

Mobility or Lack Thereof

I remember quite clearly what life was like before the now-ubiquitous Internet, mobile phone, and iPad. Information transfer moved at a far more leisurely pace, accompanied by a curious absence of beeping, tweeting, and pinging. There was time to absorb, collate, and ration data. Information was hard to get, and therefore valuable.

If your ankle ligament snapped, you would have had to head to emergency or make an old-fashioned doctor's appointment for information and treatment. A predictable sequence of tests and check-ups would then proceed at snail's pace. For more information, you could limp to the library and physically find a journal or book on the topic.

Recently facing that very scenario, I was able to instant message my doctor, who called from her smartphone to give me instructions (ice, elevation, no walking) and arrange for an immediate X-ray. One day later, radiology e-mailed her and texted me that there were no broken bones. I then did a quick web search—via a mobile medical app—on nonfunctioning ligaments and what to do about them.

Without registering it, I was ankle-deep in the flexible, easy access, data-rich world of mobile health. Mobility in this field means that event-driven patient care can occur in real time, and data can be routed immediately to the appropriate user, whether that is the clinician, hospital staff, patient, or patient's family. However, does this necessarily mean better patient care and improved outcomes?

Big business certainly thinks so. Industry analysts at GlobalData estimate that the global mHealth market will reach \$11.8 billion by 2018, an estimated 900% increase over seven years. With nearly 85% of people on Earth currently owning mobile phones according to Pricewaterhouse Coopers, and over 18,000

health apps on Apple's app store alone, it is safe to say that the mHealth revolution is already well underway.

But how are healthcare organizations implementing and adapting to the new technologies and increased mobility? How are security of information delivery, access, and patient quality of care affected? In this issue of *Horizons*, the challenges and opportunities presented by mHealth are discussed from a broad range of perspectives, including manufacturing, regulatory, clinical, and healthcare technology management.

From an expert's discussion of what it will take to harness the mobile revolution and improve patient care, to articles on mHealth interoperability, security and compliance, device design, and the latest apps and wearable devices, this issue offers a comprehensive look at mHealth today and a glimpse into the future of mHealth.

As I was writing this, the irony of being immobile while finalizing an issue on mobile health was not lost on me. Fortunately, thanks to having all of humanity's shared knowledge at my fingertips, my immobility turned out to be not only bearable, but also downright informative.



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About This Issue

This issue of Horizons examines the latest practices and challenges in mobile health and wireless medical devices, as well as offering advice and practical tips from manufacturers, regulators, clinicians, and wireless experts. This is the latest in a series of special-topic Horizons, published by the Association for the Advancement of Medical Instrumentation (AAMI).

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In This Issue

The Big Picture

- 6 Mobile Health News & Products
- 10 *A Roundtable Discussion... Embracing the Mobile Revolution*
Mary K. Logan, Moderator
- 19 *'The Process Is Just the Beginning' Connecting Mobile Medical Devices*
Terenzio Facchinetti, Anura Fernando, and Richelieu Quoi
- 26 *The Promise of Wireless An Overview of a Device-To-Cloud mHealth Solution*
Rajeev Rajan

Clinical Perspectives

- 34 *'The Future of Medicine' The Emergency Room and Mobile Health*
Neal Sikka and David M. Barash
- 41 *mHealth and Developing Countries A Successful Obstetric Care Model in Uganda*
Kristen DeStigter

- 45 *Opinion Electronic Medical Records and mHealth Anytime, Anywhere*
Vitaly Herasevich, John Litell, and Brian Pickering

Technology and Design

- 49 *mHealth Consumer Apps The Case for User-Centered Design*
Tara McCurdie, Svetlana Taneva, Mark Casselman, Melanie Yeung, Cassie McDaniel, Wayne Ho, and Joseph Cafazzo
- 57 *Early Detection of the Deteriorating Patient The Case For a Multi-Parameter Patient-Worn Monitor*
James Welch, James Moon, and Scott McCombie

Testing and Implementation

- 65 *Medical Device Interoperability And Data Integration to Clinical Information Systems*
Medical Device Data Alignment
John R. Zaleski

- 71 *Interoperability for Device Manufacturers Building a Personal, Connected Health Ecosystem*
Ian Hay, Kelvin Lim, and Frank Wartena

- 79 *Validation and Verification of WLAN Medical Devices*
David H. Hoglund

Security and Regulation

- 84 *The Regulatory Perspective Q & A With FDA's Bakul Patel*
- 87 *One Company's Experience Blazing the Trail With the First FDA-Approved Medical Imaging App*
Mark Cain
- 91 *Enabling mHealth While Assuring Compliance Reliable And Secure Information Access In a Mobile World*
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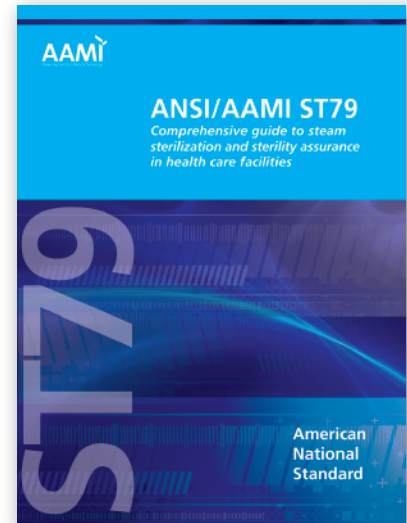
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