1. RESEARCH GRANTS

Chronic diseases.—In terms of the effect on actual and potential patients, the economic impact of this research grant program is important both (a) from the standpoint of enabling people to remain productive for a longer period of years, and (b) from the standpoint of enabling them to be more productive, per day on the job, than they would be if they were employable but in poorer health. Measurement of the latter type of benefit from health services (greater productivity per hour or day) is a task recognized as desirable but not thus far achieved. (See publication No. 1178, pp. 7 and 14, where the problems of economic losses from mortality and morbidity are discussed.)

Communicable Disease Center.—The economic and other significance

of CDC's research grant program cannot be assessed independently of other aspects of the control of communicable diseases. The United States has, by this time, brought various communicable diseases under a high degree of control through the efforts of the various levels of government, and through the efforts of private individuals, foundations, etc. In consequence, we tend to take for granted the freedom from heavy economic and other losses of, for example, a smallpox epidemic. However, there is an occasional opportunity to make meaningful estimates of the economic benefit when a breakthrough occurs in the control of a communicable disease, as happened recently with regard to vaccination against poliomyelitis. (See publication No. 1178, p. 7.) Somewhat less spectacular are the benefits from vaccination, sanitation, etc., where the means of control have been in use for a long time. With regard to vaccination, there are very marked external benefits—the economists' way of saying that, if vaccination is widespread but not universal, even the unvaccinated get substantial protection. (See publication No. 1178, p. 6.)

Community health services.—In this research grant program, the

measurement of the comparative cost-effectiveness of two or more alternative ways of delivering the same sort of service is probably feasible but remains to be done. Likewise, it is probably feasible to measure the relative effectiveness of two or more ways of delivering the same sort of service in terms of a performance measure—that is, given that two approaches require expenditure of identical sums of money, which reaches the greater number of beneficiaries? (See publication No. 1178, p. 16, last two paragraphs.) Such studies

remain to be done.

Dental health.—The economic impact of this research grant program is considered along with the economic impact of the formula grant program in dental health; topic 4, below.

Nursing.—This research grant program makes itself felt ultimately through improved patient care; and it thus needs to be considered along with other BSS(CH) programs related to nursing, especially the following: the nursing student loan program, the formula grant program for home health services, and the several training grant programs for nurses.

In publication No. 1178, page 11, the staffing pattern of nursing homes is used to illustrate the fact that, to an important extent, health services can be expanded without even a short-run reduction in the other services and goods produced by the economy. The report

mentions that the unemployed—