

Thinking Out Loud... The Medium Is the Message

“The message of any medium or technology is the change of scale or pace or pattern that it introduces into human affairs.”

—Marshall McLuhan (educator in mass communications, circa 1964)

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Beginning about 10 weeks ago, I began to look at television differently. It was once a medium that made me feel the center of its focus. Now, it makes me feel in the center of what is happening—transporting me, if you will, out of body, discarnate into cyberspace. What I view therein is real to my senses—I can smell the dust in real time, feel the heat and experience the apprehension of those who speak in *real time* to an audience who is miles away.

It is sad to admit that a war among peoples may advance the science of information throughout the world by digitizing what is happening in real time so that events are ever present, everywhere, to those who would see them. This is the reality of seeing, in the present, where one is not. By extending our consciousness outside ourselves, we are becoming a part of what we see.

As in war, so in peace, “The medium is the message,” because it is the “medium that shapes and controls the scale and form of human association and action,”² and the pace of cultural change ultimately revolves around its message.

On March 21, 2003, there was a message from the United States Department of Health and Human Services (HHS), the Department of

Defense (DOD), and the Department of Veteran Affairs (VA). This message may be as critical to healthcare as the real-time digitization of world events is to the process of modern global politics. The HHS, DOD, and VA announced adoption of the first federal “e-Gov” health information standards, the medium the federal government will use to electronically exchange clinical health information and coordinate patient care among the care team (administrators, billers, patients, physicians, dietitians, nurses, technicians, and social workers) in the present and everywhere.

As of March 21, 2003, all federal agencies were to adopt the following standards:

- ♦ the Health Level 7 (HL7) messaging standards;
- ♦ certain National Council on Prescription Drug Programs (NCDPP) standards for electronically ordering drugs from retail pharmacies;
- ♦ the Institute of Electrical and Electronics Engineers 1073 (IEEE1073) series of standards for plugging medical devices into information and computer systems;
- ♦ Digital Imaging Communications in Medicine (DICOM) standards that allow the transfer and retrieval of images and their diagnostic information;

- ♦ the laboratory Logical Identifier Name Codes (LOINC), a standard that enables the electronic exchange of clinical laboratory results so essential to preventive and chronic care.

These standards *are* the foundation of the long-awaited National Health Information Infrastructure. Once in place and proliferated in the private and public sectors, they will ultimately wear smooth the information barriers within today’s medical delivery system. The outcome that will evolve will be a new culture within that system, one of “simultaneous relationships”³ that delivers electronic information at the point-of-need in the medium in which it is needed.

HHS Secretary Tommy G. Thompson said this about the announcement: “It’s important for the federal government to lead by example by selecting and adopting these standards. With appropriate privacy protections for personal health information, consumers and patients will benefit when their health information is available to their doctors and other healthcare providers when it is needed.... But we cannot do it alone. The private sector will be crucial to the widespread diffusion of these standards.”⁴

THINKING OUT LOUD

What can this potentially mean to the renal community? It can mean the electronic consolidation of all patient information—hospital admissions and discharges, consultation reports, test results, complete and accurate problem and medication lists, history and physical data, transcription documentation, dialysis treatment data, and treatment plans—in real time.

It can also mean the standardization of data for research purposes and the detection and prevention of evolving diseases, such as end-stage renal disease, diabetes, and heart failure, as well as of medical errors. It can mean passing the care baton to the next care team member along with the patient's medical history and critical details. It can mean saving the quality of a patient's life or the patient's life itself. It can mean increasing the care team's span of control by extending their minds beyond themselves into the practice of information in which events are ever present, everywhere, to those who would see them. Perhaps it means that we can fight the battle against disease in a different way by practicing information to prevent it.

Dr. William Winkenwerder, Assistant Secretary of Defense for Health Affairs, states: "We hope that this action will provide the momentum for the adoption of these standards across the health care sector."⁴ So do I.

References

1. McLuhan MH. *Understanding Media: The Extensions of Man*. Reprint edition (originally published in 1964). Cambridge, MA: MIT Press, 1994, p 8.
2. *ibid.* p 9.
3. "The Cultural Paradox of the Global Village," by Mark Federman. This paper was presented as part of a panel on Digitization of Information and the Future of Culture at the EU-Japan Fest 10th Anniversary Symposium on The Role of Culture in an Age of Advancing Globalization, held in Tokyo, Japan, February 10-11, 2003.
4. U.S. Department of Health and Human Services news release, March 21, 2003. **D&T**