

Abbreviation Expansion Software: Do's and Don'ts

HPI ON-LINE SEMINAR, June 26, 2001

by Ellen Drake and Georgia Green

Updated by Ellen Drake, April 2008

What Is an Abbreviation Expander?

An abbreviation expander is a program or part of a program that improves your typing speed and efficiency while you are working in word processing software. An abbreviation expander is sometimes referred to as a typing engine, speed typing program, keystroke saver, productivity software, or (somewhat incorrectly) a macro program. If you've used the AutoCorrect or AutoText features in MS Word or Quick Correct in WordPerfect, you've used an abbreviation expander. In the simplest terms, with abbreviation expansion software running you can type an abbreviation and it expands into its full meaning.

For example, if I typed **The patient had a history of chf**, this would expand into **The patient had a history of congestive heart failure**. The beauty of an abbreviation expander really hits you when you realize that I could also have typed **tpho chf** and it expanded to **The patient had a history of congestive heart failure**. It is not just traditional medical abbreviations that can be expanded. You can also take advantage of the techniques used by professional stenographers who abbreviate just about everything.

There are expanders built into word processing programs, like MS Word's AutoCorrect, and third-party programs or "shelf products" that are intended to work with one or more word processing programs. As a rule, shelf products tend to be more powerful with more features and generally more control for the user.

There are a large number of abbreviation expansion shelf products, and I'm going to be discussing the features that are common to some of these programs. I am not going to discuss the merits of one program over another at this presentation, nor will I be providing a list of particular brands.

That will be your assignment—to use a search engine to find as many types of abbreviation expanders as you can. Remember to try out some of the synonyms I mentioned above when using a search engine.

In Windows, as I noted, there are many abbreviation expanders, including programs that were conceived by companies who never heard of medical transcription. (I always thought this was an MT idea—not!). Anyone who uses a keyboard can use an abbreviation expander. Computer

programmers work with a great deal of repetitive text entry and make use of these tools. Some of these programs are straightforward **expanders** and some are **text analyzers**.

In the former category, you create the abbreviations yourself (or import a list created by someone else). In the text analyzer model, you can instruct the software to process a selection of documents you specify and create an abbreviation list (or glossary) for you. This will produce lots of phrases that you type all the time—and the software will suggest sentence endings for you. There are pros and cons to each type of expander. Some expanders have the ability to imbed programming commands (your word processor's command to save a document, for example) within an expansion. This is analogous to what you can do with Windows hot keys. Let's move on to what is common to all expanders and how you can best use them (and avoid misusing them).

Features Common to All Abbreviation Expanders

Features common to all abbreviation expanders underlie the reasons for using them in the first place. Let's examine those reasons.

1. Save keystrokes, improve speed.
2. Promote better quality.
3. Correct habitual typos and spelling errors. Note: A spelling error is corrected faster by an abbreviation expander than a spell-checker.
4. Make difficult-to-type expressions easy to type, e.g., expressions with numbers or special characters.
5. Incorporate keyboard commands for problem characters, e.g., in **x-ray**, the hyphen should be a hard hyphen to prevent the word from breaking at the end of a line; this can be done with an abbreviation expander. Frankly, you can achieve all of these goals with even the most limited abbreviation expander. That doesn't mean you won't want or need the bells and whistles offered by some products.

General Guidelines

1. Don't reinvent the wheel. If an abbreviation already exists, use it, e.g., **CVA** for **cerebrovascular accident**; **CHF** for **congestive heart failure**. (You need to memorize standard medical abbreviations anyway, so this part should be easy for you.)
2. In general, avoid 1- or 2-letter macros. (There are exceptions—and this is discussed below.)

3. Use consistent naming conventions. (A naming convention is very important and we'll discuss this next.)
4. If an abbreviation saves only 1 or 2 keystrokes, or even 3, it's probably not worth using. (This is an area where people differ in opinion.)

Using a Naming Convention

A **naming convention** is a system of naming your abbreviations so that you don't have to refer to a list to help you remember what you called each abbreviation. You may be able to remember a couple hundred abbreviations fairly easily, but when you get up into the thousands, it can take more time to remember the abbreviation than to type out the expanded form in the first place. A naming convention solves that problem. In fact, with a good naming convention, you will be able to recall many thousands of abbreviations.

A naming convention is like a set of spelling rules—if you remember the “i before e” spelling rule and then remember a couple of exceptions, you can handle almost any “ie” word. This is the same with an abbreviation expansion naming convention.

Also, a naming convention solves the problem of assigning names when you have multiple similar abbreviations. For example, if **PDA** means **patent ductus arteriosus** and it also means **posterior descending artery**, your naming convention can solve this problem of which to assign to that abbreviation. Take special note of what I just said. If **PDA** can expand to two completely different abbreviations, what would happen if you were using an abbreviation expander that already had abbreviations in it that you did not personally enter and name?

