

Children's Hospital Oakland Implements Picis Perioperative Suite to Help Meet Its Clinical Documentation, Operational and Financial Goals



Children's Hospital & Research Center Oakland is Northern California's only independent not-for-profit regional medical center for children. The hospital is a national leader in many pediatric specialties and sub-specialties, including hematology/oncology, neonatology, cardiology, orthopedics, sports medicine and neurosurgery. Children's Hospital is one of only two solely designated California Level 1 pediatric trauma centers, with the largest pediatric inpatient critical care unit in the region. Children's Hospital is also a premier teaching hospital with an outstanding pediatric residency program and unique pediatric subspecialty fellowship programs.

Quick Profile

Children's Hospital & Research Center Oakland

Institution profile:

190-bed pediatric hospital with 10 OR suites and 9,900 OR cases annually

Key business/clinical drivers:

Automate processes across the perioperative continuum to help clinicians standardize and optimize care, improve utilization and throughput, and comply with ARRA HITECH

Picis solutions:

Picis Preop Manager, OR Manager, SmarTrack®, Anesthesia Manager, PACU Manager, Quality Manager, Perioperative Dashboard, Extelligence® OR and Extelligence® Anesthesia

Interoperability:

- Meditech Magic for ADT
- McKesson TrendStar®
- GE Scheduling

Results:

- Increased block utilization from 64% to 74%
- Increased OR utilization from 49% to 80%
- Better compliance with rapidly changing rules and regulations
- Reduced costs through efficient materials and supply management
- Improved patient/family and staff satisfaction
- Eliminated ~ 80 patient tracking calls/day



▶ Selecting the Right System

Children's Hospital was seeking to automate its surgical care workflow. In order to meet its requirements, the hospital needed a system that would:

- Automate the entire perioperative suite with a single integrated solution
- Provide tools to help their clinicians standardize and improve the quality of care
- Deliver the proven flexibility needed to operate in a specialty children's care environment
- Be easy to set up and use and offer the flexibility to react quickly to changing needs and requirements
- Offer seamless integration with the facility's Meditech health information system
- Help meet emerging American Recovery and Reinvestment Act (ARRA) HITECH "meaningful use" requirements for the electronic medical record

After a rigorous review of available systems, Children's Hospital Oakland selected the Picis Intelligent Perioperative Suite.

Innovative Training Approach Speeds Adoption

Children's Hospital established a multidisciplinary team to oversee the system implementation. The team, led by the Children's Hospital OR director and the Chief of Anesthesia, included personnel from IT, nursing, materials manage-

ment and a consulting firm. The system was implemented in phases: Picis OR Manager and Preop Manager went live in November 2009, and Anesthesia Manager and PACU Manager launched in February 2010.

One of the biggest implementation challenges facing the hospital was introducing change of this magnitude to a workforce with a wide range of ages. According to senior systems analyst Kate Kemble, BSN, RN, CNOR, "the average age of nurses today is approaching 50 and many of our nurses never expected to have to convert to an electronic medical record. We found that adaptability and creativity were essential for our teaching program to be effective. We employed a mix of teaching styles to best address multiple learning styles, including visual, auditory and kinesthetic approaches. Repetition was very important. We also tried to make it fun with contests, displays and parties."

Another key was finding "super users" who had an aptitude for using the system and were enthusiastic about learning more. "They became role models and change agents and really helped win people over," said Kemble. "Before the implementation, our staff was worried that the system would take away from patient care. Now they can't do without it."

Trendsetting System Delivers Results

As the pilot program for an integrated paperless system at Children's Hospital, the Picis Intelligent Perioperative Suite is a trendsetter for the institution. The Picis system electronically manages all aspects of the perioperative process, including patient scheduling, preference card and supply management, patient tracking, online nursing and anesthesia documentation, integrated billing, and reporting and analytics.



► The system:

- Integrates with the hospital's other systems — including ADT, labs, materials management, scheduling and billing — to reduce data entry and increase accuracy
- Interfaces to medical devices to automatically capture physiological data in near real time
- Provides in-room documentation for all patient care areas
- Offers the flexibility to quickly adapt to new requirements and work flows

Among the many benefits resulting from the Picis Perioperative system implementation:

- **Better utilization of operating rooms.** The system helps the hospital make more efficient use of OR time and facilities. OR utilization has increased dramatically and is now 74%. Block utilization, which ensures that physicians are making the most of their allotted time, has increased from 64% to 74% in one year. Furthermore, management now has the granularity of data needed to effectively track performance in near real-time and proactively address performance issues.
- **More efficient supply management.** Supply management has improved dramatically, resulting in increased efficiency, improved accuracy and decreased costs. "A good example of this is preference card management," said Kemble. "If a surgeon finds better or more cost-effective supplies or implants for a surgery or group of surgeries, a global change to the system can quickly and easily update all relevant preference cards."
- **Better billing and charge capture.** Late charges have been reduced substantially by automating the transmission of charge information directly to the billing system. In addition, standardized charting has resulted in more consistent and accurate charges. This has increased revenue and ensures that billing is based on the actual procedures that were completed.

