A Framework for Medical Information Science

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The Seventh Annual Symposium for Computer Applications in Medical Care has sponsored a one day, limited attendance workshop to discuss the topic: A Framework for Medical Information Science. Participation was limited to approximately fifty people. Each attendee prepared either a paper or a working statement before the workshop; these documents will be revised following the workshop for publication. This session will contain a review of the workshop by some of its participants. An extract from the call for participation follows.

Medical Information Science (Medical Informatics) has grown from visionary concepts to practical realities. With the widespread diffusion of computer technology, improvements in computer science, and growth of a market for medical computing applications, there is a need to reestablish what is meant by Medical Information Science. Without a framework for the discipline, it will be impossible to define an agenda for research or identify educational needs.

The objective of this one day, limited attendance workshop is to work toward a framework for Medical Information Science. Three major issues will be considered:

- What is Medical Information Science? Does it differ from the biomedical sciences and computer science, or is it a specialty area in each? Is the computer simply a tool which facilitates the accomplishment of the scientific objectives, or does it fundamentally alter the discipline? Can the field be stratified into a hierarchy which goes from research through the application of accepted knowledge?

- What are the principal research issues? Given a structure for Medical Information Science, what are the major avenues for disseminating existing knowledge (i.e., avoiding the reinvention of the wheel), and developing new knowledge (i.e., research)? What research issues are purely in the area of the biomedical science, computer science, and medical information science?

- What are the key educational needs? What knowledge is required of Medical Information Science professionals, medical students, computer professionals in the medical field, clinical practitioners, clinical researchers, and other health care professionals? How are these needs being met, and what alternate strategies should be explored?

Clearly, the scope of the meeting is too broad to suggest resolution in a one day workshop. Nevertheless, it should be possible to establish a framework for a continued dialogue. The general conclusions of the workshop will be presented in a SCAMC session; publication of the recommendations in a leading journal will be explored.

The workshop will be limited to seventy-five participants. Each participant must submit either a working paper (4,000 words) or a short position statement (500 words). All materials will be distributed to the participants at least two weeks before the workshop. Authors will be given an opportunity to revise their submissions for inclusion in a final workshop report to be published by SCAMC, Inc.