

may be increased by two methods: by increasing enrollment, and in some cases, shortening the period of the educational process.

Mr. ROGERS. What is the shortage of physicians presently, would you say?

Dr. LEE. We estimate 50,000. It is, of course, difficult to be exact about these things.

Mr. ROGERS. This is based on how many per how many of population?

Dr. LEE. This is based on a variety of factors. There has been an improvement in the ratio of physicians to population since 1963, and I think that the present ratio has been 142 per hundred thousand.

I am informed that is correct, 142 per hundred thousand. Needs change with the shifts in population, with the shifts in the disease patterns—the increased number of people with chronic disease, for example, who require more care—and as we eliminate certain diseases in youth and childhood, people live longer, and they require more care, more physicians' services and nursing services.

Mr. ROGERS. Could you give us a projection of the next 5 years on the shortages?

Dr. LEE. We can do that for the record, Mr. Rogers.

Mr. ROGERS. Yes, I realize you may not have it. I think that would be helpful, and for dentists as well.

(The information requested appears in statement below.)

Mr. ROGERS. What is the shortage in nurses?

Dr. LEE. About 145,000, Dr. Fenninger tells me, and there are approximately 660,000 nurses in active practice. So with a shortage of 100,000 to 150,000, we have a serious problem.

We are making a major effort, as you know, at the present time to bring back into active practice nurses who are licensed but who are married or for one reason or another have become inactive, and to provide them with the refresher training and the educational opportunities that they need to reenter practice.

There is a large pool of nurses in this category, and a number of them in the last several years have in fact returned to practice.

Mr. ROGERS. Could you give us a projection of your nurse shortage in the 5-year period, too?

Dr. LEE. Yes, sir.

(The information requested follows:)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE STATEMENT ON PROJECTION OF PERSONNEL SHORTAGES IN THE HEALTH PROFESSIONS OVER THE NEXT 5 YEARS

Among the many factors involved in the projection of numbers of people needed in the health professions over the next 5 years are: (1) The rate at which the demand for services increases; (2) the rate of change in the age and geographical distribution of the population; (3) the rate at which medical knowledge and technology change; (4) the ways in which health services are organized and professional and technical skills are utilized; (5) the rate at which educational and training institutions can develop and acquire faculties and facilities to accommodate an increased student body and provide the students with sound educational and training experiences; (6) the recruitment of students to the health professions; (7) the length of the educational period; (8) the rate at which inactive practitioners return to work and can acquire knowledge and techniques which are current. These variables are all related to one another and must be considered in making projections.

The provisions of Title 18 of the Social Security Act involving a segment of the population (the older age group) which requires considerably more personal health care than people who are between ages 15 and 65, have increased the de-