

For instance, if in Wisconsin the University of Wisconsin were determined to be the dissemination point, then a teletypewriter presently installed at the university could be used to receive this message and the university in turn would disseminate it to points throughout the State, possibly in each county, depending on what the traffic requirement would be, so that the information could be put on a tape and each doctor would only have to make what amounts to a local telephone call to gather the information.

Senator NELSON. Does that cover everything?

Mr. CALLAHAN. Yes, sir. I would like to briefly conclude this presentation on an observation about the regional medical center program now under development.

I hope this presentation has demonstrated that communications can produce new efficiencies in many ways. Transporting a patient to a distant hospital or clinic for an on-the-spot examination and diagnosis will seldom be necessary. Pressure on the supply of beds in the large institutions will be relieved. Waiting for admission to those institutions will be greatly reduced, if not eliminated.

The problem that results from a patient's returning home from a distant medical facility to a practitioner who has not participated in the medical discussions and who may not be entirely confident of being able to provide the special treatment prescribed, which is common in psychiatric cases, will occur less frequently. The hospital of the future will rely more heavily on physiological monitoring, computer-assisted diagnosis, television viewing of patients with concurrent consultation by doctors; and distance need not be a deterrent. Much more use will surely be made of data processing and information retrieval over the communications network. These capabilities are available right now.

The communications developments discussed today show the trend toward community and regional centers linked by communications to serve hospitals and the medical profession. In turn these local centers will have access to State, area, and specialized information centers, technical information centers, and other national resources or medical libraries. Such complexes will require coordinated voice, video, and data communications, of whatever kind is needed, for administration, patient care, research, and education.

This is the overall communications concept that will be an indispensable part of the regional medical programs initiated by the Surgeon General.

(The overall communications concept illustration referred to appears on next page.)

Mr. CALLAHAN. Through the use of the nationwide communications network, any of the facilities available in State, regional, or national information and resource centers and medical libraries can literally be put at the fingertips of the doctor.

Whether in his home or his office, at the clinic, the hospital, or at an extended-care facility, the doctor will be able to get the information he needs, when he needs it, in the form he wants it, by telephone, by telewriting, by television, or slow-scan television to retrieve X-rays or other photos, by facsimile to duplicate printed material, by teletypewriter for printouts or displayed on a cathode ray tube.