C. Role of Mobility

The analysis thus far indicates that, as long as the fee rises with income and the use of physician services per person is fixed, physicians in low income areas will tend to have either less leisure or less income than physicians in high income areas, but not both. This follows in part from the assumption of mobility and equal ability. If these assumptions are relaxed the result no longer necessarily holds. Absence of mobility from low to high income areas may leave doctors in these areas with both less income and less leisure than in high income areas. On the other hand, a preference by doctors for high income areas has the same effect as a substitution of leisure for income; it tends to increase leisure and reduce income in high income areas and cause the opposite in low income areas.

The relaxation of the assumption of equal ability may also affect the results obtained. Specialists, who represent a group with higher than average qualifications, are likely to draw higher fees than general practitioners. Since they choose to locate mainly in high income metropolitan areas, they may raise both the leisure and the average physician income in these areas.

D. Summary and Conclusion

The main determinants of physician distribution, given the regional distribution of income, were found to be (1) the relation of fees to patient income, (2) the relation of demand for physician services to patient income, and (3) the behavior of physicians with respect to price competition, income maximization, desire for leisure, and geographic mobility. The degree of inequality of physician distribution tends to be greater the greater the increase in fees and in demand for services for a given increase in interregional income and the greater the inclination of physicians to substitute leisure for income.

An interesting insight provided by the theoretical analysis is that so long as expenditures on physician services rise with increases in income, and physicians do not engage in price competition but try to maximize income, changes in the total number of physicians, or in the general level of fees, or in the level of demand for services, do not affect the relative distribution of physicians. However, increases in the number of physicians, in level of fees, and in level of demand would increase the absolute physician-population ratio differentials between high and low income areas and in that sense would make the distribution more unequal.

IV. EMPIRICAL ANALYSIS OF DISTRIBUTION DETERMINANTS

We shall now examine to what extent available evidence on physician behavior, fees, and demand for services supports the preceding theoretical explanation of physician distribution.

A. Income Maximization, Leisure, and Mobility

In investigating the behavior pattern of physicians we shall make the assumption, which will be substantiated later, that medical expenditure per person (fees times visits) rises with income. This will tend to give us an uneven distribution of physicians in favor of high income areas, unless physicians ignore income. There is no evidence of such behavior. Nor are there data available that would allow a positive test of the income maximization hypothesis. The only feasible approach is to test the behavior pattern for its consistency with income maximization and to find out in this manner whether substitution of leisure for income and lack of mobility should be considered significant factors in the observed distribution of physicians. Lack of mobility is intended to cover all reasons for not moving other than income and leisure.

If leisure is valued by physicians, and if they are fairly mobile, we should find higher physician incomes where leisure is low and