



## **Surgery Department EHR Implementation from an OR Nurse's Perspective**

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From intense heat and pressure diamonds are formed. As an OR nurse, I would apply this truth to implementing an Electronic Health Record (EHR) in the pressure-cooker known as surgery. The Operating Room, by its very nature, is a high stress environment. No matter how it's sliced (pun intended), the intensity of this environment and that of the involved clinicians is extreme. Implementing an EHR in such a setting can be precarious at times, but the benefits are substantial.

The needs of the patient, surgeon, anesthesiologist, operating room nurse, and even the institution where surgery is performed must be carefully balanced. An EHR implementation team must respect that surgery is a major income stream for any hospital/clinic. Patient throughput and turnover times are paramount to the bottom line. Therefore, the EHR implementation team should strive to ensure that patient throughput and OR turnover times are not negatively impacted by EHR adoption decisions.

The patient record conversion from paper to electronic must leverage the need to ensure clinicians have the ability to adequately document in a regulatory-compliant fashion with that to minimize potential increases in documentation time and amount. Balancing these often opposing forces is integral for successful implementation. Optimally, documentation would be both comprehensive and efficient. To that end, **Epic** has made significant strides in its '09 release with integration between the *eMAR* and preference cards, as well as streamlining OR documentation via the button-based *INTRA-OP NAVIGATOR* which includes a regulatory-compliant *SAFETY PAUSE FORM*.

This tussle of balancing documentation to meet regulatory compliant standards while remaining quick and efficient pervades all perioperative departments. Clinicians in each area from pre-op, intra-op, to post-op have a limited amount of time to deliver patient care and document it. Configuration of the EHR should enhance -- not hinder -- the clinician's ability to accurately capture the care each delivers.

Another way EHR implementation can accommodate delivery of prompt and safe patient care deals with physician orders and order management. Employing CPOE (Computerized Physician/Provider Order Entry) facilitates the ability of physicians to direct care and enables downstream clinicians to act on the appropriate orders at the designated time.

Executing a 'Phases of Care' plan can make CPOE inception as smooth as possible. It would be crucial to identify which phases are relevant, who is placing orders for that phase, and which clinicians would act on the orders and when. For example, surgeons may consider 'Post-Op' as consisting of both the Post Anesthesia Care Unit (PACU) as well as the Post-Op Nursing unit to which the patient will be admitted after surgery, while anesthesiologists may consider their 'Post-Op' orders to be confined to the PACU. In this example 'Post-Op' could be split into 2 phases of care, such as 'PACU' for the PACU RN's and 'Post-Op' for the Inpatient Nursing unit RN's. Delineating into two separate categories would accommodate both practices, dictating who should act on those orders downstream. Phases of Care would need to be tailored to each specific institution. Delineation of care phases should be clear and concise for all parties, i.e. surgeons, anesthesiologists, nurses, other clinicians, as well as the implementation team, in order to optimally configure the system to suit all parties' needs.

Another eminent topic for consideration is scheduling. A key to surgeon satisfaction is having all the necessary and desired equipment, instrumentation, supplies, implants, and drugs present when an individual surgeon

arrives in the OR. This information, or preferences, is stored on preference cards. The system can only be as accurate as the data contained within it. Therefore, preference-card build should be robust, replete and clinically reviewed for accuracy. The OR PROCEDURE masterfile (ORP) needs to comprehensively reflect the types of surgeries performed at the institution, as efficient OpTime scheduling is contingent upon it.

Commonly, the schedulers selecting which ORP to utilize during case creation and scheduling are not clinical, and some of the incoming case requests contain complex medical terminology. The ORP selected by the scheduler determines which preference card is used. To ensure the correct supplies will be pulled for each case, configuration should incorporate a way for a designated clinician to perform a clinical review of the surgery schedule ahead of the surgery date. This clinician can verify and /or update the scheduled cases to ensure that the most clinically appropriate preference card is utilized. Having all the necessary supplies and equipment present will increase surgeon satisfaction and keep surgery running as efficiently as possible.

A successful perioperative EHR implementation enhances patient throughput where possible, keeps documentation comprehensive and efficient, configures orders to meet the complex demands of a wide variety of clinicians and practices, and enables a surgeon's preferred equipment and instrumentation to be ready for all scheduled cases. Staying the course and seeing the implementation through to completion will produce substantial results. From this intense heat and pressure of the OR can emerge a precious GEM: a Great Electronic Medical record.

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