

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

Dr. MEYER. Thank you, Mr. Chairman.

You have heard of some of the uses to which computers are being put in medicine, and in fact, there are so many that this could be a subject of a hearing in itself.

In Wisconsin, we have been interested in the use of computers in what we believe to be two critical areas of the health care process. We believe that significant practical improvement in the process of health care delivery will result.

You have seen something of the use of the computer in taking a history and I will not go further into it. There are many benefits from this. Taking of a history is critical in the evaluation of a patient, but it is time consuming. While it is time consuming, it may be incomplete; therefore, something may be missed which is vital in the history and therefore to the diagnosis and management of the patient. There is lack of standardization by which histories are taken from interviewer to interviewer. Depending upon who is taking a history it may come out in a different way, although the same information may be there. Therefore, it is very difficult to abstract that history from the patient's chart.

You know well of the traditional illegibility of physicians' handwriting. The computer, once it has taken the history, prints it out in very legible form.

There are other advantages that I do not think really one needs to go into at the moment.

Dr. Warner Slack initiated this project of testing whether or not a reasonable history could be obtained from a patient by a computer and plans to do this routinely over the next several years.

The history is taken from the patient. It is printed out in a recognized form to the physician who can then utilize what is in the history. He knows what questions have been negatively answered. He knows what have been positively answered. His time in taking that history has been significantly cut down.

Dr. Slack has developed history programs for gynecological histories, for neurology histories, endocrinology histories, psychiatric history, gastroenterology, and currently pediatric histories are being developed.

The teletypewriter extends the programs which are currently in Madison available only to patients at the University Hospital in Madison. This process can be taken to wherever one plans to take it, utilizing the teletypewriter. This can then go from a doctor's hospital office or a remote hospital to the computer and can be done relatively simply.

Senator NELSON. May I ask a question at this stage?

The doctor receives the typewritten result of the interview between the patient and the computer?

Dr. MEYER. Yes.

Senator NELSON. On a sheet just like the one there, I assume?