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# Voice and Handwriting Recognition

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# Voice Recognition in an Outpatient Primary Care Internal Medicine Practice

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## Helpful hints for accurate voice recognition (VR):

1. Speak as if delivering the evening news. Enunciate clearly in a quiet room.
2. Speaking in longer phrases allows the computer to use context to improve accuracy. Avoid dictating single words or very short phrases.
3. Focus on dictating, and keep speaking. Avoid waiting for the computer to catch-up.
4. Dictate the full document then go back and proofread. Avoid proofing as you go.
5. Use correction commands to fix errors and improve future recognition accuracy. Avoid simply typing over errors or highlighting the error and re-speaking.
6. Use macros.

**A macro is a spoken command that executes a larger task.** The spoken word (or words) is not directly transcribed. Instead, the spoken command performs a task that may be as simple as inserting frequently used text templates (e.g., speaking “negative review” inserts your typical negative review of systems) or as complex as performing calculations or retrieving network information. VR software allows easy creation of simple macros. In my office, the simple macros suffice only for a fraction of the tasks that I do while dictating. The complex macros require some programming knowledge. Macros afford significant time savings.

**VR is at best time-neutral for the clinician.** In my office, my dictation times are, on average, just slightly longer than other providers who see a similar patient mix, and my notes tend to have a similar number of lines compared to the other providers, yielding a slower rate of dictated lines per minute. Anecdotally, I am not leaving the office any later than prior to the use of VR software.

**VR saves time for the office staff.** The patient’s chart does not need to be filed after the visit then pulled again when the transcribed note is available.

**VR saves money.** The largest savings obviously come from transcription costs. Purchase of a high-end computer system with good VR software (\$3,000.00 start-up) should pay for itself within two months. Other financial savings come from saving the staff’s time, possibly allowing employment of fewer full-time employees to do the filing.

## VR might be right for you if

- you like computers,
- you document the same information multiple times a day,
- you want to use text templates
- you want to use calculations and clinical prediction rules,
- you want fast turn-around times for notes and letters,
- you want to save money and staff time.

## VR might not be for you if

- seeing the document as you speak is not important,
- you initially find the learning curve to be steep,
- you feel frustrated by the computer repeatedly making the same mistakes,
- you want to concentrate on the note’s content – not enunciation.