

professions have been effectively in existence for little more than three years. Appreciable effects and benefits derived from these programs will not be felt before 1973. Their major impact will occur in the mid and late 1970's and 1980's. These programs are, by their very nature, long term investments as are the programs of student aid and institutional support.

Today there is essential universal agreement as to the existence of very large unmet needs for health workers. There is also agreement that the present educational capacity is inadequate to meet these needs and that production must be increased as rapidly as educational capability will permit. The shortages today are so great as to make it apparent that the greatest effort is needed even if we are to keep up with the growing demand. The statistics which are given here are to be considered not as exact measurements but as orders of magnitude. They are given in full realization that increasing demands, changing patterns of utilization, technological developments, population growth, and many other factors are constantly changing the picture, but the growing potential of medicine in this country can be expected to require a continually growing and better prepared health manpower force.

The projections of shortages prior to the enactment of the HPEA Act have, as a result of the Act, and a variety of factors relating to demand, been altered in varying degrees in the respective professions.

Current projections of shortages of *physicians* indicate a reduction in the shortage of 10,000 (from 52,000 in 1968 to 42,000 in 1973).

On the other hand, the projected shortages of *dentists* is increasing over the same period, for, although the supply is estimated to increase by 6,000 between 1968 and 1973, the estimated demand for dental services will result in a need for 12,000 dentists in addition to the 6,000 who are estimated to be added between 1968 and 1973.

The supply of nurses is estimated to increase by 95,000 between 1968 and 1973. However, the demand for nursing services is likely to rise precipitously. It is estimated that by 1973, despite the increase in the numbers of nurses trained and returning to practice, there will be a shortage of 186,000 as compared with a shortage of 141,000 in 1968.

The fields of nursing and dentistry demonstrate increasing shortages over this time period, as the growth of need will continue to outrun the growth in supply. The long lead-time in the educational process at the advanced levels of medicine, dentistry, nursing, and other health professions means that the effect of health manpower programs in increasing the health manpower force must be judged over a relatively long time period.

PROJECTION OF SHORTAGES IN THE HEALTH PROFESSIONS, 1968-73

	Medical doctor and doctor of osteopathy		Doctor of dental science		Registered nurse	
	1968	1973	1968	1973	1968	1973
Need.....	353,000	387,000	109,000	127,000	800,000	940,000
Supply.....	311,000	345,000	100,000	106,000	659,000	754,000
Shortage.....	52,000	42,000	9,000	21,000	141,000	186,000

Mr. ROGERS. The proposed legislation, then, has no required number of new students to be accepted by universities if they accept aid?

Dr. LEE. The proposed legislation does include an expansion-of-enrollment requirement, Mr. Rogers. It refers to the average enrollment in the preceding 5 years, and the schools will have to meet that requirement.

Mr. ROGERS. I didn't see anything in your discussion requiring an increase, that if they do, they have an incentive to double the amount instead of the amount for one student. They get the amount for two students for every new one taken over a 5-year period?

Dr. LEE. They have an increased incentive for the added enrollment.

Mr. ROGERS. It is double the amount of what they would get for one student.