



Selecting a Hand-held Computer

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The small size and light weight of hand-held computers make them excellent tools for carrying medical information right to the bedside. Because of this portability, physicians are adopting them very rapidly. This article discusses a few points to consider if you are planning to purchase one of these handy “personal digital assistants.”

Planned usage

The first step is to decide how you want to use the computer – as an electronic organizer, a medical reference tool or an extension of your main computer. If you only want an organizer, the less expensive models have the basic address book, calendar, memo pad and calculator functions, but they may not have the memory capacity to store much medical information.



Drug Information

Drug information is one of the most popular medical uses. The August InforMed column reviewed several products. Before you purchase any program, be sure to check its memory requirements.



Medical References

One of the most popular general medical references is the “Five Minute Clinical Consult.” Other references include *The Merck Manual*, *The Washington Manual*, and handbook versions of Harrison’s and Cecil’s textbooks of internal medicine. Some of these reference books are available as plug-in memory modules.

Desktop To Go

“Power users” often want a hand-held computer that does many of the same tasks as their desktop computer, such as word-processing, spreadsheet calculations, database management, electronic mail and Internet browsing. These users are likely to appreciate the power of the Pocket PC computers over the simplicity of the Palm OS family.

Operating System

There are two main families of hand-held computers. The first family includes Palm, Visor, HandEra, and Sony; these systems use the Palm operating system. The second family includes Hewlett-Packard, Compaq, Casio and Toshiba and they use the “Pocket PC” system.

Palm OS

Palm computers are very user-friendly and are the most popular. They do a limited number of tasks, but do them very well. They tend to be smaller and have a longer battery life than the Pocket PC models. There is more medical software available for the Palm family.

Pocket PC OS (Windows)

The Pocket PC operating system is a version of the Windows software used on PC-type desktop computers. It is more powerful than the Palm OS, but also requires more memory and battery power. It includes versions of the Word (word-processing), Excel (spreadsheet), Outlook (address book & electronic mail) and Internet Explorer (browser) programs.

Size

The computer should fit easily in your hand and be easy to carry in a pocket. If you have small hands, you may find the larger models uncomfortable.

Video Display

A color display is nice, but a monochrome display uses less power and is adequate for most medical applications. Displays vary in quality, so compare models before you buy.

Memory

If you plan to load multiple reference programs, buy a computer with the largest available random access memory (RAM), and with a slot for inserting additional memory cards. Most manufacturers now use the "Secure Digital" cards.

Data Entry

Most models enter text by drawing handwritten characters or by tapping on an on-screen keyboard. A few newer models offer an actual keyboard with tiny keys. Folding full-size keyboards are handy for entering large amounts of text.

Price

Monochrome models cost from \$200 to \$700, while color models cost from \$500 to \$1200. Palm OS computers tend to be less expensive than Pocket PC models.



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Local Issues

If you have warranty problems, it may help to be dealing with a local vendor. It may also be practical to purchase a model similar to those used by other local physicians.

The Bottom Line

If you are a computer novice, or want the best value, buy a Palm OS model with a monochrome display, 16 megabytes of RAM and a memory expansion slot. If you are an expert, or have just won the lottery, consider a Pocket PC with a colour display and 64 megabytes of memory. If you are somewhere in-between, you need to do a bit of research!

Medical Information Service

<http://www.ruralnet.ab.ca/medinfo/>

Our “Handheld Computers” page contains additional information about handhelds and medical software. [Dx](#)

The screenshot shows a web browser window with the address bar set to www.stacommunications.com. The browser's toolbar includes icons for Back, Forward, Reload, Home, Search, My, Images, Print, Security, Shop, and Stop. The main content area features a large blue banner with the text "WE'RE ON-LINE". Below the banner are four medical journal covers: "The Canadian Journal of CME (Continuing Medical Education)", "Diagnosis (Nutrition in the Elderly)", "le clinicien (Les convulsions fébriles)", and "Cardiology (CHF Management)". At the bottom of the page, the website URL "www.stacommunications.com" is displayed in a large, blue, stylized font. The browser's status bar at the bottom shows various system icons.