Anaesthesia, University of Basel, Switzerland. Motivated by the Australian-Incident-Monitoring-Study (AIMS) the authors decided to create an international forum aimed at collecting and distributing anonymously submitted critical incidents from daily anesthetic practice. The system not only allows one to submit critical incidents in a narrative format but also serves as a teaching resource in that one can review adverse clinical experiences by browsing through the case collection. (There are 132 reported critical incidents in the system so far.) As already noted. CIRS submissions are anonymous, raising potential issues about how anonymous information is best handled, especially given that many important details may be missing in submitted reports.

A particularly useful section of the site includes a discussion entitled "Administrative Guidelines for Response to an Adverse Anesthesia Event" based on policies developed at the Department of Anaesthesia, Harvard Medical School. This section of the site should be reviewed whenever a patient has died or has been injured from causes suspected to be related to anesthetic management. (Better still, post a copy in your anesthesia lounge.)

I enjoyed going through the case collection, a surprisingly large number of which were "wrong drug" type errors, such as the anesthesiologist who wondered why his spinal did not work, only to discover that he had administered intrathecal pancuronium instead of intrathecal lidocaine.

I recommend this site to all individuals interested in human error in medicine.

D. John Doyle
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Website Review

Handheld Medical Computing Devices
http://www.handheldmed.com/

Anesthesiologists and other mobile health care providers require timely, portable access to clinical information, such as reference materials (books and charts) or even information about specific patients (e.g., pain service patients or past anesthetic procedures). Since recourse to library resources in order to answer clinical questions is often impractical when one is caring for a patient intraoperatively, there is a clear need for electronic materials that are easily accessed using a pocket-sized computer system, such as a member of the PalmPilot™ family or other handheld device. These gadgets are small enough to keep in your OR scrubs' top pocket (where they risk spilling out) or (more appropriately) attached to a belt using a leather pouch.

For many anesthesiologists, the PalmPilot™ has become an indispensable tool for personal information and clinical care. Many other individuals have chosen the PocketPC platform or the Psion platform for similar purposes. These and related devices are generically known as Personal Digital Assistants or PDA's.

The handheldmed site offers many resources to health care professionals interested in PDAs. This includes news on new hardware and software and information on Avantgo™'s information retrieval technology (An important source of nonclinical information for mobile individuals is from Avantgo™ (http://avantgo.com) who call themselves "the leading provider of infrastructure software and services that power the mobile economy" by providing individuals with "real-world solutions" both wirelessly or via synchronization with a host computer.)

The handheldmed site also has an informative section on WAP enabled cell phones and hand-held devices, a technology expected to grow substantially in the next few years. (WAP stands for Wireless Application Protocol, a software system for information formatting similar to HTML, the standard for normal web pages, but downsized for smaller devices. Essentially this technology allows a form of simplified web access using small wireless PDA devices)

In the links section of the site there are hyperlinks to companies and organizations that offer products and services of potential value to users of handheld-computer-based medical devices. An example is information on special sensor cards for PDA devices that convert them into miniature ECG monitors or pulse oximeters or spirometers. One special appeal of such equipment is that valuable space is saved since the software and computer system is based on a handheld platform.

The site even provides the option to make PDA e-book purchases via the Internet. As an example, the "Family Practice Library", available for an annual subscription rate of USD $121.22, "includes all of the essentials for the informed Family Practitioner", including the Physician's Drug Handbook, The 5-Minute Clinical Consult, The 5-Minute Pediatric Consult, and your choice of one other title.

Similarly, one can purchase full journal articles if one finds a (free) abstract that looks interesting (this latter service is offered in partnership with Aries Systems, developer of the Knowledge Finder® search

engine for MEDLINE). To order an article at the handheldmed site, “simply click on the check box located at the beginning of the article title(s), enter your e-mail address in the field provided, and click the Order button. The next time you sync your unit you will receive an e-mail with ordering information”.

I recommend this site to all individuals interested in hand held computer applications in medicine.

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