A more recent study of 20 medical schools for the National Institutes of Health indicates that Federal funds made up 9 percent of medical school budgets in 1948, about 29 percent in 1958, and that by 1970 an estimated 44 percent of medical school budgets will come from Federal grants.²¹ These figures do not include construction grants, which would raise the proportion of Federal support for medical education.

Assuming an annual growth in gross national product of only 3 percent, the Bayne-Jones report projects a desirable rise in national spending for medical research from \$330 million in 1957 to \$900 million or \$1 billion a year by 1970. Attainment of this level of spending for medical research will require private industry and private philanthropy to triple private spending for medical research, the report states, and Federal spending for medical research should rise to about \$500 million a year in 1970. Although the report stresses the need for increasing Federal support, it also states clearly that non-Federal spending must continue to support about half of the total medical research effort.²²

Widespread awareness of the value of research has created strong public support for medical research. Discovery of an effective poliomyelitis vaccine has raised hopes for other major medical breakthroughs. It is significant that in 1959 Congress raised appropriations for National Institutes of Health research activities by \$106 million above the Administration budget request to \$400 million. This action reflects public support for medical research. This demand for progress in medical research can be expected to continue to grow.

DEMAND FOR HOSPITAL SERVICES

Trend to hospitals for health care

Hospitals are focal points for advances in medical science, and the American people increasingly demand hospital services for diagnosis and treatment of disease, as well as for preventive medicine and community health education. Increased utilization of hospitals stems in part from the social and technological role of hospitals in providing medical services, but rising income and prepaid health insurance programs provide additional incentives toward utilization.

Hospital utilization is also determined by age, sex, marital status, education, and a variety of less measurable socio-economic factors, including existing alternatives to hospital care such as family or home care or care by nonhospital institutions such as nursing homes and halfway homes for mental patients. Among the most significant factors, however, are the prevalence of hospitalization insurance, the increase in older age groups, and the incidence of long-term diseases and mental illness.

Hospitalization insurance

The most widespread benefit of health insurance is protection against costs of hospitalization. Evidence of higher hospital utilization by insured persons raises the question of abuse of this protection. It is difficult to establish abuse, which implies doctor-patient collusion,

²¹ U.S. Department of Health, Education, and Welfare, "A Study of 20 Medical Schools," a report to the Director, National Institutes of Health, from the staff committee on support for research and training, April 1959, p. 6.

²² Bayne-Jones report, pp. 29–30.