

not greatly affected by dropping either the initial level of income or the change in income as independent variables. In the case of the adjacent, the lesser metropolitan, and the 19 standard metropolitan areas, total correlation is not greatly affected even if both of these variables are dropped. Only in lesser metropolitan areas is there a high simple correlation between change in income and change in physicians. In these same areas the combination of income level and income change also has the highest correlation with changes in the number of physicians. The level of physician income at the beginning of the period has only a very low correlation with the subsequent increase in physicians. Finally, it should be noted that, on the whole, the change in physicians is more closely correlated with changes in per capita income than with the initial level of per capita income. This is especially the case in the lesser and the greater metropolitan areas.

SUMMARY AND CONCLUSIONS

It has been shown that the two most important factors affecting the change in location of physicians over time are the regional degree of urbanization and the increase in population. The extent to which an area is urban or rural, or adjacent to an urban area, influences its attractiveness to physicians aside from what is happening to its population or to its level of income. An increase in population has an effective drawing power in urban but not in rural areas. In the isolated rural areas as a whole both population and physicians decreased, but there was no meaningful correlation between these two changes. Rather surprisingly, the level of per capita income at the beginning of the period turned out to have little effect on physician location. Nor were physicians induced to locate on the basis of higher average physician incomes. Increase in per capita income seems to have been a factor in attracting more physicians but only in lesser and greater metropolitan areas. The fact that the isolated rural areas had the highest rate of increase in per capita income did not prevent a decrease in the number of physicians. Even when initial per capita income and increase in income are combined, their effect is strong only in lesser and greater metropolitan areas. This indicates that on the whole the income of the population is a less significant factor than we had originally suspected.

However, in evaluating the meaning of these findings it is important to bear in mind that they refer to all physicians, rather than only to those engaged in private practice. The Lorenz curves in Chart I show that there is a substantial difference between the distribution of all physicians and that of private physicians. It is possible therefore that if a comparison over time were made of physicians in private practice, the income of the population would be a more important factor. At least this was suggested by our analysis of the distribution of private physicians in 1959.⁸ It is quite clear that a more disaggregated analysis is necessary to obtain more precise and more reliable results. For instance, it might be worth while to break down the increase in population into increase through migration and natural increase. It might be profitable also to analyze changes in the number of physicians

⁸ See Rimlinger and Steele, *op. cit.*