



## POSITION STATEMENT

# INCREASING SCIENCE AND ENGINEERING REPRESENTATION ON U.S. GOVERNMENT ADVISORY ENTITIES CONCERNED WITH HEALTH-RELATED ISSUES

*Adopted by the IEEE-USA  
Board of Directors, 18 Nov. 2011*

The U.S. Congress has enacted legislation placing certain responsibilities on the executive branch of government to ensure the safety, efficacy and reasonable cost of health care. These responsibilities encompass guidance of health care-related programs, ranging from support of basic life science research to health care facility justification and planning, in addition to creating programs for cost control. To meet this technically complex challenge, advisory committees, commissions and panels have been created to provide expert advice to local and national government entities.

IEEE-USA recommends that whenever the mission of a government agency, commission and/or advisory committee includes health care technology, the selection process and strategy for membership should include consideration of engineers with relevant biomedical, communications and/or health care backgrounds.

IEEE-USA also supports the National Academies' recommendations that the process for nominating and appointing people to advisory committees should be both explicit and transparent, and that "when a federal advisory committee requires members with scientific or technical proficiency, persons nominated to provide that expertise should be selected solely on the basis of their scientific and technical knowledge and credentials, and their professional and personal integrity."<sup>1</sup>

IEEE-USA will work proactively to recommend or endorse qualified engineers for appointments to governmental positions whose mission encompasses health-related technology issues.

This statement was developed by the IEEE-USA Medical Technology Policy Committee, and represents the considered judgment of a group of U.S. IEEE members with expertise in the subject field. IEEE-USA advances the public good and promotes the careers and public-policy interests of the 210,000 engineers, scientists and allied professionals who are U.S. members of the IEEE. The positions taken by IEEE-USA do not necessarily reflect the views of IEEE, or its other organizational units.

## **BACKGROUND**

Scientific and engineering achievements, including the contributions of related disciplines, have resulted in the development of significant technologies to improve health care system delivery in the past few decades. However, incorporating these technologies into the national health care strategy has been slow and inconsistent, in part due to the under-representation of engineers, scientists, and other technical specialists in key advisory roles. To meet the advisory and planning objectives of these bodies, the presence of these individuals on committees giving expert advice are desirable.

The engineering education system that trains the nation's scientists and engineers has had the foresight to create multi-disciplinary programs of study, so that professional practitioners are available with combined education and experience in the life sciences, as well as engineering and the physical or computer sciences. Engineers and scientists with a biomedical orientation can provide needed expertise in technology as applied to health care. Individuals with this multi-discipline background can benefit the two complex issues of adopting information technologies into health care, and achieving the "genomic vision" of DNA-based solutions for cancer and other acute diseases.

## **NOTES**

1. *Science and Technology for America's Progress: Ensuring the Best Presidential Appointments in the New Administration*, Committee on Science and Technology for America's Progress (National Academy Press, Oct. 2008), Summary at p. 9. Available online at: <http://www.nap.edu/catalog/12481.html>