

cillary" personnel, operational research, and reforms in medical education. There can be no quarrel with the list, although less can be said for the depth in which these concepts are explored and assessed. Yet, just such critical review is now needed desperately. The respected Mayo Clinic design of group practice is hardly the model for a community health center delivering personal and family medical care. Autonomous hospitals and competitive fee-charging practitioners form an improbable basis for an effective regional medical program. Semantic substitutes for "G.P." will not fill the need that has *always* existed for a strong, qualified, supported and honored front line of primary medical care. A revolutionary theory for the form and structure of medical care has got to be formulated before the coming of the revolution itself can be described. Dr. Rutstein has the symptoms of the current medical-care disorder well chronicled; his diagnosis is accurate, even if not overly detailed; but his therapy relies too hopelessly upon familiar remedies in revolutionary new packages. . . .

The most useful portions of the book are those dealing with potentialities of the new data-processing and automation techniques for medical research and program operation. These lectures reflect the direct and personal experiences of the author in bringing about new partnerships between MIT scientists and Harvard physicians in the exploring of these dramatic possibilities.

Is there a coming revolution in medicine? Probably, but not tomorrow. Does this book convincingly analyze its wellsprings and contribute to its conceptual clarity? Not really, although the author does view with all the appropriate alarm and does take most of the statesmanlike positions.

E. RICHARD WEINERMAN, M.D.
Professor of Medicine and Public Health
Yale University School of Medicine

REFERENCE

1. Stevens, Carl M.: "Problems of Goal Definition for National Health Policy," presented to the Medical Care Section, American Public Health Association, Miami Beach, October 23, 1967.

Surgery

ANESTHESIOLOGISTS IN THE U.S.S.R. The health and working conditions of 15 per cent of the anesthesiologists in the Soviet Union were surveyed by questionnaire. Of the 354 doctors surveyed, 91 per cent were under 40 years of age, and two thirds were male; most had been specialists for more than three years, a fourth for more than six years; 69 per cent had been surgeons before they went into anesthesiology. Investigative institutes and clinical hospitals had 42 per cent of the anesthesiologists; district hospitals, 14 per cent; city hospitals, 24 per cent; the remainder being in other types of hospitals. Twelve per cent of the anesthesiologists surveyed administered anesthesia for less than ten hours a week, 42 per cent between 11 and 21 hours per week and the rest more than 21 hours per week. Ether was used by 98 per cent of anesthesiologists; the semiopen or semiclosed techniques were the most common means of administration. Nitrous oxide was also used by more than half the anesthesiologists; halothane by about a fourth. Closed techniques appear to be used rather rarely, apparently because of difficulties with CO₂ absorption equipment. Many of the Russian anesthesiologists believed that their operating rooms were poorly laid out and badly ventilated. Many had health complaints relating principally to the central nervous, gastrointestinal and respiratory systems. The number of complaints tended to increase with the number of years in the specialty. Headache, fatigability, irritability, sleep disturbances, dyspepsia, decreased tolerance to alcohol, and inflammation of the upper respiratory tract were among the difficulties noted. There were 31 pregnancies in anesthesiologists between 24 and 38 years of age. Eighteen terminated in spontaneous abortion; there were two premature births, one congenital defect, toxemia in 13; only seven deliveries were completely uneventful. The author attributes the problems observed to unfavorable working conditions, especially the inhalation of anesthetic vapors, the need for sustained attention to details of work, excessive work, and emotional strain. (Vaisman, A. I.: *Working Conditions in Surgery and Their Effect on the Health of Anesthesiologists*, Eksper. Khir. Anesthesiol. 3: 44, 1967.)