Physicians need a way to access and organize personal, patient-related, and medical reference information. Hand-held computers are a practical solution that can make this information available at the point of care. We review the major types, of hand-held computers and their Software and recommend specific models based on physicians' needs. We also describe software for hand-held computers, with special attention to medical record and medical reference software.

KEY WORDS. Computers; software; information storage and retrieval, (J Fam Pract 2000; 49; 243-251)

Family physicians generate many questions as they care for their patients.[1-3] Some are urgent information needs ("What is the dose of naloxone for an infant with respiratory depression?"); some are important but less urgent ("How do I interpret a negative troponin blood test result in a patient with chest pain?"); and others represent expressions of curiosity or frustration ("Why did this patient develop asthma late in life?").

Unfortunately, physicians who want to answer their questions in time to have an impact on patient care face several barriers. These include the unavailability of high-quality medical information at the point of care and a lack of time. Both are especially problematic for family physicians who have less time with each patient than do consultants. They also practice in a variety of environments: office, hospital bedside, emergency department, nursing home, and house call. Although Sackett and Straus[4] have described an "evidence cart" with a computer and references that is pushed through the hospital while on rounds, this is expensive and impractical for most physicians and does not solve the problem of access to information at multiple locations.

One solution is to put medical references on a hand-held computer (Table 1). These devices have become very popular among a wide variety of professionals and are characterized by:

* light weight (5 to 17 oz)
* immediate start-up and shutdown
* relatively low cost ($300 to $1000)
* high durability with few or no moving parts
* long battery life (7 to 30 hours)
* a natural pen-based interface that is similar to a clipboard or chart

TABLE 1 Glossary of Hand-Held Computing Terms

Backlighting: Illuminating the screen, which makes it easier to read but also drains batteries faster.

Compact flash memory: A type of memory card that is a little larger than a postage stamp and can hold up to 128 megabytes of information.

Hand-held computer: A computer that turns on and off without booting up, is highly portable, and has a long battery life.

Hand-held PC: A small hand-held computer with a keyboard that runs the Windows CE operating system.

Palm: A brand of hand-held computer; the units have no keyboard and use a special alphabet for data entry.

Palm-size PC: A small hand-held computer without a keyboard that runs the Windows CE operating system.

Palmtop: Term used to describe a hand-held computer that does not have a keyboard:
Most people have two hands; you can’t start palm reading without knowing which hand to examine. I really recommend that you spend some time looking at both hands, but you should begin with the dominant hand. Theories of the Dominant Hand. There are some palmists who believe that all females should use the right hand as the dominant hand and that all males should refer to the left hand. These generalizations can help you locate information in the palm that you are examining. The Earth Hand. You’ll know an earth hand based on the strongly square shape of the palm and fingers. The palm from the wrist to the bottom of the fingers is approximately the same length as the fingers, and the skin is likely rough and ruddy in color. The right hand has very important spiritual meanings. It is considered to be our receiving hand and is symbolic of good fortune. Isaiah 41:13 says, “For I, the Lord your God, hold your right hand; it is I who say to you, ‘Fear not, I am the one who helps you.’” Open your right hand in order to receive God’s blessing. Now that we know the significance of your right hand, let’s find out what it means when your palm starts itching. When your right hand itches, check your pockets for unexpected money and keep an eye out for a surprise gift soon. If you are in the process of selling your home or car, an itchy palm might mean that you will receive a generous offer. This is a very good sign. You might also experience itchy palms immediately before payday or when you are expecting a check in the mail. Large Palmistry hand to tell your future, fun item to make into cards for your friends or add to scrapbooks. Print image out for fabric transfers and put on pillows, totes, canvas, and so many other items. **COUPON CODE** Enter code at the cart checkout, Buy 3 for 10% discount use code THREEFOR10 Buy 8 for 20% discount use code EIGHTFOR20 Buy 12+ for 30% discount use code TWEELVEFOR30 Use our images for fabric. Do you have a gift marking in your hand? The theory of Gift markings was first proposed by Richard Unger who noticed that these markers indicate special talents that need...