class. The highest income class paid on the average 28 per cent more per visit than the lowest. This is not a measure of price discrimination in the ordinary sense, since it does not refer to a single service but to a composite bundle of services bought by different groups. There may be differences in kind as well as quality between bundles.

There may be more homogeneity in a comparison of expenditures of people living in similar environments. A calculation for farm families only gave the following expenditure differentials: under $2,000 family income, $4.01 per physician visit; $2,000–3,999 income, $4.35 per visit; $4,000–6,999 income, $4.74 per visit; $7,000 and over income, $5.71 per visit.[20] In this case, the highest income group paid 42 per cent more per visit than the lowest. It is noteworthy that the heaviest discrimination occurs between the highest and the next highest income group. A computation by region shows farm families in the South paying $4.13 per visit against $4.82 in the North Central area.

In spite of the necessarily approximate nature of our statistical results, all indications are that prevailing pricing practices contribute to the observed differences in physician-population ratios between areas with different income levels and between urban and rural areas.

## V. CONCLUSIONS

It has been shown that high income areas have substantially larger numbers of physicians in relation to population than low income areas. If we assume that in a wealthy country the entire population should have reasonable access to physician services, the implications of this income-related differential deserve careful consideration.

Although there are other factors making high income areas attractive to physicians, there are definite economic incentives working in the same direction. Persons with higher incomes tend to visit physicians more often and have more expensive visits. The larger number of visits per capita in higher income areas tends to justify a certain unevenness in the distribution of physicians in relation to population, but high income areas tend to have more physicians than would be called for by this difference in use of services. The ability to charge higher fees to more well-to-do clients makes possible a high concentration of physicians in high per capita income areas without commensurate loss in physician income. In this sense, the widely defended practice of charging according to ability to pay may have undesirable consequences in terms of the spatial availability of physician services.[21] The availability of services should be considered not only in terms of access to a physician but also in terms of the amount of the physician's time available to the patient on each visit. It was shown that where the physician-population ratio is low, physicians tend to have very large numbers of visits which are almost necessarily brief.

The economic implications of the observed wide regional differentials in physician work loads depend on how health is valued. If we value health from a strictly economic point of view, it is in all probability more advisable to spend a lot of physician time on high income executives, who presumably have a high productivity, rather than on low income unskilled workers. In this case, the observed spatial distribution of physicians may well be optimal, or perhaps there should still be more physicians in high income areas and fewer in low income areas. This approach, however, becomes very awkward when we extend it to the children of various income groups. To the extent that the children have comparable productive potentials, economic

[20] Expenditure data from J. L. Pennock, "Farm Medical Care Expenditures," *Public Health Reports*, April 1958, p. 290; visits are adjusted for rural level.

[21] Within a given area, of course, this practice may make medical care available to some low income groups who would otherwise be deprived of it.