



 Process Fusion 360

# Best Practices for effective adoption and operation of Epic EMR

Workflow  
**Re****maged**

# Introduction

Epic revolutionized the healthcare IT industry with the release of their electronic medical record (EMR), and have since swiftly taken over healthcare centers across the world. Epic delivers an innovative EMR system that includes integrated patient data providing for ease of access and use by the entire healthcare team throughout any enterprise. Epic's EMR stands above other electronic medical record systems due to the high level of security, reliability and confidentiality that it offers to users. Physicians and other members of the healthcare team must be able to effectively use Epic's EMR system in order to achieve desired results. This whitepaper will detail several best practices for effectively adopting and operating the Epic EMR while also increasing productivity levels.

## Staffing Qualified Individuals

Hospitals implementing Epic EMR tend to restrict staffing to internal clinical staff, whereas there may be substantial value in hiring Epic certified consultants with prior experience in EMR implementation. Having a dedicated team of health informaticians, software engineers, developers, and IT staff is crucial for successful adoption during early phases of EMR implementation.

## Involve Clinical Leadership

Active involvement of clinical leadership from the get go is critical to a smooth adoption of Epic EMR. Forming management committees and staffing them with key clinical leaders is a great way to involve future users of the system. Identifying and involving them in core project planning and change management is crucial for both successful adoption and operation of Epic EMR.

## Develop Goals and a Vision for EMR Adoption

Healthcare organizations should develop a vision pertaining to exactly what they would like to accomplish through Epic EMR implementation in their context. Common goals may include reducing delays in the healthcare environment, enhancing patient quality of care, etc. After crafting a vision, organizations should share this vision with employees so that it serves as a basis for establishing expectations for staff.

## Prioritizing Necessary Components

During the adoption phase, organizations must prioritize the vital components required to get the EMR system going initially. An Epic go live is only the beginning, and the implementation team will have further opportunities after going live to make tweaks and add optional value adding components. So, the client hospital must prioritize items that are critical for initial go live success.

## Communicate Effectively

As is the case with any business project, the success of Epic EMR implementation lies in effective communication that reaches the target audience, at the appropriate time, and through the appropriate channel. During the early phases of adoption, Epic EMR implementation may bring about some anxiety amongst front-end members of the healthcare team. Having an effective communication plan compliments a successful implementation strategy.

## Integrating Stakeholders

Ensure engagement and integration of stakeholders who are working behind the scenes when developing workflows for front end users at the very beginning of planning and implementation. Working as an integrated group where experts can tackle upcoming implementation changes from various angles is a great resource for any healthcare organization to have when adopting Epic EMR. It is essential to engage and integrate all stakeholders to ensure a collaborative and cohesive approach, and to implement a successful and unified system.

## Develop a Risk Management Strategy

As with any large-scale project, migration of data from older EMR systems to newer Epic EMR may also have some associated risks. Before transferring patient data and implementing the Epic EMR, it is essential to create a plan for managing any risks that may arise during data migration. The strategy should detail who will do what, in the event of an error during data migration, and what the cost would be if the migration of data is not a success.

## **Transfer relevant data from previous EMR to Epic and archive remaining data**

When older EMR systems are replaced by Epic EMR, healthcare providers are held responsible for maintaining historical patient data for a certain period of time. The patient history needs to be extracted from the discontinued EMR, while the relevant information must be migrated to the new Epic EMR, and the rest archived. Several data management services exist which provide healthcare organizations with assistance in secure lossless transportation of their patient data to Epic EMR.

## **Conduct Workflow Analysis prior to Implementation**

For enhanced efficiency post Epic EMR implementation, every existing task before adoption must be analyzed to see where efficiency can be enhanced with the use of Epic's technology. A conversion plan should be developed, entailing steps for replacing old and inefficient procedures with those that can be performed with enhanced efficiency by the new Epic EMR system.

## **Transparency and User Empowerment**

It is necessary to have transparency with the progression of the Epic EMR implementation project and to empower users. End-users, for example, could be given access to open labs to practice, ask questions or provide feedback prior to go-live. This allows for final adjustments to workflows and within the system prior to live implementation. Most importantly, it is a good idea to observe and learn from other organizations that have completed an implementation. Processes related to anything such as training, configuration, or security can be modified to ensure that similar issues do not arise.

## **Customize the EMR, and provide clear and specific instructions**

Allot adequate time for workflow experts to spend time with Epic to customize the EMR and create solid data entry templates before going live. Trying to backtrack and customize later is a disorganised endeavor, and causes stress and change fatigue for healthcare staff. Provide clear and specific instructions on exactly how to use the Epic EMR, otherwise employees may try to do things their own way, resulting in less than optimal productivity. However, if the customization is done beforehand, it is easy for staff to input data and complete their work with the highest level of efficiency.

