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Migrating to Epic?

Here's the Data You Need

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We asked Keena's conversion experts and data scientists to compile advice and tips from experience with 50+ Epic Conversion and Archival Projects to help you prepare for your conversion project.

Introduction

With increased regulatory and reporting requirements, a push for true interoperability, and the need to better engage with patients, many of our clients have been considering a move to a new EHR — and specifically to the market-leading Epic platform. Industry statistics indicate that the majority of EHR conversions and implementations within the past 2 years have gone to Epic — with 111 hospitals joining its network.

DATA PLANNING

The Key to a Successful Epic Conversion Project

An EHR conversion is a complex and challenging project requiring a unique mix of savvy technical deployment and carefully considered collaborative planning. To ensure a successful migration, the scope and build-out of your data plan is priority #1. While this paper mainly focuses on clinical data, the overall insights also apply to organizations that plan to use Epic's financial modules, including Epic Tapestry.

> **We have broken data planning down into 8 critical factors for your consideration, outlined below.**

Data Elements Selection

Deciding which data elements to move from your existing EHR is at the heart of every conversion project. Here are some factors to consider when determining which data elements to migrate to Epic.

Key Patient Identifiers

Demographics such as name, address, date of birth, are typically a core part of any conversion.

Structured, Discrete Clinical Data

Medications, allergies, and lab results offer the potential of being moved directly into a new EHR database — which provides the advantage of being incorporated into clinical decision support processes.

◆ Epic Pro Tip

Consider the PAMI (problems/allergies/meds/immunizations) ROI (reconcile outside information) rules. Certain data parameters, override status, etc. can save you a lot of time when discussed and planned for up front. If you are utilizing a CCDA, you can only bring those 4 data elements into Epic. For histories/vitals/ results you will need to use an HL7 interface or flat files per Epic specifications. Be prepared for data clean-up. Errors will occur and business logic will not always align with your process needs.

Continuity of Care Documents (CCD)

CCD's are useful for both summary data and discrete elements. This is because the underlying structure is based on the CCDA (Consolidated Clinical Document Architecture) standard. CCDAs can be used to generate historical PDFs for longitudinal view of the patient's chart. It also contains all the discrete data needed for most clinical conversions.

> ◆ **Epic Pro Tip**
>
> Many EHR systems can produce a CCDA but often those CCDAs are not able to be imported into Epic or they import data that is undesirable. There are a variety of reasons for this, so choosing a knowledgeable conversion specialist with experience in reviewing, identifying, and resolving a wide spectrum of data issues adds a lot of value.

Progress Notes and Other Relevant Clinical Documents

This data has important historical reference value. When considering notes and clinical documents, look to balance providers' needs vs wants to avoid cluttering your new EHR.

> ◆ **Epic Pro Tip**
>
> In the Epic environment, PDFs require an extra click to access, while notes do not.

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Data Quality

Older systems typically have a higher dependence on unstructured data variability and therefore increased data quality issues. Migrating to a new EHR provides you with an opportunity to start fresh — which means being selective about which data is converted to avoid the bad data in/bad data out paradigm.

Data Mapping

The data mapping effort is almost always underestimated by an organization but is critical for a discrete data conversion and crucial to keeping to your planned project timeline. For example: some items might not be codified, or they may not be in the required coding system. These situations require a lot of communication, vetting, and signoffs.

A Few Suggestions for a Successful Data Mapping Project

- **Identify coding set mapping requirements upfront**

- **Determine the volume of data you have that is not codified**

- **Prioritize by instance count.** Example: For medications, determine how many are prescribed and then prioritize accordingly

- **Give extra time for basic data formatting of key elements.** Examples: time, language, gender, and demographics

- **Make sure you have the Epic Dictionaries map from source codes to Epic Codes**

◆ Epic Pro Tip

An experienced conversion partner should suggest that they do key portions of the data mapping analysis during the discovery phase BEFORE the project plan and costs are finalized. It may seem like they are building in upfront costs, but the opposite is often true. It will save a great deal of time and effort in the end.

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Data Grouping / Sets

It's important to define and build meaningful practice identifiers to ensure patients and their data can follow the provider. Consider what needs you may have for identifying patients/ groups from a legacy perspective up front in your planning process. If you want to know which patients are affiliated with specific practices in your network, you'll need to define and build meaningful Practice Identifiers.

These identifiers can then be used during the conversion from the legacy system(s) for various conversion data set(s). If you're planning to use the legacy practice level OID — having complex, or inconsistent rules can reduce or eliminate your ability for some practice level reporting, export utilities, or straight-forward conversion tasks.

Archiving vs. Conversion

It may not be practical or possible to convert all the relevant clinical and financial data from your old systems to your new one. Yet it's crucial for patient care, collections, and legal compliance that you "leave no data behind". Consider having a comprehensive legacy system data archival plan to provide easy access to a full view of all archived clinical and financial data from older platforms.

There's no need to keep your legacy EHR or PM systems running along with the maintenance and licensing expenses that go along with that alignment. A user-friendly, flexible archive solution can be configured to operate as a module inside most leading EHR and PM systems. Thus, avoiding the need for clinicians and back-office staff to log into multiple systems to access historic patient information.

