EMRs & Dictation
The Best Dictation Solution May Be Right Under Your Nose
Many orthopedic practices are in the process of going digital with their charts. The software that allows practices to do this is called Electronic Medical Records or EMR software. There are many companies who offer EMR products which work in different ways. The majority of EMR products are focused primarily on generating an office note using a template driven system where the physician enters information about the patient’s history and exam. The system then uses this input to generate some type of note.

At first glance, this seems like a great idea. Physicians, who normally dictate the office note and then pay a transcriptionist to type it, are led to believe that templated dictation will cut down their workload. The problem that I have seen in the real world practice setting is that this type of system often has the opposite effect, slowing the physician down rather than speeding them up. Additionally the generated note lacks the customization often required for each patient. Worse yet—the physician is now tasked with the responsibilities of a clerical person. This is frustrating for the physician whose primary role is to see patients and provide clinical care, not generate notes on a computer. I have spoken to many physicians who have adopted EMRs which use a template based note system and invariably they all say the same thing, “I was able to see more patients with my paper chart and dictating the note.” The reason for this is obvious.

There are two types of patients seen in the office: the routine patient, and the complex patient. An example of a routine patient would be an initial post-op knee replacement that is doing well. One would imagine it would be simple to template a note on a computer system for this case. Maybe you would select the range of motion for the knee, select something about the incision healing well, select that the patient would do physical therapy, and select what the x-ray findings are and the system would generate a note for the patient. The complex patient is usually the new patient. For example, the workman’s comp patient who was in an accident with a fractured left ankle, right distal radius, and open wound over the right knee. Maybe the patient has had previous right knee surgery as well and has a complex history of how the accident actually happened. There is no way a computer template can be used to generate the note on this patient. If you were to try, it would take you at least 3 times longer than dictating the note, and the note you end up with would still not be as precise. So a template based note may be beneficial for the routine patient, but the dictated note is essential for the complex patient.

Is there a happy medium? I believe so. The first thing to do is to get out of the mindset that the primary function of an EMR is to generate the office note. I believe the primary function of an EMR is to get rid of the paper chart. This will allow all physicians and office staff to access the charts immediately and will dramatically improve efficiency in the office. So any EMR system worth considering must be 100% paperless without changing the existing workflow in the practice. This idea of getting rid of the paper chart is much more important than the specific problem of how to generate the office note.

Having said that, once a practice adopts an EMR that allows them to go paperless, how can the office note be generated? As I have said before, templates are useful for routine problems. All EMRs that use a template based system usually require the physician to first create the templates that they will use—this takes time. But why pay for software to make templates? If you are going to go through the effort of designing templates, why not give the templates to your transcriptionist? You don’t need to spend thousands of dollars on software to do this. For example, in my hand practice, I do surgery on many patients that have carpal tunnel syndrome. I have a template for an initial post-op note that I have given to my transcriptionist that looks something like this:

**SUBJECTIVE:** John Doe is seen back today for their right hand. This is the initial post-op visit after a carpal tunnel release. He says is sensation is improved and he reports no specific complaints.

**OBJECTIVE:** The splint and dressing is removed today and the incision looks to be healing nicely. The patient has full range of motion of all the joints of all the finger and thumb. They have an intact neuro-vascular exam. No other abnormalities are seen.

**ASSESSMENT and PLAN:** Status post carpal tunnel release. The sutures are removed today and the wound is cleaned and redressed. I have instructed the patient on some exercises for the hand and have told them to start massaging the incision gently. They will return in 4 weeks for a recheck.

Now when I have a post-op carpal tunnel patient, I simply dictate, “Jane Doe, standard post-op carpal tunnel note, left hand.” My transcriptionist then generates the note for me. It literally only takes me a couple of seconds to generate this note and I can move on to my next patient. This is an example of a templated note.
which I believe is much more efficient and easy for physicians. Give the templates to the transcriptionist and have them do the work of making the note. This will allow the physician to see more patients in the same amount of time. In general seeing just one extra patient a day in the clinic will pay for the cost of transcription for the entire day.

The templates that you make don’t have to be the whole note. For example I have a template for a normal knee exam which goes something like this:

**KNEE EXAM:** The skin is intact with no erythema or bruising. There is no edema or effusion in the knee. The knee has full range of motion without pain or crepitation. There is no laxity with varus or valgus stress. There is a negative Lachman’s test with solid endpoint. There is a negative anterior and posterior drawer test. There is no medial or lateral joint line tenderness. There is a normal distal neuro-vascular exam.

So when I see a patient for an acute ACL tear, I simply dictate, “left knee exam – positive effusion and positive Lachman’s test.” My transcriptionist will plug these values into my normal knee template.

Another thing that makes my dictation more efficient is that there is no need in the dictation to become a “Xerox machine.” What do I mean by this? When you see a patient for the first time, all practices have intake paperwork that the patient fills out which includes information about past medical history, review of symptoms, family medical history, social history, and medication history and allergies. There is absolutely no need to re-dictate this information into the office note – you simply have to refer to it. For example under the past medical history section of my new patient office notes this is what is transcribed by the transcriptionist:

**PAST MEDICAL HISTORY:** The past medical history given by the patient on the intake sheet is reviewed and discussed in detail. Relevant findings are a history of rheumatoid arthritis since age 17.

Despite the fact that only the rheumatoid arthritis is listed in the note, since we have referred to the intake sheet with many more items on it, the number of bullet points needed to grade the office visit level can be obtained from the intake sheet.

As you can see, this is the best of both worlds. You can template the simple notes and thereby increase your efficiency and reduce transcription costs. (Note: Transcriptionist shouldn’t charge per line for a templated note since it only takes them a few keystrokes to paste a template into a note – if your transcriptionist insists on billing you for each line even for a templated note, go to another transcriptionist or employ your own). Notes that require a lot of customization can still be dictated.

Many people ask me about voice recognition. My personal feeling is that the technology hasn’t advanced far enough yet to make it practical. For optimal results with voice recognition programs, you must have a quiet environment and speak slowly. Orthopedic offices are typically very noisy with cast saws, cell phones, and pagers going off. Even if the computer can understand what is being said, it still has problems with context. For example in the sentence, “This patient hurt her hand while kneading some dough.” The word “kneading” – is it “kneading” or “needing”? We know which one it is supposed to be since we as humans can understand the context of the sentence, but the computer is no where near intelligent enough to figure this out. So even if you can get 97% accuracy with voice recognition, which is very optimistic, the last 3% of inaccuracy will still require you to check the remaining 97% for mistakes which can be time consuming.