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Technology

Combining Voice Recognition Software With EMR
Guest article — first in a series

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Dictation is how doctors work

New Orleans urologist and practice management author and lecturer Neil M. Baum, MD, sent us a 5,000-word manuscript on using voice recognition software with electronic medical records. He is the author of Marketing Your Clinical Practice-Ethically, Effectively, and Economically *(Aspen Publishers).*

When a quality physician on the leading edge of practice management thinking sends us article ideas, we usually pursue them. We've edited that long piece into a series of articles, starting with an overview of VRS with EMR. Next issue we'll discuss the specifics of equipment considerations and cost. Contact Dr. Baum at (504) 891-8454 or e-mail to NeilB89@aol.com.

In most practices, patient charting goes something like this:

- A staffer pulls a patient chart for the physician.
- The physician carries the physical chart into the exam room.
- The doctor later dictates a chart note and any referral letters.
- A transcriptionist types the chart note and referral letters.
- A staffer files the chart note and any referral letters in the patient's chart and mails any referral letters.

This process often proves inefficient and labor intensive. Numerous time and motion studies have demonstrated that it costs $3 each time someone on your office staff physically touches a patient chart. And that's when it works properly.

Bogged Down

The paper system too often bogs down under a variety of misfiles, lost files, transcription errors and omissions. Nearly every physician has experienced the drain of time and energy when a chart falls into a "black hole" and can't be located.

You've probably faced the embarrassment of "winging it" with a blank chart - holding it so the patient can't see that it's empty.

Electronic medical records (EMR) offer a more efficient way to manage all the varied information in a well-documented medical record. When adopting new technology like EMR, using voice recognition software (VRS) to capture that data allows physicians to work in a style they're familiar with - dictating notes and

letters.

While you *can* use a keyboard, PDA or other writing device to enter patient information into an EMR system, physicians are used to dictating that information. They're trained to work that way, creating chart notes, referral letters, x-ray reports and other documents that end up in patient records.

How You Work

The more your method of inputting information reflects how you already work, the more likely you are to accept an EMR for managing medical information. Effective VRS facilitates dictating your clinical documentation into an electronic record.

This article describes an effective transition strategy for making the move to the so-called paperless office using VRS. Next issue, we'll address cost and some key other questions physicians ask when they're evaluating VRS.

One Way To Start

Making the switch to a paperless electronic medical record is not difficult. For new medical practices it's rather straightforward - simply use an integrated electronic medical record from day one.

For existing practices with paper charts, the following approach has worked exceptionally well: Go paperless for all new patients and convert existing patients to electronic records when they next visit your office. When that next visit occurs, a staffer pulls the patient's chart and scans the documents into the new EMR system - as graphics, not text - using an inexpensive, offthe-shelf document scanner.

After the paper documents are scanned into the EMR system, a staffer archives the paper chart. Many doctors find that they almost never have to retrieve them. You can free up expensive office or off-site storage space once you gain a comfort level with electronic records.

Charts for previously seen patients who don't return to the office are never scanned. Eventually, these charts are archived based on the practice's document retention policies (for medical records, usually 10 years after the most recent encounter in most states).

Switching to Paperless

How long it takes to make the transition largely depends on the interval between patient visits to the practice, but about six months is typical. Practice size is less of a driving factor.

According to Craig Yates, president of Medical Dictation Systems[1] which distributes and supports voice recognition software for medical practices, during the first few months, large numbers of patients will come in for new visits or follow-up. So expect heavy scanning into the EMR system then.

After three months, the scanning should reduce by half. Expect it to reduce by half again each subsequent month. After six months, the scanning should be minimal, according to Yates. By then most practices will have completed a functional transition to EMR.

Primary care practices - with more patients returning on a regular basis - will face heavier scanning requirements than specialties, which see more new patients. However, the total time for transition remains roughly the same.

VRS Role

With a VRS software system in place as part of your EMR system, any documents dictated to the documentation software go right into the electronic record. Doctors dictate using a microphone connected to a desktop or laptop computer equipped with the VRS software.

The doctor can review the documents created by the software, electronically sign them and then upload them into the EMR system, where they're immediately available across the practice. The physician's handwritten signature is scanned into the program so the doctor can use and electronically sign off on reviewed documents. You also need a letterhead sample and an address list of the referring physicians for producing letters.

For added physician flexibility and mobility, the system can also work with a hand-held recorder.

That makes it easier for the doctor to dictate, after which the typed notes can be played back through the VRS software and uploaded to the EMR system.

Getting the VRS portion of the system up and running takes less time than launching EMR. The learning curve for a voice recognition software program is very short since a medical VRS program includes medical vocabulary. According to Yates, doctors can easily learn to use the program even if they have little experience with computers. He estimates that after an hour of hands-on training and then dictating 10 to 20 charts, physicians will feel comfortable with the VRS process.

95% to 99%

New-generation speech recognition software is so well refined that with little adjusting physicians can dictate at accuracy rates of 95% to 99% and still maintain a fast dictation pace. While acceptance varies by individual doctor, many find this accuracy meets their needs well.

Most physicians start by using the VRS program for several patients a day until they're comfortable using the software. Then they steadily increase the number of cases until they're dictating all of their charts using the VRS system.

Basic Costs

Expect to spend $8,000 to $20,000 for a VRS software package. Add to that the cost of any additional computer, networking or peripheral hardware you need to get started. These costs vary greatly, depending on your existing computers and network. Of course, that excludes the cost of EMR software, which varies widely depending on the type of system you select.

After the first year, expect to spend 10% to 15% of the purchase price on annual maintenance and software upgrades. We'll explore cost in detail next month.

Next issue: Components, features and cost details of VRS.

[1]Contact Medical Dictation Systems at (985) 370-8885.