There are several ways to make historical charts readily available for providers without integrating the data into the new platform. For problematic data, this is a compelling alternative. Balancing what providers want and need with what is possible, is critical to achieving success at a technical and user level.

How Much is Too Much?

The benefits of archiving data are huge and often pushed aside in the initial stages of planning. Consider planning ahead for release of records and legal data storage requirements. Avoid filling your new Epic system with poor quality data or data with minimal access requirements. The financial and operational benefits of planning your data archival strategy up front are significant.

◆ **Epic Pro Tip**

When determining what legacy data you want to bring into Epic, be aware of disc space considerations especially when making decisions on documents and PDF's. Epic may enforce specific storage space limitations for document conversions that can require extra hours for reassessment and communications.

How Much is Too Little?

It is also possible to err on bringing in too little data during a conversion. Patient safety can be threatened from limiting access to legacy records. When deciding how many years of patient data to bring into Epic consider that if a patient does not exist within Epic you will not be able to use single sign-on from within EPIC to the Archive for that patient. The user would have to manually login to the Archive and search for the patient, which can dramatically reduce both the value of the Archive and user adoption.

◆ **Epic Pro Tip**

When considering how long to maintain OB/GYN patient records, remember that many years can pass between patient visits. You may consider migrating OB/GYN patient data for a longer period of time than the average primary care patient.

Take Advantage of Data Tools

One of advantages of working with experienced conversion vendors is that they have often developed efficient data cleansing and workflow tools that can help mitigate challenges that inevitably arise with complex conversion and archival projects. Be sure to include data automation tools in your conversation when evaluating vendors.

Recomended Data Tools

- **CCDA**
  - **Parsing** - ability to parse human readable and machine code elements
  - **Transforming** - leverage all translation & mapping
  - **Generating** - ability to create HITSP C32 compliant CCDA

- **Standard HL7 Interfaces** (Parsing, Transforming and Generating capabilities)

- **Translation and Mapping Tools**
- **Conversion Database**

- **EHR API Libraries**
- **EMPI Integration**

- **Document Conversion Tools**
- **Legacy EHR Specific Extract Scripts**

◆ Epic Pro Tip

Do not overly rely on Epic's validation tools to filter out bad data. Define your specific data requirements in advance of migrating/importing any data, determine if the system can enforce those requirements, and then establish infrastructure to handle any gaps in data validation. You will need a team of SMEs and technical experts to accomplish this task. Organizations planning to use Epic's Air98 format to import eligibility data particularly will benefit from this approach. New to Epic's Air98 file format for importing eligibility data? Our consultants have spent hundreds of hours working with clients to structure data to fit into the rigid formatting requirements of these files.

Don't Forget About Workflow When Making Data Management Decisions

In the end, the goal of a conversion project is to support administrative and clinical workflows that guarantee continuity of care for the patients served. Since medicine is a high transaction activity, even minor workflow inefficiencies get magnified.

Getting a practical perspective on how a conversion project can impact daily activities — from scheduling, to check-in, to visits, to ordering tests, and finally through the billing process, is essential for a successful project. This means understanding the workflow of all the staff that fulfill these functions — not just the physicians. This can also be an area where your conversion specialists can help, particularly if they have experience building and utilizing tools to support workflow issues that occur within conversion projects.

◆ **Epic Pro Tip**

Regarding post-conversion workflow- how data elements are converted to your new system could dictate whether they are classified as read-only editable active past reorder. A couple examples are a transition of problems from Active to Past, or the ability to Reorder medications.

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Consider Post-Migration Needs

Data Considerations

When establishing data feeds that will persist beyond the end of the migration project, determine whether Epic's change tracking will meet your needs for reporting and investigating historical values. Consider building supplemental logging, change tracking, and data history into your ETL process as needed.

Epic Provider Data Management (Triplets) information for Providers (SER), Vendors (VEN), and Places of Service (EAF), often needs to continue to flow into the system from an external source after go-live. By establishing strong translation tables and a reliable feedback loop between your Triplets file generator and your Epic data early in your migration, you will save time and effort throughout testing of the new system and into the years that follow go-live.

Provisioning Considerations

Start determining how you will grant access to your new system. An Auto-Provisioning Solution can decrease time to full system access for users, increase productivity versus manual methodology, and provide built-in reporting capabilities that enable easy and accurate provisioning compliance tracking to enhance security and meet regulatory requirements.

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Summary

An EHR conversion is a challenging project that can be successfully completed by following a systematic process. A detailed understanding of your data and workflow requirements is necessary. Partnering with experienced conversion specialists with data set knowledge, established workflow tools, and programming capabilities can help facilitate a smooth transition and successful adoption of your new Epic system.

Next Step

Contact Jamie Steck if you are interested in a more technical discussion or scoping of your next conversion project:

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Next Read

Read our EHR Migration Guide about general tips on converting to a new EHR

8 Steps to a Successful EHR Conversion

Read Guide →

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