

## *Virtual Mentor*

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### **ART OF MEDICINE**

#### **Back to the Future**

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On April 1924, when *Radio News* published a cover story titled, "Radio Doctor - Maybe," it offered readers one of the first glimpses into what medicine and the patient-physician relationship might (or should) look like in the future. Like most predictions, this glimpse into the future of "telemedicine," while fairly successful in foreshadowing new technologies in medicine, was predictably more myopic in understanding its full impact on patients, their families, and their physicians.

The image on the *Radio News* cover depicts a young boy sitting on the edge of his bed, with his tongue sticking out, as he stares into the monitor of a sophisticated device: a radio equipped with interactive video transmission and several medical instruments. At the other end of the connection, as represented in the monitor, a physician peers into the patient's throat, while simultaneously listening to his heartbeat through a stethoscope applied to the boy's chest.

On a scientific level, the *Radio News* cover is quite remarkable, considering it appeared before most of the technologies it represents became available. The multimedia platform depicted in the image was probably identified as a "radio" because that was the only communication device with a name and function that would ring familiar to a general readership of that era. In fact, the device was more like a television than a radio. In 1924, the television, as we know it, would not be tested for another 3 years, and videoconferencing, which is now increasingly used in patient-to-physician and physician-to-physician telecommunication had not even been invented. The stethoscope depicted in the image foreshadowed the variety of diagnostic, monitoring, and other medical instruments that are routinely employed today in telemedicine.

On a social-psychological level, the predictive accuracy of the *Radio News* cover was invariably limited by the norms and expectations of that era. For example, the doctor in the image is a white man because the medical profession had few women and even fewer minority practitioners at the time. Accentuated by the artist's use of warm colors, the image also attempted to capture the humanizing aspects of "house calls" which were still common place in the practice of medicine at that time - a doctor visiting a young patient dressed in his comfortable clothes surrounded by loved ones in a familiar environment.

While the benefits of house calls have undoubtedly been romanticized by both the lay and professional communities of today, this image reminds us that technology is neither good or evil; its impact often depends on how it is applied by individuals, communities, and society. In the case of telemedicine technologies, the electronic house call portrayed in the illustration does hold the promise of providing good medical care, especially to those who are less mobile, live in remote communities, or are simply too ill at the close of life. However, these technologies remain at this moment still an approximation of a face-to-face interaction between patient and physician, and while this proximate clinical encounter may take place in real time, it is still less than real and robust.

In the "Back to the Future" movie series, Marty McFly and Doc Brown traveled back and forward in time to right the wrongs of their actions and choices and those of others. Fortunately or not, none of us has a time-travelling DeLorean. Thus, when we contemplate medicine's future - a time when physicians care for their patients through electronic media - it is critical that we choose to employ technologies that promote not only the science of medicine, but, more importantly, the human and caring qualities of medicine embodied by the house call.

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