transitions of care were also improved throughout the perioperative system as information could now be shared from preoperative evaluations, to anesthesia, to the operating room and to PACU through discharge. At all points of the process preference cards, protocol reminders and even quality improvement metrics, such as WHO checklists, SCIP and PQRS (Physician Quality Reporting System), which prompts providers to track quality measures crucial to patient care and reporting requirements.

### Robust Reporting Leverages Rich Data Resources

The extensive data-capture capabilities of Picis resulted in an impressive ability to generate reports on everything from supply costs, reporting requirements and room utilization rates, to demonstrating Meaningful Use and more.

“We can do so many kinds of reporting,” says Laurie. The reports from OR Intelligence provide information, to hospital administration to support everything from growth planning based on block utilization reports, to staffing needs, to quality reporting metrics. “Once we started putting out reports from Picis, it really caught the eye of the administration,” Laurie explains. The reporting capabilities also help clinicians improve the quality of patient care. Dr. James R. Rowbottom, M.D., Medical Director, Operating Room, UH Case Medical Center, says “Reports also allow us to remind clinicians to do 48-hour post-op checks and make it easier to do the appropriate documentation.” In addition, data capture retrieval and reporting support University Hospitals’ academic and research initiatives, by contributing data to studies ranging from various drugs to hernia repair and more.

### **Integrating the Full Spectrum of Perioperative Care**

Picis not only enhanced efficiency, standardized processes and supported charting and billing improvements at University Hospitals but also provided the framework for a truly integrated perioperative system of care.

Dr. Rowbottom says, “Our care extends from the preop clinic to discharge from the ICU. Picis provides us with the ability to track and understand patients’ progress through that process for the entire time.”

Laurie agrees. “It really ties all of our work together. From the preference cards for our surgeons, to the easy-to-use documentation, to personalized plans of care for our patients, to reporting, the sky’s the limit,” she says.

“The reporting is spectacular. Everyone is so cost-conscious right now, but Picis helps us understand the cost-per-case variables.”

**Laurie Canala,**  
Director, Perioperative Services

## **Results**

In the six years since the initial go-live of the Picis Perioperative Suite, University Hospitals has made the solution the standard framework for 43 operating rooms and 3 ambulatory surgery centers across the health system. John says the benefits are countless. “At University Hospitals, our focus was to implement a system that supports the highest level of clinical care while also offering the flexibility to accommodate the inclusion of quality metrics, cost analysis, automated reporting, research, and a positive impact on ROI. The flexibility of the Picis program has allowed us to standardize our processes across the health system. Significant efficiencies in our billing, reporting, documentation of key quality indicators and communication have been achieved using the Picis system.”

- **Transitioning manual to electronic processes:** Patient tracking, charting documentation, automated billing card creation and more processes, have been successfully transitioned from paper-based to electronic processes that capture information, which can be easily shared across the system and mined for reporting.
- **Improved efficiency:** Block utilization and staffing reports help to refine approaches to scheduling and staffing. Automated documentation frees clinicians from tedious manual charting, allowing more time to be devoted to patient care.
- **Process streamlining:** Patient information flows freely throughout the system, across departments, organizations and facilities. Shared data enhances communication among perioperative phases from preoperative to discharge, resulting in more standardized and leaner processes.
- **Billing and cost savings improvements:** Enhanced ability to bill anesthesia correctly resulted in increases in gross revenue. Cost-per-case analyses make it easier to identify and address variances in supply costs. Automatic generation of billing cards reduces billing staff headcount required to process billing plus reduces the time to bill for improved revenue capture.

Dr. Rowbottom notes that implementing and growing Picis over the years has been as much about creating a culture change as a systems change. Yet, the challenge was one that “clearly has efficiency, financial and academic benefits to it.” Above all, he believes the ability to provide clinicians with the information they need to improve the quality of patient care is one of the biggest benefits of having the Picis system in place. “Seeing the data is empowering,” he says. “The ability to have the data we wanted collected easily and reliably, along with the ease of customization to meet our unique needs, make this solution essential to our health system’s future performance,” he says.

## About University Hospitals

University Hospitals serves the needs of patients through an integrated network of hospitals, outpatient centers and primary care physicians. At the core of our health system is University Hospitals Case Medical Center. The primary affiliate of Case Western Reserve University School of Medicine, University Hospitals Case Medical Center is home to some of the most prestigious clinical and research centers of excellence, in the nation and the world. This includes cancer, pediatrics, women’s health, orthopedics and spine, radiology and radiation oncology, neurosurgery and neuroscience, cardiology and cardiovascular surgery, organ transplantation and human genetics. Its main campus includes the internationally celebrated UH Rainbow Babies & Children’s Hospital, ranked among the top children’s hospitals, in the nation; UH MacDonald Women’s Hospital, Ohio’s only hospital for women; and UH Seidman Cancer Center, part of the NCI-designated Case Comprehensive Cancer Center, at Case Western Reserve University. University Hospitals Case Medical Center is the 2012 recipient of the American Hospital Association – McKesson Quest for Quality Prize for its leadership and innovation in quality improvement and safety.

For more information, go to [www.uhhospitals.org](http://www.uhhospitals.org)



### About Picis Clinical Solutions

Picis Clinical Solutions (Picis) is a global provider of clinical information solutions that automate the entire perioperative experience with one continuous patient record, from preop to anesthesia through PACU. Picis continues to focus and specialize the integrated suite of solutions in life-critical areas of the hospital where the patients are the most vulnerable, the care process is the most complex, and an increasing majority of hospital costs and potential revenue are concentrated. The software enables rapid, sustained delivery of clinical documentation, and financial and operational results. From department performance to patient case costing, hospitals benefit from the ability to interact with the data needed to help clinicians improve patient care, engagement and hospital revenue goals. Picis Clinical Solutions, a wholly owned subsidiary of N. Harris Computer Corporation, is headquartered in Wakefield, Massachusetts with licensed systems for use at more than 400 hospitals worldwide.

For more information about Picis Clinical Solutions, visit [picis.com](http://picis.com)

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Case Study University Hospitals 2018-12-04