

From Wolfman to Medicine Man: Podcasting for Clinicians

Robert W Hogan, MD

Many of us in clinical medicine aren't fond of very large numbers. We deal with and intuitively grasp milligrams, grams, and kilograms, and centimeters and meters, but what sense does the difference between a megabyte and a terabyte make? By contrast, computer professionals routinely work with gigabytes, and given the popularity of multigigabyte, MP3 players, pocket-form terabytes (one thousand gigabytes) are soon to come.

So what do these gargantuan numbers mean to the clinician? With more storage in less space the opportunity exists to develop new methods to house medical information in tinier packages. This should translate to ease of use, convenience, and portability that we need or might enjoy. Technical advancement however shouldn't be viewed simply as a parade of interesting devices. It's also about processes, surprises, breakthroughs, and the migration of technology from place to place in society. This movement of technology appears capricious, until innovation alights a consumer application, and then we can count on clever folks transplanting it to professional use.

Digital Music

A case in point is digital music. Audio CDs are moving rapidly toward obsolescence, replaced by MP3 players—bad news for CD manufacturers, good news for plastic recyclers and manufacturers of tiny digital file-storage devices.

Parallel to the rise of the MP3 player are Internet file-sharing services—at first underground and ultimately illegal over copyright infringement, but recently mainstream, legal, and astonishingly popular. Apple's iTunes music download service, for example, recently passed the billion-tune, download milestone. No more trips to the music store to purchase CDs and ready access to an enormous range of music choices online, convenience, and competitive pricing create a marvelous extension of daily use of PCs.

If Gen X youth can walk about with tens of gigabytes of their favorite tunes (thousands) nestled in MP3 play-

ers the size of a short stack of credit cards, how could this technology make life better in clinical medicine?

Sound As Data

To first grasp what is underway, think about sound as data. There is great irony in this—we write (remember “word process”?) words that become files sent over the Internet, which bulges with vast numbers of Web pages and blogs—a gargantuan eruption of written expression in culture-changing proportion. Throughout history, before the written word, there was the spoken word, the poem, and the song.

There are subtleties, nuances and depth of meaning to the spoken word. The richness of sound also creates our significant attraction to music, theater, and poetry. Sound enhances the pleasure of learning and can enhance comprehension. Our remarkable era has produced methods of digitizing many things—storing, transporting, and utilizing what is digitized in new and previously unimagined ways.

Podcast

Podcasting, an odd term now familiar, brings sound seeming too melodious to fit the gigabyte stored in your pocket. “Pod,” shorthand for the iPod, is the iconic leader of MP3 players. Tens of millions of these elegant little devices reside in the backpacks, belt clips, and shirt pockets of our tech-savvy youth. The “cast” part becomes interesting for those of us in medicine. Digital sound as recording data is static—a file quietly sitting on a PC, server, or mass storage device, waiting to be played or transferred.

Through a dazzling interlocked series of small technical leaps, movement of audio files has been simplified, automated, and streamlined. Highly compressed audio files can move from the point of origin to your MP3 player in no time with little effort, and in most cases at no cost. The technical language of this transforming convergence is arcane—RSS feeds and aggregators are terms as alien as “floppy disc” and “peripheral device” once were.

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In one of the historic turnabouts, iPods and other MP3 players might have been just clever “peripherals” but they are now the tail wagging the dog of the personal computer industry—hugely popular, constantly improving, and fun!

How To Do It

To glimpse the clever technically sophisticated world of Medical Podcasting you'll need a good MP3 player—dozens on the market will play MP3 files; the simplest to use are any of the iPod family. Second, tinker with

your laptop or desktop PC, (with a high-speed Internet connection) and download and install the software—now an easier process. I used Apple's iTunes (www.apple.com/itunes/) to prepare for this article; you may prefer other software.

Several other excellent sites also feature searchable Podcast directories—www.podcastpickle.com/#, <http://podcast.com/home.php>, www.podcastcentral.com/. For additional technical detail on the history, development, and components of podcasting, see <http://en.wikipedia.org/wiki/Podcasting> or www.pod101.com/.

