

*Technology Transfer at the National
Institutes of Health*

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**TECHNOLOGY TRANSFER
AT THE
NATIONAL INSTITUTES
OF HEALTH**

A TECHNICAL MEMORANDUM

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Preface

The quality and efficiency of health care and, ultimately, improved health of the population depend substantially on the timely and appropriate transfer of medical technologies from the research setting into medical practice. This spreading of technologies must be fast enough so that significant potential benefits are not denied to the population and yet sufficiently paced to assure that enough is known about the safety and appropriate conditions of use of the emerging technologies.

The flow of technologies from research and development (R&D), through evaluation, to their adoption and diffusion in health care settings is thus a crucial aspect of the lifecycle of technology. Congress and many other parties are concerned with how to blend accelerated transfer with informed transfer.

As background to an effort to develop improved policies toward the transfer of medical technologies, the House Committee on Energy and Commerce requested OTA to prepare an examination of current technology transfer and assessment activities of the National Institutes of Health (NIH). This technical memorandum is the result of that examination. It presents general information on biomedical R&D and its relationship to technology transfer, and on the processes of transferring medical technology and of assessing that technology. It discusses the current technology transfer activities of NIH and contains detailed looks at two specific institutes.

The National Cancer Institute has been the focus of substantial congressional concern, particularly over its research directions and its activities in bringing technologies to medical practice. OTA conferred with a large number of academic and other experts regarding these issues.

The National Heart, Lung, and Blood Institute (NHLBI) is also covered in depth. NHLBI has been the single most active institute in terms of an organized approach to technology transfer and the level of such activities.

The main finding of this study is that despite some problems in timely transfer of technologies the most critical problems are: 1) insufficient attention to the development of the basic science base necessary for development of effective technologies; and 2) insufficient attention to the careful, scientific evaluation of the potential benefits, risks, and costs of medical technologies.



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