All of this has taken place immediately and automatically as a result of the nurse making a simple telephone call of only a few seconds' duration.

During this period, the system can also be monitored by the switch-board attendant, although no action has been required on her part to coordinate any part of the procedure. The system is not limited to cardiopulmonary emergencies. A separate code could be established for an obstetrical emergency—say, 3333 instead of 1212, and a different set of hospital telephones would be activated. Likewise, surgical or civil emergencies could have their own separate codes.

We have invited Dr. Joel J. Nobel, director of the Graduate Pain Research Foundation in Philadelphia, who has done considerable work in conjunction with this system, to describe the impact of the command

telephone system on hospital emergency service.

Dr. Nobel is with us today and I would like to present him at this time.

Senator Nelson. Dr. Nobel, the committee appreciates your coming here today. Would you furnish the reporter your full name and identification for the record?

STATEMENT OF DR. JOEL J. NOBEL, DIRECTOR, GRADUATE PAIN RESEARCH FOUNDATION, PHILADELPHIA, PA.

Dr. Nobel. Thank you, Mr. Chairman. It is my privilege. I am Joel J. Nobel, director of the Graduate Pain Research Foundation in Philadelphia.

Senator Nelson. Go ahead, Dr. Nobel.

Dr. Nobel. Thank you.

The limiting factor in the survival of many patients requiring emergency medical care within the hospital or on arrival in the emergency room is the time required to mobilize emergency care resources. The patient with cardiac arrest is irretrievable if resuscitation is not begun within a few seconds or minutes and the accident

victim may die if emergency surgery is delayed.

Despite the current tendency to concentrate more critically ill patients in specialized intensive or coronary care units, emergencies are and will remain a hospitalwide phenomena. Our capability for predicting which patient is a likely candidate for emergency care is still rather limited. From the staffing viewpoint, it is impossible to have a three or four person team with no other duties, standing by 24 hours a day awaiting an emergency. Team members normally have routine hospital duties which they interrupt for emergencies. Team members, like emergencies themselves, can therefore be in any location.

The goal of emergency mobilization is, of course, to deliver a competent, well-equipped team to the patient's bedside as quickly as possible. The time required to bring personnel and equipment to the patient is directly related to delays in communications, elevators, and characteristics of equipment and the physical plant of the hos-

pital.