Podcasting, Vodcasting, and Medicine's Im-Personal Communication Revolution: A Commentary on Dr Hogan's article *From Wolfman to Medicine Man*

Ricky Chen

As a young 20-something, I have embraced almost every fun gadget from pocket PCs to MP3 players and Web video blogs with zeal and fascination. Though I am old enough to have graduated college in a wave of dizzying personal communications revolutions from outgrowing puberty in a chat room to basing my future vote on presidential debates on YouTube, I didn't know about Wolfman Jack until I searched for him on Wikipedia. I learned, to my surprise and admiration, that he was an (other-) generational icon of the timeless communications revolution, a man who became an iconic radio personality in the 60s and 70s. He was a cult figure, a tremendous celebrity for an entire generation, but to my fledgling cohort and me, he is as heroic and distanced as the 60s leaders I studied in school. I wonder—how could this transformation in technology be so continuous, universal, and timeless as indicated by Robert Hogan, MD, yet so perforated along generational lines at the same time?

I also wonder if the transformation of podcasts reaching billions of those in their downloading, pop-crazed teens and 20s might take a while to reach those late adopters of technology, who prefer the security and comfort of time spent with real people. This group resents paying bills with the automated British lady when they dial their

utilities and might listen unenthusiastically to the idea of a prerecorded physician's advice, downloaded to a mysterious and baffling machine.

If podcasting ever becomes mainstream enough to be a truly useful tool for the health-seeking populations and not just for the interest-seeking crowd, then perhaps our culture itself might have changed. People my age of course don't really remember hour-long face time with doctors enough to lament its demise. Even my Chinese mother, now in her 50s, has learned to plug in a USB to view pictures on her LCD HDTV and also to dial China using an Internet phone service. So I guess she's not too many steps away from iPod-subscribing a health cast to keep up with the latest.

A more appealing alternative to recorded sound-bytes, however, is simply viewing videos of similarly prerecorded professional health advice. On the NIH today you can get the latest seasonally relevant medical advice and even learn about some research from their monthly “vodcast” (“vidcast” is another name). These videos are more attractive to the older crowd, who desires to hear and see a more personal doctor, and even more attractive to the younger crowd, who prefer music video to cd, now just another “eight-track.” In other words, MP4 is going to win out MP3 because video is more personal and interactive

to our psyches. Even as a student learning tool today, video is more appreciated than sound recordings and may facilitate learning in a more mentally accessible way.

I agree with Dr Hogan that medicine would gain much from adapting new technologies for its professional use. However, I think video will be a more useful tool than NPR-like podcasts because it's a more human compromise for a technologic present characterized by lessening degrees of “personal” communication. And though I would lap up this innovation readily, there are many who might pick it up more slowly. Setting down our iPods though, the most apparent way in which medicine is behind our technologic times is that we still lack a universal electronic health record. Between hospitals and across insurance lines, this old technology, if finally implemented, would create many podcasts of excitement across the nation and really be worthwhile.

Though I am young and ignorant, perhaps I might have known Wolfman Jack if he hadn't died when I was in my early teens. Similarly, I think many people, both young and old, seeking health care today, would prefer a video to an airwave, even if it were simply because medicine's technologic advances have made it increasingly more difficult to see one's physician in person. ♦



