

# Useful Tools in the Digital Age

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Electronic Medical Records (EMRs) are, indeed, extremely useful in ensuring immediate access to patient information, including remotely. However, there are many other useful, and even fun, applications that can be utilized in a modern 21<sup>st</sup> Century medical office that do not require an EMR. Plus, these applications don't have to break the bank to be useful.

While most offices have computers and networks that are Microsoft Windows-based systems, the world of the hand-held devices (PDAs, smartphones, iPhones) is far more open. There are a number of applications that can be downloaded for free, or a relatively nominal charge, that run on these handheld devices. There are other, (sometimes much) more expensive, applications that offer great convenience and/or productivity enhancements.

In the first category, "free or next to it", one can find such tools/applications for handhelds or smartphones / iPhones as general tools (like BMI calculators), specific obstetrical tools [gestational age calculators (OB Wheels), Apgar score calculators, Bishop's score calculator, obstetrical patient list], electronic prescribing tools and formulary management tools (such as Epocrates Rx), practice management tools (such as ICD-9 code look-up), vaccine management (what shots are appropriate when, dosing), etc. Apple's iPhone has a decent number (some 5 pages) of applications that can be downloaded through the iTunes store, some free, some not (but typically \$1 to \$20, or, less than a couple of coffees at Starbucks).

Of particular use and note are the electronic prescribing tools available. As already mentioned, Epocrates has a free (sign up required) product that is a drug compendium with such useful



information as drug-drug and allergy information, and formulary information for handhelds and phones. It is so much better for you, the patient and your office to have the prescription written for a medication on the patient's drug plan rather

than dashing off a prescription, and getting a call back from the pharmacist later to change a non-covered medication to a drug that is covered. A browser-based product is available from Allscripts

Some social networking sites can be repurposed into ways your office can keep up with where you are and what you are doing. Loopt, a free site, permits the GPS function on phones to pinpoint your location, with annotations possible to show your current activities (for example, "in office seeing patients" or "in L&D for delivery", etc.). Thus, your colleagues or office staff that also use Loopt can see where you are and what you are doing, either on their phone or on Loopt's web site.

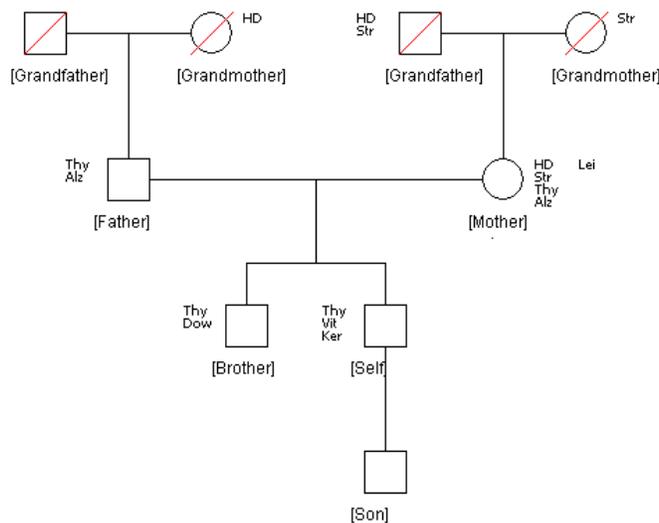
This is not to imply that all of these free tools are superbly written, the best graphical interface, or the most user-friendly application you will ever use, but for free, they are certainly worth the look. Using these applications may make it easier to make rounds, capture all billing-related charges when away from the office.

There are also free web sites that offer help with a variety of things. The federal government offers several sites that should be of interest to OB/GYNs, including access to the CDC guidelines for treating STDs (available as a web version or downloadable for handhelds: (<http://www.cdc.gov/std/treatment/>)). There is a free family history generator available at <http://familyhistory.hhs.gov/>, which can be used by patients

or by physicians to generate a family history and family tree (see sample).

**My Family Health Portrait - Drawing Report**  
December 7, 2008

□ - Male Family Member	● - Family Members with a History of Disease	
○ - Female Family Member	⊗ - Deceased Family Member	
HD - Heart Disease	Str - Stroke	Dia - Diabetes
Col - Colon Cancer	BrC - Breast Cancer	OvC - Ovarian Cancer



There are, of course, other applications that are beneficial, though more expensive. There are very basic patient tracking and database programs available. For the programs that purport to be an all-inclusive EMR, though, one would have to have an extremely limited

practice to be able to use the program successfully, and the limitations of the user interface would likely make this quite tedious to use on a daily basis.

However, these include one OB-specific application that gives the ability to view fetal heart tracings from L&D on a smart cell phone in (essentially) real-time. This application does require that your hospital purchase a server to send data to your cell phone. An iPhone version is supposed to be available "soon".

Applications for viewing DICOM images (typically radiology images, including digitized x-rays, ultrasounds, and CT/MRI scans) are also now available, with the same limitations of needing the hospital to provide the software and servers to send data to the phone.



Patients		
Fetus_11wk	May 28, 2001 OT 1	
Bohr, Neils	Oct 1, 2002 Long Leg Views CR 3	
Bohr, Neils	Oct 1, 2002 Long Leg Views CR 2	
Bohr, Neils	Oct 1, 2002 Long Leg Views CR 6	
Nemo	Nov 11, 2003 Thorax CT 6	
AXIL.-FEM. BYPA...	Aug 28, 2001 CT 10	
MR dataset Brain	Aug 9, 1996 head MR 1	
Cine Speed Test	Sep 17, 2004 Cine Speed CT 2	

Then there are the applications that are not medically oriented, but useful for organization, managing other aspects of your life, or just fun. For smartphones that run the Microsoft Mobile operating system, there are products like Call Firewall that can block unwanted telephone calls, allowing only calls on the cell phone that match your criteria to get through (white lists, black lists, contact list only, etc.). Phones that have internet access open the whole world of the web, including Google (searches for everything), and web-based applications. Some applications for fun include varying games, puzzles, or other time wasters (when waiting in the physician lounge?) that can be almost addictive. Solitaire, Tetris, Sudoku, and imitations abound, and free versions exist for a large number of games and puzzles.

Finding technology solutions that are easy to use, and worthwhile, can be challenging, but as the cost can be quite low, it is often worth the effort. It can also help show your technology-reluctant colleagues the benefits of inexpensive or "toe in the water" approaches, making adoption of technology easier for them.

---Michael J. McCoy, M.D.