Online Anesthesia Record Saves Time, Helps Unify Care

Children's Hospital implemented Picis Anesthesia Manager to save time, improve record legibility, standardize charting and automatically capture information needed for billing. The system also allows the anesthesiologist to have a single unified record beginning in Preop and extending through the OR and into PACU.

According to Amit Gupta, MD, Director and Chief of Anesthesia, the new online charting system was set up and implemented with their existing paper chart in mind. "We wanted the program to mirror our paper record as much as possible in order to make the transition from paper to the

computer that much easier. Picis Anesthesia Manager had the flexibility to let us do this."

When building the templates for Anesthesia Manager at Children's Hospital, Dr. Gupta pointed out the importance of making every aspect of the system easy to use. "Each discrete variable on our checklists was carefully considered for both charting and reporting purposes," said Dr. Gupta. "That said, we also wanted to ensure that when our anesthesiologists were selecting a value in the system, scrolling was minimized."

The system gives anesthesiologists more hands-free time to spend on direct patient care. "While you are taking care of the patient, Anesthesia Manager is continuously documenting vital signs and keeping the record up to date," said Dr. Gupta. "Before we converted to an electronic charting system, we would have to play catch-up by recording certain events and measurements retrospectively. Now the system is accurately recording that data while we administer care."

Anesthesia Manager also helps ensure that anesthesiologists meet all their charting requirements. In addition to providing online checklists and reminders that make charting easier, the system produces an anesthesia audit report that identifies deficient records. "The system has increased our ability to chart properly," said Dr. Gupta. "With a paper record it was difficult to review 11,000 or 12,000 charts every year to ensure that all required documentation was complete. Now we have the computer doing it for us."

"Picis Extelligence makes it simple to extract data from the system and build reports."

SmarTrack Improves Productivity and Patient Flow

Children's Hospital implemented Picis SmarTrack to manage the flow of its surgical patients throughout the perioperative process. When the patient arrives at the hospital, volunteer "ambassadors" note the patient's arrival in SmarTrack. From that point on, the system proactively manages the status and location of the patient and compares his or her progress to user-defined care paths.

SmarTrack screens are located at the main desk, physicians' lounge, outpatient center and other locations in the hospital. There is also a HIPAA-compliant tracking board in the surgical waiting area so that families can easily track the progress of their family member. "As more departments hear about the benefits of SmarTrack, more departments are requesting access to the system," said Kemble.

Before SmarTrack was implemented, the staff typically had to make 50 to 80 phone calls each day to find out the status and whereabouts of OR patients. SmarTrack has eliminated these calls, saving significant staff time. Other benefits of SmarTrack identified by Children's Hospital include increased throughput, better OR utilization, and improved patient/family and staff satisfaction. It even has benefits outside of the OR. "The charge nurse of the day updates SmarTrack once



- ▶ a post-op bed is located," said Kemble. "This information is viewable by the patient's caregivers, eliminating delays in moving the patient from the PACU to his or her bed location on the floor."

Advanced Decision Support and Analytics

Picis provides the tools needed to transform system data into actionable business intelligence. Using Extelligence OR and Extelligence Anesthesia, the hospital staff is able to extract key metrics to help them improve patient care, increase efficiency and reduce costs.

"Because we do things a little differently at Children's Hospital, canned reports are not enough," said Brian Wheeler, clinical data analyst. "Picis Extelligence makes it simple to extract data from the system and build reports. For example, when our Quality Department wants reports on universal protocol and central line insertion cases, the Extelligence drag-and-drop functionality makes it quick and easy to do."

Children's Hospital also relies on the system and its tracking of key performance indicators to make strategic decisions. "The system supports both short-term and long-term planning," said Kemble. "We can now base our decisions on

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quantifiable data. This allows management to make more informed decisions based on facts and performance. For example, as our OR utilization approaches 80%, it points toward adding an operating room. Before Picis, this kind of statistically valid data just wasn't available." In addition, reporting flexibility helps Children's Hospital adapt quickly to rapidly changing regulatory compliance requirements such as SCIP, SSIP, CLIP and meaningful use.

Looking to the Future

Plans are under way to expand the perioperative suite to Children's Walnut Creek Outpatient Surgery. This will extend the benefits of perioperative automation — including paperless clinical documentation — to all of the hospital's surgical locations.

Picis is also a vital component of Children's Hospital's long-term ARRA compliance strategy. Picis perioperative products have received meaningful use certification as modular EHRs by the Office of the National Coordinator

for Health Information Technology. "The fact that Picis is knowledgeable about and prioritizes compliance with meaningful use requirements is very important as we move forward," said Kemble. ■

About Picis

Picis, an Ingenix company, is a global provider of innovative solutions that enable rapid and sustained delivery of clinical documentation, financial and operational results in the emergency departments, surgical suites and intensive care units of more than 2,100 hospitals in 19 countries. For more information about Picis, visit www.picis.com.

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