Computer Technology in Medical Education and Assessment

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PREFACE

This report reviews the state-of-the-art of the use of computer technology in medical education and assessment. It both describes the technologies and strategies for computer-based education and assessment, the current state of medical education and assessment activities, and computer applications in medicine. It also provides examples of systems for the development and dissemination of computer-based educational materials. A summary and analysis of such computer uses are also presented. Although the focus of the report is on physician education and assessment, the implications of the activities described are applicable to other health professions.

The Federal Government’s role in computer-based education and assessment has been primarily in the research and development phases. However, the medical areas in which such computer-based methods have been applied have been of long-standing interest to the U.S. Congress. Such areas include health professions education, monitoring and evaluating physician services through Professional Standards Review Organizations (PSROs), and efforts to contain the costs of such federally financed programs as Medicare and Medicaid. In all of these areas the use of computer technology is becoming the rule rather than the exception.

This report examines these computer applications in various stages of the life-long process of medical education from entry into medical school through active practice. It therefore provides an overview that may be of value to two audiences: policymakers at the Federal, State, and local levels, and those in the public and private sectors who are directly involved in the use of computer technology in medical education and assessment.

The study was conducted by the OTA Health Group staff with assistance from an advisory panel and contractors. The report was also reviewed by the OTA Health Advisory Committee. This report is a synthesis and does not necessarily represent the views of any of the individuals involved in its preparation.

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