

P R E S I D E N T ' S C A N C E R P A N E L

NATIONAL CANCER PROGRAM

NATIONAL CANCER INSTITUTE

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

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The Future of Cancer Research: Accelerating Scientific Innovation September 22, 2010

The President's Cancer Panel held the first meeting of its 2010-2011 series, *The Future of Cancer Research: Accelerating Scientific Innovation*, on September 22, 2010, in Boston, Massachusetts. The meeting included expert testimony and moderated discussions regarding scientific progress made over the past four decades and opportunities to enhance the National Cancer Program in coming years. Speakers identified principles and priorities around which the diverse stakeholders of the National Cancer Program could come together to prevent cancer and increase the survival and quality of life of those diagnosed with the disease.

Continued investment in research was cited as critical for identifying new ways to prevent and treat cancer. Although advances in genetics and genomics have yielded substantial knowledge about cancer in recent decades, speakers noted that molecular targets must be understood in the context of the cellular and tissue microenvironments in which they function. Research must also seek to more clearly elucidate the steps involved in cancer progression, including the factors that determine whether a lesion is likely to develop into an invasive cancer (i.e., whether it should be treated). It was maintained that the emphasis of cancer research must shift from cure to prevention of the disease and that the National Cancer Program should more successfully implement what has already been learned. Speakers recognized the contributions of clinical trials to recent improvements in cancer care but also emphasized the need for fundamental changes in the clinical trials system in order to adapt to changes in the research field as well as increase the speed and efficiency with which trials are initiated, conducted, and completed. Decreasing the regulatory burden associated with trials would partially achieve this goal. However, trial design will also need to change to integrate and accommodate advances in biomarker research and the development of molecularly targeted therapies that may be appropriate only for a small segment of the population. Future trials may involve fewer patients but will continue to require coordination among multiple institutions across the country and around the world.

Despite health care reform measures, limited access to high-quality care continues to contribute to the national cancer burden, particularly the disproportionate burden endured by underserved populations. Data-driven efforts must be undertaken to maximize the quality of care provided to patients and those at risk of cancer. In addition, the growing costs of cancer treatment must be addressed in order to create a sustainable cancer control program. Research should also be done to characterize the experiences of the growing number of Americans who have been diagnosed with cancer.

Infrastructure and workforce issues were also discussed. Speakers noted that widespread adoption of electronic health records and information technology is increasingly critical. Robust, interoperable systems have potential to both improve delivery of care and facilitate research. The cancer care and research workforce must be enhanced. In addition to attracting new researchers and health care professionals, continuing education is necessary to ensure that the existing workforce is well versed in the scientific advances and emerging technologies that are driving cancer prevention and care. The cancer workforce would also benefit from increased recruitment and retention of individuals from minority and underserved populations.

The need for improved coordination and communications within and across disciplines and sectors—including government agencies, private industry, and academia—was emphasized. Participants also highlighted the importance of continuing to involve advocates to help ensure that the best interests of patients and the public remain at the forefront. The Panel will summarize findings and recommendations from this meeting, along with the other meetings in the series, in its 2010-2011 Annual Report to the President of the United States.