Make Medical Notes Better and Faster with Macros

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You can use your word processing program to create notes almost instantly – even if you're not a great typist.

Having your encounter notes completed and in the chart before the patient leaves your office might sound like a fantasy, but it is typical in my practice. The key to my efficiency is the word-processing technology of macros, which I use as I document patient visits at the point of care.

Macros allow you to record and replay a series of typed characters or other keystrokes. They make it possible for a physician to quickly document an entire medical note while avoiding the cost of transcription or expensive medical-record documentation programs.

Built for repetition

The fact that medical notes often contain repeated information makes them a natural fit for macros. By using mac-

ros, you can program a "hot key" (one or more keys hit at the same time) to recall all that repeated information and then simply edit that general note to apply to the specific patient. For example, I have written macros that insert the complete wording for a Pap smear, a routine physical or an infant's two-month examination. Macros can also be used when a patient has a specific complaint. For example, the history, exam and treatment for pediatric otitis media are often very similar.

Along these lines, I have a macro for otitis media that "plays" when I press two keys: "Alt" and "O." After keying in that combination, this is what appears in my word processor's window:

History: Two days of low-grade fever, nasal congestion and pulling at ears.

Exam:

General: Alert.

HEENT: Mild nasal congestion. Mouth normal. TMs are red and dull.

Heart: Regular rate and rhythm without murmur.

Lungs: Clear to auscultation.

Abdomen: No liver or spleen enlargement. Nontender.

Skin: No rash.

About the Author

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Extremities: Normal.
Assessment: Otitis media.
Plan: Amoxicillin, 250mg/5cc, 1 teaspoon three times per day for 10 days. Follow up in two weeks. Report reaction to medication. Report worsening.

With that as my starting point for a typical history of otitis media, I then edit each note as it applies to the specific patient.

How it's done

Here are step-by-step instructions for programming macros in Microsoft Word. (I'll use the example of creating a basic heading for a medical note.) There's no limit to the number of macros you can set up. The details might be different in other word processors, but most have the capacity to program macros.

While displaying a new, blank document in Word, go to the "Tools" menu. Select "Macro" and then the submenu item "Record New Macro." A pop-up window appears. This is where you'll decide what to name the macro and how it will be recalled. We'll name this macro "purpose" for purpose of visit. Type "purpose" in the space below "Macro name" and then click on the "Keyboard" button.

A new pop-up window appears with the cursor ready to assign a keystroke combination as a hot key. In this case, a convenient hot key is the "Ctrl" key held down while pressing the letter "P." (It is a good idea to make your hot keys memorable by incorporating letters that have some reference to their function. In this case, the letter "P" reminds us that this hot key will recall our "purpose of visit" entry.) Click on "Assign" and then "Close." The pop-up window will disappear.

The program returns you to the document screen but adds a tiny box that has the record-function control. It is automatically set to record. Any keystrokes you enter from this point until you stop will be recorded and saved under the heading of "purpose" and linked to the use of the "Ctrl-P" keystroke combination.

Hit the "Enter" (or "Return") key a few times to create enough space for an adequate top margin. Then pull down the "Insert" menu from the menu bar at the top of the Word screen or window. Select "Date and Time," click on the date format that you wish to use and then click "OK." The date will appear on the screen. It will also be stored with the macro. Hit "Enter" twice and type, "Purpose of visit: " (Leave a blank space after the colon so that after executing the macro, you will be ready to type in the patient's purpose for the visit.). To complete this macro, click the stop button (the blue square) on the macro-record pop-up box.

That does it. Your new macro is stored and ready to use. It will be remembered even when the computer is turned off. In the future, any time you're using Word, the keystroke combo "Ctrl-P" will execute what we have just typed.

WordPerfect's macro capabilities are comparable to those of Microsoft Word, but the procedure of recording a macro and assigning it to a key combination is a bit different. The easiest way to assign key combinations to your desired phrases in WordPerfect is to use the keyboard customization feature under the "Tools" menu.

One caveat: Some keystroke combinations are already in use by your word processor to recall commands. Most of the function keys, F1 to F12, are already in use. The program will alert you if you try to assign an already-in-use key combination to a macro. The "Alt" key or "Ctrl" key used with a letter or number as usually available for assignment.

A macro combo

Macros are most useful when you can string two or more of them together during an encounter. An example is a typical history and physical for a child with otitis media. In that case, I type "Ctrl-P" to call up the purpose of visit heading and then "Alt-O" to put in the wording for the otitis media exam. There are always some minor changes needed to make the note applicable to the specific situation. ➤

Repetitive documentation can be sped up by using word processing macros, which allow you to record and replay a series of typed characters.

After you link a macro to a "hot key," you can execute an editable medical note with a single keystroke.

You can set up as many macros as you want, and your computer will remember them even when it's turned off.

You can also use macros to represent simple, frequently used phrases within your note. For example, you could use the key combination of "Alt-A" to represent "Amoxicillin 250mg/5cc 1 teaspoon three times per day for 10 days." Or you might use "Alt-N" to represent your name and address. You'll be limited only by your own imagination.

Give it a try

At the end of an exam, your note can be printed and put in the chart or saved as part of the electronic health record. Of course, all the usual HIPAA security requirements must be met.

In addition to helping you document a visit efficiently, other benefits to using macros are that the notes are in your own words and look nice in the written chart. Try them during the most common visits to your practice (see "Helpful macros" below for some ideas to get you started). I think you'll find that a macro-based note documents a visit better and looks much more professional than a check-list-based handwritten note. **FPM**

Send comments to fpmedit@aafp.org.

HELPFUL MACROS

To get you started thinking about macros that could be helpful in your practice, here is a partial list of the macros I use in mine.

Alt-E	Normal exam that includes general, head and neck, heart, lungs, abdomen, extremities and assessment.
Alt-O	Otitis media note with typical history and usual treatment.
Ctrl-O	Otitis media cleared. Meant for follow-up visit for ear infection.
Alt-P	Physical and Pap smear with typical normal history.
Alt-M	Male exam and physical with normal findings.
Alt-U	Upper respiratory infection with typical history and treatment.
Alt-B	Acute bronchitis with typical history, findings and treatment.
Alt-N	Normal newborn exam at a few days of age.
Alt-1	One-month exam for a newborn with normal findings.
Alt-2	Two-month exam for an infant with normal findings and usual vaccinations together with the instructions that I routinely give at this age.
Alt-4	Similar to above for 4 months old.
Alt-6	Similar to above for 6 months old.
Alt-9	Similar to above for 9 months old.
Ctrl-1	One-year exam with usual vaccinations.