The value of clinical data bases has been touted for some time. Yet the current use of clinical data banks has been somewhat limited. Two forces are acting to reverse this situation and to stimulate the growth of data base systems:

1. The costs of computer storage have been dropping exponentially. The price per million characters of magnetic disk storage, the most common form of storage for current computer data bases, has fallen from thousands of dollars a decade ago to well under a hundred dollars today. The use of video disc devices promises even greater economies of scale for some applications as well as exciting possibilities for integrating text and pictures.

2. The problems of the human interface with the data base have been better addressed. In particular, the papers in this session demonstrate well the tremendous progress that has been made in aiding the clinician to define and enter his data easily, to retrieve information conveniently, and to analyze it appropriately.

Medical data base systems can be divided into two categories: those, such as the AMA-sponsored information network, that provide access to the accumulated medical knowledge distilled from the experiences of many patients; and those that store information regarding individual patients. The papers of this session describe systems of the latter category. Both categories of data base systems present a common challenge: We now have the computer tools available to maintain medical data bases of all types facilely and economically. We must define what medical information is to be automated and how it is to be used. The authors of the following papers have answered that challenge.