

communications equipment and lines within the hospital and requires relatively minor changes in elevator programmers, it will be economically feasible for most existing hospitals over 30 beds. The cost is even lower when planned for new construction.

In addition to the specific technical advantages of speed, simplicity, and reliability, the hospital emergency command system requires the hospital to reevaluate, rethink, and refine its internal organization for emergency care. This in turn will tend to upgrade personnel training, professional competence, equipment maintenance, and other important factors.

When a system like this is brought into a hospital, it has a number of spinoff factors that raise the level of competence for handling emergencies within that hospital.

In the ultimate analysis, however, the true worth of the hospital emergency command system must be measured in terms of decreased patient mortality and the increased number of long-term survivors who return to a meaningful and productive life.

We shall soon begin a 2-year evaluation phase to determine the change in survival rates so that we have specific data.

We feel that the hospital emergency command system will have a significant effect on patient mortality. It is our contention that there should be no such thing as emergency care in a hospital. Emergencies within a hospital are expected and should merely evoke an effective routine response.

Senator NELSON. Thank you, Dr. Nobel.

What is the cost of installing such a system in a hospital?

Mr. CALLAHAN. Mr. Chairman, I think that I can estimate that for you.

In a hospital of 600 to 800 rooms, the cost would be about \$150 a month, and for each additional alert arrangement, another \$10, so that if you had two different alerting arrangements it would be around \$160, and so forth.

Senator NELSON. You mean that in a hospital that has already been built with the elevators operating on their own system, this system can be brought in at a cost of \$150 a month?

Dr. NOBEL. We should clarify this a bit. The communications phase can be brought in at that cost. There will be a cost, depending on the number of elevator banks used and installation costs for reprogramming, in the range of \$10,000.

Now, in the overview for hospital costs, \$10,000 is not terribly significant for a refined emergency call system, and a monthly charge of \$150 for a large medical center, which may have a telephone bill in the \$20,000 range, does not appear to be very significant.

Senator NELSON. Well, so that it is clear for the record, you have certain equipment, emergency equipment, for example, that is electronically activated upon the code call of the nurse in the room in which the emergency occurs. Then when that piece of equipment is brought onto the elevator, the elevator will not move until activated by the electronic relationship between that piece of equipment and the elevator. Can you take the hospital's emergency equipment and add this telecommunications equipment to it?

Dr. NOBEL. That is correct.