## **Recognize End-User Technical Skills and Offer Basic Training during Implementation**

For Epic EMR implementations occurring in healthcare contexts where paper was previously the primary way of recording patient data, providing basic Epic EMR training for physicians and other users of the healthcare team would significantly enhance the efficiency of Epic EMR operation. Training should be appropriate and relevant to the parts of the EMR that users will interact with. In organizations and settings where older EMR systems were implemented, training may not need to be as detailed due to users already being familiar with the key technical aspects of data entry and access. Offering this training for members of the healthcare team would ultimately enable a smooth transition to the new Epic EMR.

## **Adhere to project timeline and engage operations**

From a project perspective, sticking to the project timeline is critical in order to meet the deadline for Epic EMR implementation. New requirements always arise during implementation, and by pushing back the go live date for every new requirement, the new EMR system would never launch. When completing projects of such large scale, there are always items that are never fully complete or correct, and will need to be corrected after launch. Keeping operations engaged is vital in order to reinforce that this was not just an IT project, it was a clinical transformation that affected all groups.

# Feedback after Implementation

Once a new Epic EMR is implemented and begins to be used, it is foreseeable that there will be issues with functions that the healthcare team will have difficulty understanding, or system processes that may need redesigning, etc. Following the go live of the Epic EMR, it is necessary to arrange dedicated feedback sessions where users from all backgrounds can provide valuable input helping to dictate how the implementation and support teams can improve the system for achieving the desired results of the new system.

## Apply the Epic EMR to enhance collaborated patient care

Epic's EMR enhances the ability of healthcare professionals to converge and coordinate while providing the best possible treatment for the patient. Epic EMRs automate the documentation and records sharing process, allowing for all members of the healthcare team to collaborate their care using the shared patient data. The Epic EMR system also enables physicians to enhance the efficiency of ordering examinations, prescribing medications, and sharing other relevant patient information with other members of the healthcare team.

## Encrypt Data

Encryption of data helps to protect Epic EMR systems from data breaches, along with lost or stolen devices. Database administrators must ensure that the database client applies encryption according to industry best practices. For premium security, data should be encrypted both at rest and while in transit.

## Plan regular backups to reduce interruption and maximize productivity

In a fast-paced clinical environment, time is of the essence! The healthcare team cannot afford even the slightest amount of stoppage time with their Epic EMR system. If the EMR system does crash, significant discrepancies in data sets may have catastrophic effects on patient-related decision making. In order to avoid this, regularly backing up the Epic EMR data will reduce any discrepancy in the data, and allow for higher productivity levels.

## Validate soundness of the backup data

The front end of your backup and recovery process may be functioning fine, however if your backup data integrity is compromised, then there is no use of deploying a backup procedure. Backup data integrity should be checked and verified every time there is a change in recovery configuration or every time a trial restore is performed. Healthcare organizations should be sure of confirming that their backup policies and procedures align with those outlines by Epic.

## Optimization of the recovery and restore procedures

It is essential to optimize the performance of the recovery and restore processes. The backup or recovery process will always be faster than the restore process, however reducing the discrepancy between the two will help to maximize the efficiency of a restore execution when needed. In order to increase the likelihood of a successful restore: Use several data readers when backing up the databases, execute comprehensive daily backups of the databases and upgrade the recovery process if complete backup does not occur within twenty-four hours, and ensure the recovery software is able to restore the data from numerous streams. The number of streams for the recovery and restore must be equivalent in order for the restore to be as fast as possible in the event of a catastrophe. Regularly monitoring the backup and restore processes is essential to ensure that they meet the guidelines and limits set by Epic.

## Keep up to date with Epic guidelines

Supporting all of the above mentioned best practices is the fundamental need to stay up to date with all recommendations and parameters set out by Epic. The Epic implementation team should constantly review Epic guidelines and adopt updates to their implementation as necessary.

# Integrate secure, error-free printing from Epic EMR applications

Printing is critical to healthcare, and with increasing privacy concerns relating to confidential patient information, it is vital for healthcare organizations to adopt print solutions that enable secure and error-free printing. Print solutions for Epic EMR settings should provide secure pull printing, preventing unauthorized access to printed patient data. Efficient print solutions for healthcare organizations should also allow for 100% printing uptime and fast printing from Epic EMR applications. With the increase use of mobile devices by healthcare professionals, the ideal printing solution for Epic EMR should also be compatible with mobile printing. Adopting a print solution with the above-mentioned benefits will ultimately lead to increased productivity, reduced printing costs and enhanced security and compliance.

## Content Security and Auditing

With security being paramount in the healthcare industry, it is of utmost importance that healthcare organizations constantly monitor and audit their Epic EMR systems. To begin, access to logs should be restricted to authorized users in any Epic EMR setting. Records should be maintained indicating the purpose of each log, along with the details of users who are authorized to access the log. To aid in monitoring, and as a preventative measure, system warnings should be automated within the Epic EMR to notify users that all access is being monitored and audited. Healthcare organizations should ensure that auditing takes place on a continuous basis in order to prevent, detect, and deter any unauthorized access to patient health information. Audits should be both proactive and reactive, helping to ensure that the system is completely secured from privacy breaches on an ongoing basis.



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