

a computerized arrangement for taking medical histories directly from the patient.

Senator NELSON. Is this the technique of using a machine to interview the patient?

Mr. CALLAHAN. Yes, sir. The patient sits at a teletypewriter, which is connected to a computer at the distant location and the computer, which has been programmed to take a medical history, actually works directly with the patient in the role that frequently consumes many hours of the doctor's time.

Senator NELSON. This can be done by just the machine and the patient?

Mr. CALLAHAN. Yes, sir.

Senator NELSON. With the patient being interviewed by the machine; is that correct?

Mr. CALLAHAN. That is right; yes, sir.

We will also discuss applications of Telelecture and tape libraries and television in continuing medical education. We will discuss a concept for a drug information system.

Senator NELSON. With regard to drug information, are you talking about some system of furnishing information by phone or otherwise to physicians who call a center of some kind?

Mr. CALLAHAN. That would be part of it, sir. We will be describing a system which will make it possible to get information out promptly to the physicians all over the United States when there are some urgent needs to recall a drug, for instance, or any other information, possibly about an adverse reaction which has been discovered and there is an urgent need so that all who might prescribe or dispense that drug will know about it quickly.

Senator NELSON. In other words, so far as the drug information system is concerned, if a physician had prescribed a drug for a patient and suddenly the patient had a dramatic reaction to it, the doctor could call the center, describe the drug and the reaction, and have an expert advise him immediately as to what to do about it?

Mr. CALLAHAN. Yes, that could also be incorporated in the system. But primarily the system we will describe would be for providing information which has been developed in research or has been reported by physicians who have learned about some unknown side effect or other adverse reaction to the doctor through a central controlling point. The system would permit dissemination of that information all over the country so that those who need to know about it, not only physicians but druggists and others, would know about this and still would be protected from the general public learning about it.

Senator NELSON. Is there a need for a source of information for the doctor about drugs of which this would only be part? Supposing the doctor wants to know what type of drug to use for a certain kind of situation. Is there a value in having a bank or an information bank he can call and find out?

Mr. CALLAHAN. Well, we're going to talk about that kind of a tape library in use at the University of Wisconsin, Mr. Chairman. Whether or not there is a need or a value for that, being a communications man,