

and 35.5 per cent for the top quartile. The top 10 per cent of the population still had three times as many physicians in 1959 as the bottom 10 per cent, but in 1950 the top 10 per cent of the population had over four times as many physicians as the lowest 10 per cent. This improvement in the physician-population ratios of the lower income relative to the higher income areas should not be interpreted to mean that physicians relocated from high to low income regions. A more likely explanation is the tendency of the population to move to higher income areas, and the changes in regional income levels.

A valid argument can be made that for a general evaluation of the distribution, the concept of relative distribution developed above is more meaningful than the measurement of distribution based on degree of urbanization. Relative distribution takes into account the proportion of the population that gains or loses by a change in distribution. On the other hand an analysis in terms of the degree of urbanization shows what happens to specific social segments of the population and gives us another way of looking at the problem of distribution. It also has the advantage of isolating one of the important causal factors in the location of physicians and the relocation of the population as a whole. The results of this approach for the period 1950-1959 are summarized in Table 2.

An important fact which can be noted in Table 2 is that in none of the areas did the number of physicians increase as much as population or decrease as little as population. This means that the over-all decrease in the country's physician-population ratio between 1950 and 1959 left all aggregated county groups with fewer doctors in relation to population. However, not all areas shared equally in this relative loss of physicians. There was a redistribution in favor of the more highly urbanized areas and against the rural areas. In isolated rural areas population decreased slightly (.7 per cent), but the number of physicians decreased about six times as fast (4.4 per cent). This is the meaning of the 5.9 coefficient of elasticity of physician mobility.⁶ This coefficient merely describes a numerical relationship and is not intended to indicate a causal significance of the same magnitude. Isolated semi-rural areas fared even worse than isolated rural areas, even though they had a slight increase (1 per cent) in the absolute number of physicians. Their problem is that population increased 11 times faster than the number of physicians. The other three county groups had somewhat comparable changes in physician-population ratios. Most favored were the greater metropolitan areas, where the relative increase in the number of physicians was equal to 70 per cent of the increase in population, as indicated by the elasticity coefficient of .7. In the lesser metropolitan areas, the relative increase in the number of physicians was second largest in the country, but the relative increase in population was the largest. As a result the lesser metropolitan areas had a rate of physician increase that was about half as fast as the rate of population increase. In the adjacent areas, where the rate of physician increase was much smaller, the rate of population increase was relatively still smaller. The result was a rate of physician increase equal to 60 per cent of the population increase.

⁶ Computed before rounding the percentage changes.