America’s Demographic and Cultural Transformation: Implications for the Cancer Enterprise
December 9, 2009

The President’s Cancer Panel held the third meeting of its 2009-2010 series, *America’s Demographic and Cultural Transformation: Implications for the Cancer Enterprise*, on December 9, 2009, in Wilmington, Delaware. During this meeting, invited speakers discussed the unequal cancer burden experienced by underserved populations and emphasized that these disparities stem from a complex interaction of factors, including sociocultural issues, environment, biology, and genetics.

Racial categories are sociopolitical constructs and should not be used in biomedical research to explain genetic or biological differences between populations. Although genetic ancestry likely plays some role in cancer susceptibility, most of the observed disparities among U.S. subpopulations are not due to inherent genetic differences between racial/ethnic groups. Furthermore, it was pointed out that differences in tumor biology can be driven by variations in environmental exposures and/or gene-environment interactions and are not necessarily caused by inherited factors.

The excess cancer incidence and mortality experienced by many underserved populations are largely preventable. Some minority populations suffer disproportionately from cancers caused by lifestyle factors, such as tobacco use and low rates of vaccination against infectious diseases. Perhaps more importantly, minorities are less likely than whites to receive high-quality cancer prevention, screening, and treatment. Inadequate access to health care, for example due to low socioeconomic status or lack of health insurance, may explain this discrepancy in part.

However, even when equal access is achieved, minorities and other underserved populations are often less likely than whites to receive the best available treatment and achieve optimal outcomes. Cultural and logistical barriers can impede prompt, accurate diagnosis and patient adherence to treatment plans. Patient navigation and facilitation services can improve patient interactions with health care providers and systems. In addition, some researchers are working to adapt cancer therapy regimens to make it possible for patients who live far away from a medical center to complete their treatment more quickly, decreasing the burden created by being away from home for extended periods of time. Suboptimal patient-provider interactions can also contribute to inadequate delivery of care. Many minorities, particularly immigrants, are not proficient in English. When language barriers exist, it is essential that trained interpreters facilitate the exchange of information between patients and providers. Other cultural and social differences may also deter effective communication. Research has shown that unconscious physician biases can influence the information provided and treatments offered to patients, negatively impacting quality of care.

Regardless of race/ethnicity, each individual has a unique complement of cultural, environmental, biological, and genetic risk factors that coalesce to determine cancer risk. Insights into the interactions between multiple variables (i.e., gene-neighborhood interactions) and biological markers of cancer risk and prognosis can be gained through thoughtfully designed research and should ultimately help health care providers more effectively treat patients.

The Panel will summarize findings and recommendations from this meeting, along with the other meetings in the series, in its 2009-2010 Annual Report to the President of the United States.