Here are some rules for setting up a naming convention:

1. Use familiar abbreviations when possible. (Logic is important here. But we all think differently, so what is logical to me may not seem logical to you.)
2. For multiple-word phrases and multiple-syllable words, use the first letter of the primary words in each phrase or each syllable. In this convention, **cvd** becomes **cardiovascular disease** (the first word takes up two letters just as if it were two words).
3. For shorter words and to prevent duplicate macros for multisyllabic words or phrases, use the initial syllable or unusual significant letters, e.g., I use **cz** for **catheterize**; **cauz** for **cauterize**. If you have a nursing background or are familiar with common charting abbreviations, this can be part of your naming convention, e.g., **hx** is **history**, **sx** is **symptom**, and so on. Under this system, **pt** would be **patient**, but **pt** can mean so many things, including **physical therapy** (although since **tx** is often translated **therapy**, one could use **ptx** for **physical therapy**, or follow the model of using the first two letters of each syllable—**phth** would be

physical therapy. Returning to **patient**, the abbreviation I've seen used most commonly is **tp** because more often than not, the dictator would be saying **the patient**.)

4. Use Gregg or other shorthand endings for verb forms, plurals, and adjectives. Some programs make this easy with a menu-driven system for adding endings. In others, you may have to create each form of the word as a separate entry. Either way, in the long run, using consistent endings and having a form for each ending will save you time. Note: Some of these endings may never be used but it doesn't hurt to have them if your software makes it easy to include them.

Examples of Naming Conventions

Here are some examples: I'll show you the abbreviation root and its expansion, e.g., **root = expansion**, followed by endings that modify the root and the root/expansions that are formed with the addition of the ending.

b,d,g,j,s (these are the endings that are added to the root **amel**)

amel = ameliorate
amelb = amelioratable
ameld = ameliorated
amelg = ameliorating
amelj = amelioration
amels = ameliorates

Take a moment and read that over. Note that adding a **b** to the end of **amel** adds the **able** ending. Adding a **d** adds the **ed** ending, a **g** adds the **ing** ending. A **j** adds the **tion** ending. The **j = tion** or "**shun**" sound ending comes directly from Gregg shorthand. So let's try this convention on another word.

Let's try **ambulate**:

amb = ambulate
ambd = ambulated
ambg = ambulating
ambj = ambulation
ambs = ambulates

Here is another variation:

ant = anterior
Add a lower case "L" to add the *ly* ending.
antl = anteriorly

I wouldn't want to just add a y to get this ending because **ly** and **y** might be used differently. The **l** can be used for **ly** or **ally** endings; another ending which can be used is **m** for **ment**.

Try this one: **xr = x{F2}-ray**. On my computer this puts a hard hyphen in x-ray. (Ellen means that she assigned her F2 key the job of designating a hard hyphen in her word processing program. Then she uses the F2 key as part of her expander abbreviation.)

anesb = {F6}anesthesia{F6} which spells out **anesthesia** (This one is the abbreviation for the word **anesthesia** with a **b** on the end, signifying a bolded heading. She embedded her bold key command [which is F6 in her word processing software]).

There are times when you **do not want an abbreviation to expand**. For example, 9 times out of 10, a dictator will say **CBC** and that's what you would type. However, occasionally, a dictator might say **complete blood count**. If you make an abbreviation to expand **CBC** to **complete blood count**, you need to have a way to keep it from expanding. Most programs have what is known as a "hot key." In some, this key can be defined by the user so that it's easy to remember and transcribe. I used to use the control key, which is the bottom key on the left and the key in extreme left of the top row (to the left of the 1 key). I could use my thumb and forefinger to do this, and I was very quick. However, there are other ways to do this. Many people use the hyphen, slash, and semicolon to designate an abbreviation to be expanded, or to have an initial cap, or for a phrase to have what is known as title cap (each word has an initial cap). Personally, I don't like using symbols for these functions as I don't find them easy or quick to type. I've developed my own system in which "x" at the end of an abbreviation means to expand.

A good expansion program will give you an initial cap if the initial letter of your abbreviation is capitalized, even if that letter doesn't represent the first word of the phrase. For example, **Pbor** would expand to **The patient was brought to the operating room**. Pressing the cap lock key when entering an abbreviation should put the entire word or phrase in all caps, as for a heading or title.

In some programs, abbreviations can be "nested." That means that you can use an abbreviation within an abbreviation. In the following examples, **aox** expands to **alert and oriented**.

ao1 = aox times one = Alert and oriented times one.

ao2 = aox times two = Alert and oriented times two.

ao3 = aox times three = Alert and oriented times three.

ao3s = aox in all three spheres = Alert and oriented in all three spheres.

ao4 = aox times four = Alert and oriented times four.

**aotpp = aox to time, place, and person = Alert and oriented to time,
place, and person.**

Remember that **aox** = **alert and oriented** and the **aox** can be entered as part of another abbreviation and will expand as that abbreviation expands. See how nesting was used to bury one abbreviation inside another? That saves keystrokes when setting up your abbreviations.

Avoiding duplicates can be trying. For example **RCA** can stand for **right coronary artery** or **right carotid artery**. If you want to use **RCA** for both, you could use **RCA1** and **RCA2**. Still, you have the problem of transcribing the wrong one and not catching it.

