Pharmacy Automation and Technology

Take Two Apps and Call Me in the Morning

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The pace of change in the world of information technology is remarkable at times. The role of the smartphone has rapidly been evolving into that of a health care tool, which has a variety of uses for providers and patients. In this installment, we provide our perspectives on the role of the smartphone and its associated apps.

Yes, you remember when we jokingly said, “Take two Web sites and call me in the morning.” This was funny because the idea of giving information as a prescription was, at one time, a novel concept. Flash forward to today. We are now in an era where we can safely say, “Yes, Virginia, there is an app for that.” Hasn’t it been great to find a Web site on absolutely any area of interest and discover content on whatever you sought? Increasingly, the same thing can be said about locating supportive apps in today’s evolving information age. Naysayers will continue to respond that much of the content found in apps is inaccurate, dated, biased, or all of the above. To be fair, you will find apps that span the continuum from valuable to silly and some that make you scratch your head wondering why anyone took the time to make those particular apps.

It is also true that decades later we still struggle to evaluate the quality of the information we find on the Internet. The good news is that reputable publishers and our clinical academies, as well as reliable patient advocate organizations, are producing good print and electronic information at an astounding pace. Increasingly, these sources of information and connectivity are being offered as apps. The functions that these apps serve are often in front of the functionality currently available in your full-blown electronic health record.

Pharmacist applications are rich for both mainstream pharmacy practice and for any kind of specialty practice. Mainstream apps include advanced scientific calculators and unit conversions as well as an excellent array of tertiary references, many of which are updated on a daily basis. There are apps for nearly every major business and financial entity, for

security concerns, and for various aspects of pharmacy interests ranging from formulary tools to multimedia patient education assets.

Pharmacists who practice in a specialty niche are able to locate professional level apps within any disease state. To test this, simply go to the Apple or Google app stores and enter key words relating to your specialty to see the applications that are available. You will usually find both free and retail apps ranging in price from close to \$1 up to \$300. If you go to the medical section for either app store, you will find more than 250 apps for your consideration. You can probably expect (and may have experienced) that pharmaceutical manufacturers at professional meetings will be offering apps related to their products and will provide decision-making parameters concerning appropriate drug use.

Let’s discuss some categories of apps that you may want to consider if you have not already acquired one. How are you doing on document management for clinical guidelines, over-the-counter drug information, pdf article files, or clinical pearls? Do you have a translator app for communicating with patients who have low English proficiency? Do you have a laboratory interpretation app? Are you using an app that allows you to manage your “to do” list? Do you have an app that manages your continuing education efforts? How about an app that brings you breaking news in medicine and pharmacy? Do you have an app that supports how to advise patients on preventative care? Do you have a mobile app for searching PubMed?

Searching for the apps that have the potential to make you more efficient and effective couldn’t be easier. You can use your mobile device and any search

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engine you prefer. Your app download store will be specific to your smartphone so that key words will produce apps that are available for your consideration. Most of these will have ratings from the good and bad experiences of previous users. A typical search will specify the operating system of your smartphone (eg, Android, iPhone) while including the word “app” for mobile apps and the key word for the topic of interest. If you are between smartphones, you may want to look for the availability of your favorite apps on the various platforms before making the purchase decision. Although the Android app store has grown exponentially, there are still more apps available for iPhones.

Where do patients fit in all of this? Have you prescribed your first app to a patient? Consider the amount of effort that it takes for patients to cope with diabetes. We describe a 3-legged stool, with nutrition, exercise, and medication making up the legs of the stool. There are apps for each of these categories pertaining to diabetes. They all target patients, but many have the ability to report how patients do between episodes of care with their providers. These diabetes apps allow patients to record blood sugar levels manually, or they can be

connected via Bluetooth to a blood glucose meter to record measurements automatically. Some apps record food intake and make suggestions on dietary changes that are appropriate for diabetes. Still others record exercise by input or by using the GPS feature of the phone to note movement throughout the day. It is amazing how many health care support technologies are available to the millions of patients who are installed users of smartphones.

Most of you reading this are probably only using 10% of the capacity of the technology found in your professional and personal life. In addition to using the methods we describe here to maximize the use of your smartphone, we encourage you to look at the methods you employ in your practice and at home and consider whether there may be a technology out there just waiting to support your efforts. Listen to your patients and try to determine where the bottlenecks and struggles occur for them as they deal with their activities of daily living and disease management. We are confident that there are technologies that can be integrated into all of our lives that will assist our efforts. We welcome your questions or comments by e-mail to either Bill (felkebg@auburn.edu) or Brent (foxbren@auburn.edu). ■

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