An Endgame for Cancer

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For much of the 20th century, cancer was the most feared and, in many ways, the most mysterious of the major life-threatening diseases. As we begin the 21st century, cancer is still, both in perception and reality, a very real concern for public health. However, the challenges and opportunities facing us today are far different from those facing our colleagues of a hundred years ago. As the 20th century progressed, the body of knowledge related to cancer and its treatment grew significantly, leaving fewer and fewer questions to be resolved, and during the past 10 years, a number of important events have occurred, leading almost inevitably to the conclusion that cancer is no longer the threat it once was. Today, it is not a question of whether we will control cancer, but rather when and how quickly.

Cancer Is Second Leading Cause of Death

At the beginning of the 20th century, cancer was the eighth leading cause of death in this country. Today, it is the second. Advances in biomedical research and the development of new disease preventive interventions and therapies have reduced once formidable enemies, such as tuberculosis, smallpox, and measles, to a lesser status. These infectious diseases have either been wiped out completely or largely controlled. However, as they began to decline, the comparative impact of cancer grew.

At the same time, changes in lifestyle behaviors—especially tobacco use, diet, and exercise—led to significant increases in certain types of malignancies, such as lung and colorectal, pushing cancer further up the ranks of deadly diseases. Indeed, for most of the century, the fight against cancer was to some extent a holding action, focusing largely on the treatment of advanced disease, while the overall burden of cancer steadily grew. This trend seemed likely to continue even as recently as a few years ago, and for a time, many predicted that cancer would surpass heart disease as the leading cause of death in the US.

A Watershed Moment

Then, on November 14, 1996, representatives from the American Cancer Society, the National Cancer Institute, and the US Centers for Disease Control and Prevention made an exciting announcement. After carefully examining a growing body of statistical evidence, scientists in these organizations had discovered the first-ever sustained decline in overall, age-adjusted cancer mortality rates in the US. In many ways, this moment marked a watershed in our efforts. Since then, our nation has witnessed declines in the overall age-adjusted cancer incidence rate, as well as a leveling in the number of cancer deaths and new cases of cancer. Both mortality and incidence rates have decreased progressively with each passing year. Moreover, despite several areas of concern, including increases in the incidence and mortality rates for certain types of cancer, such as melanoma, and uncertainty over trends in lifestyle behaviors, such as teen smoking, there is good reason to believe that these declines will continue.

These declines in incidence and mortality rates can be attributed to a number of factors, including improvements in public and professional education, primary prevention, early detection, and treatment. Prevention is an especially promising
area. Data from the ACS’s Cancer Prevention Study II offer strong evidence for the effects of certain lifestyle behaviors on mortality. Tobacco use, lack of exercise, poor diet, and high body mass index may be factors in more than 50% of all cancers in certain age groups, and certain combinations of these risk factors can have a pronounced impact on longevity. Controlling these risk factors could cut cancer incidence and mortality in half during the normal human life span.

New ACS Goals
To accelerate the current declines in incidence and mortality, the ACS has proposed ambitious challenge goals for our nation, including a 25% reduction in the overall age-adjusted cancer incidence rate and a 50% reduction in the overall age-adjusted cancer mortality rate by the year 2015. In addition to these goals, the Society has set a third goal aimed at significantly improving the quality of life of everyone who is touched by cancer, including survivors, families, and caregivers.

The Society is developing a program of work, designed to leverage its own strengths as a community-based voluntary health organization in an effort to make substantial progress toward these goals. The program of work involves many components, including efforts to raise public awareness and increase public education, expand professional training, increase cancer research, improve early detection programs, advocate for access to treatment, and of course, develop new programs to increase healthy lifestyle behaviors. It is by far the most ambitious undertaking in the Society’s 86-year history.

The National Dialogue on Cancer
While the Society’s program of work should play a significant role in controlling cancer, it is not intended to be the sole vehicle for achieving the 2015 goals. Success will ultimately require public and private partnerships and collaboration with other organizations and agencies. One of the most promising collaborative efforts now under way is the National Dialogue on Cancer (NDC).

The NDC is the first major attempt to bring together key leaders and stakeholders from the private, public, and nonprofit sectors in the fight against cancer. Together, the collaborating partners of the NDC have developed a preliminary plan of action and have begun work on a variety of activities, including an assessment of the adequacy and balance of our nation’s cancer research efforts; a national cancer control agenda; a coordinated long-term plan to ensure support for cancer research, training, and cancer control; efforts to ensure that a significant proportion of tobacco settlement funds are slated for support of comprehensive tobacco prevention and cessation programs; a plan to increase the participation of adults, including ethnic minorities and those who are medically underserved, in cancer-related clinical trials; and additional efforts in primary cancer prevention, early detection, access to healthcare, quality cancer care, patient empowerment, and enhanced cancer surveillance.

Renewing the National Cancer Act
In a related effort, representatives from the ACS and other organizations are working to develop the framework for a bipartisan renewal of the National Cancer Act. The new act would build on the significant progress made under the first National Cancer Act and would support more rapid implementation of state-of-the-art programs and practices.

Though many diseases have had a pronounced impact on our nation and some continue to pose very real threats to the health of the populace, in many ways, none has been more devastating than cancer. Over the last hundred years, cancer’s toll has been immense. It has taken our loved ones by the millions, while at the same time implanting a sense of fear and loathing in the public imagination that has rarely been equaled. Slowly, but surely, the tide is turning.