

Editorial **Comments**

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Information Technology in the Community: The Right Tools for the Job

As health care moves into the community, nurses and physicians are not the only ones with new jobs—patients have new and increasing responsibilities for self-care and disease management. Information technologies can provide the necessary tools to ensure that patients are well equipped to meet these challenges. Under the umbrella of the theme “Information Technology in Community Health,” the participants at the 1997 AMIA Spring Congress learned of new and emerging technologies with the potential to enhance patients’ abilities to engage in self-help, promote self-care, and implement disease-management strategies. This issue of *JAMIA* includes four papers addressing developments in information technologies designed to better equip patients and consumers to meet these challenges.

Mary Gardiner Jones opened the congress with a plenary address¹ exhorting the Health Informatics community to participate in shaping the national information infrastructure. From her perspective as a consumer advocate, Ms. Jones cautioned that the current trajectory of progress for the NII is more responsive to the communications and education sectors of society than to the needs of the health care system. She advocated that we who work at the nexus of technology and health care must in turn serve as advocates for our patients and clients whose chance to benefit from the NII depends on our ability to garner its resources for health care delivery.

Rosenthal reported a prototype voice-enabled system for generating structured reports.² Voice technology remains elusive as a reliable mechanism for providing input into computer systems. Consumers and patients may best be served by information systems that sup-

port voice data entry. Efficient and effective use of voice technologies removes the barriers to consumer access to health information once posed by typing skill and access to computers.

Other papers addressed clinical, rather than technology, issues. Choice of appropriate therapy relies heavily on understanding patients’ preferences for health outcomes and clinical treatments. Elicitation of these highly individualistic values is complex and time consuming, far exceeding the resources available in the contemporary health care encounter. Lenert and colleagues describe a WWW-accessible system to assess a patient’s quality of life.³ Such tools also could be used to aid patients in value clarification. Use of such programs affords patients the time and privacy to conduct personal introspection and helps prepare them to better participate in clinical decision making.

Patient participation in contemporary health care also involves learning about health promotion strategies, disease- and condition-specific etiology and treatment, and available health care resources. The Telephone Linked Computer (TLC) system, described by Friedman,⁴ represents a mature example of an academic medical center’s attempt to create an interactive environment in which a patient at home can provide information about a condition and get consumer information or help in designing an intervention. Addressed from the perspective of the developers, this article details the challenges of structuring the patient interaction—a key component of organizing health information resources and making them accessible to a lay public.

Evaluation of consumer health informatics interven-

tions, such as the TLC program, served as the focus of discussion for many hallway conversations and panel presentations. Evaluation involves two components: ensuring the quality and relevance of the health information presented, and determining the impact on the health of the community. Two AMIA Working Groups, the Internet Working Group and the Prevention/Health Education Working group, debated the issues surrounding ensuring the quality and relevance of health information. Two perspectives emerged: credentialing consumer health informatics offerings and educating consumers to be better able to evaluate these resources. Resolution of the evaluation question rests in both perspectives. Developers and purchasers of consumer health informatics tools will be challenged in the future to show that their offerings meet acceptable standards. Given the plethora of consumer health informatics, however, the lay person will need to become a discerning consumer to make most effective use of the knowledge contained in these resources.

Congress papers addressed additional dimensions of community health under the theme of "Information Technology in Community Health." Privacy and confidentiality issues were addressed from the perspectives of technologies to ensure them and the ethical principles necessary to evaluate them. Disease management models that capitalized on technologies accessible in the home and community are emerging.

Public health advantages of large data sets, reporting schemes, and geographic information systems were explored through papers and demonstrations.

Information technology has the power to bring patients into full partnership with health care providers. Now that both the "work" and "workers" of health care have changed, it is time to develop the technologies and tools to ensure that the job is done right!

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