country increased 17% and the number of active physicians increased 22%. The recent report of the National Advisory Commission on Health Manpower predicted that for the decade ending in 1975 our population is expected to increase by 13% and the supply of physicians by 17% or 18%.

It is calculated that in 1960 there were 149 physicians per 100,000 people in this country. In 1965 the figure had increased to 153 per 100,000 people and it is

expected that in 1975 it will be 160.

Nevertheless, changes in the way physicians are being used and increasing demands for their services lead us to predict that in the coming decade the physician shortage will grow. The average physician, for example, is spending a much greater proportion of his time in administrative duties and there is a growing need for physicians in full-time administrative positions occasioned by

recently enacted Federal programs.

Mr. Rogers called attention to relatively large increases in total budgets and numbers of full-time faculty and much smaller increases in numbers of graduates. Dr. Sodeman pointed out that the figures do not tell the whole story and agreed to provide further explanation. As Dr. Sodeman pointed out, the figures presented made no reference to the role of parttime faculties in medical schools. Advances in medical science, the growing importance of research, and other factors have compelled the medical schools to depend to a greater extent upon full-time, salaried faculty. While the number of part-time faculty also has increased, the relative role of the full-time compared with the part-time faculty has increased substantially in recent years.

Of greater importance is the increased responsibility of the medical schools for research. Between 1958-1959 and 1965-1966 the total expenditures of the Nation's medical schools increased by \$563,155,511 as the Fact Sheet indicates. However, \$369,968,598 or 65% of this increase is accounted for by funds available for support of sponsored programs, mostly research and research training. While the increased research activity of the medical schools undoubtedly improved the quality of the educational programs of the medical schools, it would not be expected to increase appreciably the number of medical students the

schools were capable of educating.

It should be remembered also that medical school faculties carry a large share of the responsibility for the education of students other than medical students. In recent years there has been a marked increase in the number of such students. It was found, for example, that in 1960-1961 medical school faculties were responsible for 33,364 students other than undergraduate medical students, calculated in terms of full-time equivalents. This is more than the number of undergraduate medical students at that time, 30,093. In 1965-1966 this number had increased to 43,335, an increase of about 30%.

Finally, there was a rather substantial inflation from 1958 to 1966.

Mr. Rogers pointed out that the bill's requirement of an increase of 21/2% or five students was an insignificant requirement and asked for our recommendation as to a more substantial one. The bill also provides that, in the case of the institutional grants, a large part is distributed in such a way that a school receives twice as much per additional student as for one previously enrolled. We believe that, if the appropriation under this bill is sufficiently great, this provision provides enough incentive for the schools to increase their enrollments. If the appropriation is very small, it would not be effective regardless of the requirement. We doubt that it would be wise to require every school to increase its enrollment. Some already are in a very critical financial situation and the enrollment could not be increased without serious risk of lowering the quality of their educational programs disastrously

Mr. Rogers asked Dr. Sodeman to "let us know what you think would be a realistic ceiling on project grants." It is now \$400,000. Mr. Rogers indicated that he would agree to raising the limit but not removing it. To a greater or lesser extent a limit ties the hands of the people administering the Act. The size of the appropriation pretty well limits the amount that can be granted to a given school. According to our information some schools are incurring annual deficits in excess of \$1,000,000, a situation that cannot continue. If the limit in the bill were raised from \$400,000 to perhaps \$1,000,000, it might be possible to rescue

such a school from its critical situation.

The amount, if at all, that a given school can or should expand must be determined by the local situation. This involves such matters as the state of the buildings, available space for expansion, architectural considerations, the availability of local funds for matching purposes for construction, the availability of