How do you catch such errors? I do it after the expansion. I have **RCA1** expand to **right coronary artery** and **RCA2** expand to **right carotid artery**. This way, the spelling checker stops on the **x** at the end of the first term and I have to look at the term to make sure I've used the correct one. I put the **x** on **coronary** and **carotid** because those are the unique terms. (This is an idea a novice MT might consider whenever you find that there is a certain mistake you just can't avoid making. Call attention to the mistake in such a way that you can't miss it.)

Errors to Avoid

You must avoid using abbreviations that are actual words. Pat Forbis of AAMT claimed she received a letter once that said “Dear paroxysmal atrial tachycardia.” I myself used **fl** for **fluid**, and a number of my billing statements to my clients went out with my address as Altamonte Springs, Fluid (Florida). (I've also seen Los Angeles, **CARCINOMA** on more than one envelope.) I also thought the abbreviation **ora** was safe and used it for a med name—something like Orabase—and then got back a report from the supervisor that I'd named a patient Orabase Jones. **Cleo** was another one, although that is a relatively common name. I accidentally set Cleo to mean **Cleocin-T**. Ouch!

To deal with this, you could use a hyphen (or some other special character) as part of the abbreviation. Thus **pat-** would be **paroxysmal atrial tachycardia** but **Pat** would just be **Pat**. (This works well when you recognize the abbreviation is also a common word or name, like PAT.) As noted above, I'm not fond of non-letter characters so my solution would be **patx**.

Although abbreviation expanders can greatly enhance the quality of your work, they require scrupulous care and on-screen proofreading as you're using them. This is one of the reasons I don't like 1- and 2-letter abbreviations. It's too easy to accidentally type a single letter that expands to something you didn't intend in the report. When you get a QA report back that shows you've made an abbreviation expansion error, don't just look at it and think “I won't do that again.” Unless you stop to examine the abbreviation and the context in which you used it, try to figure out why you made that mistake and determine how to prevent such an error from happening again, you **WILL** make that mistake again.

Perhaps the worst one I've seen involved the most anal physician we had on staff. He was an English major and never made a mistake—and he really never did. If he dictated a comma, he

was right and that was that. He was an ENT physician and dictated a passage about a patient's "hearing aids" and made a beeline for the transcription department, screaming and yelling all the way, when he got a report back that said the patient had **bilateral hearing acquired immunodeficiency syndrome**. That one was especially unforgivable.

Student Use of Expanders

I want to say something about student use of expanders. I believe that you absolutely should learn as much technology as possible before you enter the workplace, but I want to caution you that every shortcut you take robs you of a learning opportunity. I would encourage you to avoid using an abbreviation expander for any word or phrase that you have not already committed to memory. If you have not memorized it before you enter it, you never will memorize it.

The average MT who depends on an abbreviation expander may produce a lot but forgets how to spell. And while I may be able to remember some spellings I had relied on my expander to remember (like Pfannenstiel—is it *ie* or *ei*?), if I was a novice MT and had never memorized it in the first place, I will be really stuck if I ever have to work without my expander. Plus if I don't know the meaning—even more important than spelling—I may expand an abbreviation incorrectly. Just as I mentioned above with the example of *PDA*, I need to know the difference between the various expansions of *PDA* in order to use them correctly. If you're planning to take the RMT exam, becoming too dependent on abbreviation expanders early on could adversely affect your performance on the test.

I recommend you go through your list of abbreviations and look for any names that are common words or first names or abbreviations with more than one more meaning. You can fix them quickly by adding an extra character to the name (like a hyphen, slash or virgule [/]) at the end to keep from accidentally expanding it.

ED is a good example. **ED** means **Emergency Department**. But if you type the patient's name as *Ed* or if you refer the patient to an *ed program*—you get in trouble.

This is also useful if you want to expand an abbreviation the first time you use it, but not expand it every time in the report. For example, **EGD** = **esophagogastroduodenoscopy**. To spell it out the first time but abbreviate it every time thereafter, you can either have two abbreviations—**EGD** by itself all in caps (so you can type it lower case if you want) and **EGD-** (or **EGD/** or **EGDx**—the x for expand) to make it expand.

Let's say you have abbreviations set up in AutoCorrect and then you install a "shelf" expander. Okay, now you have TWO expanders on your systems. Can they work together? If so, do they play well together? What happens if there is a conflict between expansion definitions in the two applications? The newer Windows expanders can work with or without AutoCorrect. How they work together (or don't) depends upon the specific program. If you experience conflicts, you can turn off AutoCorrect. There are even some shelf products that work together.

Summary: Abbreviation expanders can be a boon in terms of production on the job—IF used knowledgeably and responsibly. This article touches only on some aspects of word expander software; many programs have very advanced features. Only you can decide which program is best for you. Do your homework. Research available software, talk to users, and ask for trial products. The software should be easy to learn, and it should be relatively easy to create your expansions. Creating your own expansions as you go rather than purchasing a list or using someone else's will allow you to use your own logic for naming conventions and to memorize your short forms as you go. Trying to remember thousands of short forms from startup will be very difficult and could easily lead to incorrect expansions. Your software manual should guide you through the process of developing your short forms, but there are also books available that teach the theory and techniques for creating short forms.