



# Data Conversion/Transition Strategy

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## Objective

Advantage EMR™ version 3.5 is HIPAA compliant, fully integrated electronic medical records/Practice Management medical practice solution. It brings together electronic medical/health records, billing, collection, reporting, electronic claim submittal, document management and more in a single well-rounded, easy to use package. This product dramatically increases a medical practice's efficiency and revenue while reducing costs, documentation issues and effort.

This document is written to review and outline some strategies of implementing Advantage EMR. We will discuss the transition from paper to paperless environment strategy, risks and challenges. Several alternatives are discussed; in the end, you will be able to identify the most optimum transition path for your organization.

## Issue

Most medical practices have accumulated and continue to produce a significant volume of paper records. These records, from patient charts to insurance information, lab results to medical histories, pose challenges for storage, maintenance, accessibility and usability. There are significant information redundancies, low availability and weak security. These records have little or no safeguards against loss or destruction, are difficult to search and query.

A transition to electronic medical records would solve all of these issues, but present a new set of challenges. Staff acceptance of the technology and acquiring a new skill set are just a few. The main issue of this paper is a subset of this topic: How to integrate existing, paper-based records into Advantage EMR.

# Transition Strategy

## Data Inventory

It is important to understand your total data inventory, including the data and data sources in your organization. For example, some of your data, such as billing and insurance information, is likely in digital format. Often, the data structure is known and not well protected; this data may be considered an easy target. Unfortunately, much of the critical data in the healthcare industry is stored in hard-to-access proprietary data storage devices or in non-digital format. This might include SOAP notes, Patient History, Prescription records, etc. Your administrative staff can be a good source of information for this inventory task. We recommend asking them to participate in this exercise

You do not need to analyze every piece of paper or electronic data you have, although getting a fairly complete inventory is useful in the planning and decision-making process.

The easiest way to complete this task is to complete a data inventory worksheet. An example follows:

### Data Inventory worksheet

Data Type	Data source	Format	Critical Rating 1-5
Patient Charts	Office Charts	Paper	3
Pat. Demographics	System X	Electronic	5
Billing Records	System Y	Electronic	2

Note: the Critical Rating 1-5 value determines your subjective rating of tolerance for existence of existing data outside of the EMR system. To clarify this point, asks yourself a question, what would happen if this **historical** data were not easily accessible through your EMR system? Try to separate “Must” from “Would like”. This is preliminary exercise to your next step.

### ***Identify critical data***

You have now completed the data inventory worksheet; you know your data and where it resides. You have also started to assess how important it is to have this data at your fingertips through the EMR system. We can now develop a transition strategy.

Think what impacts will each piece of data in all “Data Type” categories have on your day-to-day or hour-to-hour operations, and how fast it becomes obsolete. Revise your critical rating based on these considerations.

When transitioning from one system to another one must understand that there is both a financial and effort cost. We need to pay for critical data, we may choose to pay for convenience, but we can certainly disregard and cut unnecessary costs.

Now we must consider patient turnover ratio. How many patients leave the practice? If you can identify those patients, this is data you may not need to convert. The number of new patients joining the practice is also important, but less relevant when analyzing data conversion.

## **Assess cost**

### **Data conversion cost - Outsourced**

Each piece of data you are converting has its value and cost. Considerations for this are simple. Some companies will offer to convert your documents to digital images for as little as \$0.25 per page, and some as high as \$1. For this example we'll assume that your charts averages 20 pages and you have 2000 charts. With simple math we can calculate that data conversion will cost you \$10,000 - \$40,000.

## **Conversion Strategies**

### **Total Conversion**

For the purpose of this discussion, let's assume that data conversion cost is \$15,000. Consider that 10% - 15% of the patients are leaving the practice and another 10% - 15% of the patients will not come back for at least one year. That represents an unjustified expense of \$3,000 - \$4,500. Of course, you should use your own number of charts and pages per chart quantities to refine your estimate. In any event, using a total conversion strategy, you will convert some dead data.

**Pros:** all data is converted and ultimately available through EMR.

**Cons:** expensive, organizational challenge of conversion activity, staff and physician ramp-up time, significant short-term office performance degradation, increase in billing errors, conversion errors, misplaced or miscategorized electronic files. (*Business cases reviewed: massive systems implementation by a major insurance carrier resulted in total system shutdown for three business days; major hospital EMR implementation resulted in disastrous data loss, patient care jeopardized*)

### **Incremental Conversion-Approach 1**

Another approach is an incremental conversion. Based on the assumption that online access to full data is required only for those patients for whom an appointment is scheduled, we assess specific data items. Typically, this includes patient billing, insurance and demographic data, past medical, past surgical, family, and social histories, medications and recent SOAP notes. This may also include other items, such as last lab test or ECG.

As the patient visits the office each time a SOAP note, and a bill are created to include most of this data, which is essentially re-keyed by office personnel.

### **Incremental Conversion-Approach 2**

A variation on this incremental strategy would require office staff to spend 30-40 minutes per day to enter patients' data for the following day or two. If the office treats 30 patients per day, a single staff person would need to spend 30 – 40 minutes per day for the first few weeks. As patients return for follow-up visits, this number decreases to 20 minutes per day and gradually reduces to 5 minutes per day. Remember that new patients will be entered in the system as of the implementation date of your EMR system; this data will not need to be “converted”. Using this strategy, the office administrative staff will both learn the system and convert most of required data.

**Pros:** significant cost savings, smoother transition, little impact on day-to-day practice operation. Data is converted on an as-needed basis

**Cons:** Occasional use of paper charts to reference historical information is still present.

## **Implementation Hardware Requirements**

The implementation of an EMR system is a move towards modern practices and technology. All too often, this move requires an upgrade of a medical practice's computer hardware and/or operating system. Different systems often have different requirements. Fortunately, Advantage EMR™ will perform well running on relatively inexpensive hardware. We also found that homogeneous environments perform better than heterogeneous. Advantage EMR™ is designed and built for Microsoft Windows XP. While Advantage EMR™ performs well on machines equipped with Microsoft Windows XP Home edition, our preference, for security reasons, is Microsoft Windows XP Professional edition. Usually minimum configuration for an average office, converting from paper will require: three networked Microsoft Windows XP PCs, with at least one of them running Microsoft Windows XP Professional, a broadband Internet connection, and a router.

## Conclusion

After carefully reviewing the strategies presented above, you should decide what strategy is right for you. It depends on your practice and style of work. While various clients have successfully implemented all of these strategies, we usually recommend an incremental strategy as the most cost-effective and risk-free approach. Regardless, Advantage EMR will be able to support whatever strategy you choose as the safest, most economical road to successful system deployment.

EMR systems are often too complex and costly. The Advantage EMR™ strategy encompasses a comprehensive feature set that is easy to use and affordable. Advantage EMR™ is flexible enough to accommodate your chosen strategy and deliver significant practice performance, revenue and efficiency enhancements that will pay for itself in three to six months.

For more information please visit <http://www.AdvantageEMR.com>

