

ical center researchers with research scientists at four medical schools in Japan, four in Australia, one each in Canada, Hawaii, New Zealand, and Mexico. We would conduct these pilot conferences in the same manner as we do the telephone-radio conferences in Wisconsin.

In conclusion I would like to say that in my view we are on the threshold of many new and exciting methods of making available to physicians and allied health personnel the means by which they can review and upgrade their current knowledge, acquire new knowledge, and yet maintain the health care responsibilities they hold in their own communities. These methods will make it possible to meet the specific needs and programs to the varied learning habits of these health practitioners.

It is possible to transmit conferences being regularly held at the medical center with two-way communication to any or many parts of the State or country, so that the Wisconsin idea of the university without walls can come to pass. The key to this venture, as it is to so many other ventures in our world today, is communications. The Wisconsin Telephone Co. has given to us every encouragement and cooperation as we questioned, complained, cajoled, demanded, and decided upon ventures that were as new and as radical to the company as they were to us.

It seems to us that we are providing some services in the education of the physicians in Wisconsin.

Thank you.

Senator NELSON. Thank you very much, Doctor, for your most interesting presentation. We appreciate very much your taking the time to come here today and make this presentation to the committee.

(The prepared statement of Dr. Meyer follows:)

STATEMENT OF DR. THOMAS C. MEYER, ASSOCIATE DEAN, UNIVERSITY OF WISCONSIN
MEDICAL CENTER

SECTION I

Mr. Chairman, computers have been put to many uses in medicine and could well be the subject of a hearing in itself. In Wisconsin we are investigating the use of computers in two critical areas of the health care process in the belief that significant practical improvement in that process will result.

A. *Taking of Medical Histories.*—The medical history consists of information of potential clinical significance collected during the course of interview between doctor and patient. There has been relatively little research done on the medical history in spite of the fact that many clinicians consider this to be the most important aspect of the patient's examination. And there are certain practical reasons why research on the medical history is urgently needed. History-taking is very time-consuming and incompleteness often results from time limitations and other factors beyond the physician's control. Further, the lack of standardization from interviewer to interviewer, together with the traditional illegibility of hand-recorded patient records, makes information retrieval for patient care and clinical research difficult and often impossible. Improved methods of collecting and recorded detailed medical histories are needed.

The use of a digital computer to interview patients regarding their medical histories was first tried in 1965 at the University of Wisconsin. The project, under the direction of Dr. Warner Slack, is still in the research stages, but it is hoped that computer-based patient interviewing will be done routinely within the next several years.

The computer has been used in this project to collect the information of clinical histories directly from patients, print out summaries in a form immediately useful to physicians and for storage and future use in patient care and clinical research. The patient sits in front of the computer and questions are displayed on a cathode-ray screen. The presentation of questions is a function of patient