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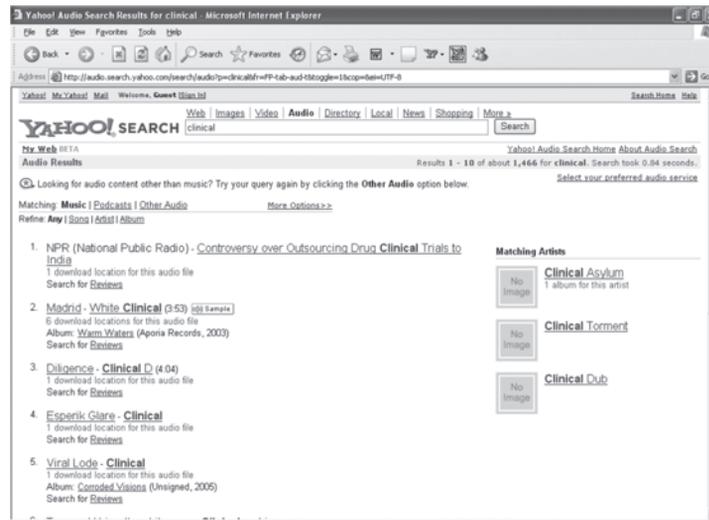


Figure 4. Screen shot of Yahoo! search results for "Audio: clinical."

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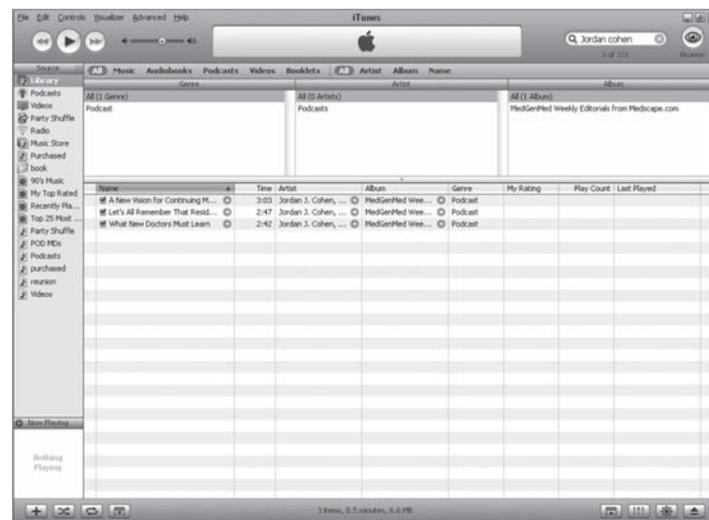


Figure 5. Screen shot of Google search results for "Medical MP3."

content is then updated each time iTunes is opened on a PC. Each time your MP3 player is attached/synced with the PC, the updated subscribed MP3 transfers to the MP3 player, ready to be played.

Convenience is still king: Apple has integrated a search service, a subscription service and a download/transfer function each of which meshes seamlessly to produce

almost effortless transfer of "programs" of our liking to iPods.

Receiving a podcast is like tuning to Internet radio, but better. Once a sound file is captured in this way, we are free to play it on our MP3 player whenever and wherever.

In the past, I was vexed that my drive time only allowed listening to pieces of NPR shows; now, having subscribed to several NPR features,

they transfer to my Nano automatically. If I miss part of a program because of time constraints, I just listen later.

Broadcast

All of us in clinical medicine are at least budding authors. We constantly write medical histories, operative notes, and discharge summaries—though not scientific articles or editorials, they are, nonetheless, authored. Similarly, if you've written an e-mail, widely passed on, you have experienced journalism or perhaps broadcasting. Once an idea is penned there is no telling where it may go. And who hasn't had an idea, mentioned during an encounter with a patient, come back in either its original form or morphed by a patient's family member, neighbor, or friend? Perhaps clinicians, albeit unwittingly until now, are also broadcasters, even with a responsibility to educate. Wouldn't it be interesting to give our best advice to hundreds (or thousands) of hypertensives, patients with diabetes, or innumerable other medical conditions we commonly treat?

As a final step, to produce a podcast visit a podcast originator's site such as www.lionhardt.ca/wps/. Ponder what words of wisdom to send out into the world, then, with PC microphone in hand, get ready to rock the clinical listening world. Perhaps entertain a bit.

Move over Wolfman Jack, here comes medicine man. ❖

Disclosure Statement

The author(s) have no affiliation of any kind with Apple, iTunes, iPod, Yahoo, Google, or any of the Web sites and companies mentioned in this article.