The Societal and Economic Impact of Cancer Health Disparities Executive Summary

Acknowledgements

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EXECUTIVE SUMMARY

Purpose and Overview

This case statement describes the societal & economic impact [e.g., Years of Potential Life Lost, etc.] of current cancer morbidity and mortality rates among minority and other disparate populations in the hope that the detailed information and data will help spur a national effort to address cancer health disparities.

Racial and economic disparities in cancer are prevalent in the United States. While morally unacceptable, cancer disparities exact a substantial toll on society in terms of premature death, lower productivity and the costs of medical care. This case statement outlines the significant societal and economic costs cancer health disparities impose on the national community. A review and summary of the cancer health disparities literature from 2000-2010 highlights documented disparities and identifies areas where more research and data are needed. To better understand the burden of cancer in the population, the case statement also explores the association between cancer prevalence and demographic, socioeconomic, obesity and other health factors. Most importantly, the report estimates the economic costs of cancer disparities to society.

There are other types of costs that we don't consider in this report. There are the emotional and psychic costs for cancer victims and their families and friends. There are the costs borne by caregivers of cancer victims. This would include the value of hours of service family members and friends provide cancer victims.

What's indisputable is that cancer exacts a heavy toll on the United States, and the disparities in cancer incidence and deaths not only add to that toll but also underscore the need to examine why such disparities exist.

Key Findings

The literature on cancer health disparities shows:

- For all cancers and the most common cancer sites, African-American men have the highest incidence and mortality rates compared to white, Asian and Hispanic men. (See section 3, pages 12-16.)

- Asian and Hispanic men have lower incidence and mortality rates than white men for all cancers and for most individual cancer sites, with the exception of stomach, and liver and bile duct cancers. (See section 3, pages 12-13.)

- White women have the highest incidence rates for all cancers, but African-American women have the highest mortality rates. (See section 3, pages 12-16.)

- Persons with low socioeconomic status have higher rates of cancer incidence and mortality and lower rates of cancer survival compared to more affluent persons. (See section 3, pages 16-18.)

- The lack of individual income, insurance and education data limits researchers' ability to study the association between socioeconomic status and cancer. (See section 3, page 16.)

- Despite higher rates of cancer, African Americans and the poor were more likely to receive suboptimal cancer care compared to whites and affluent persons. (See section 3, pages 18-21.)

An analysis of recent trends in cancer shows:

- Recent federal data show that racial and ethnic disparities in cancer persist. (See section 4, pages 21-25.)

- Socioeconomic disparities in cancer incidence rates do not show a consistent pattern, such that persons living in poorer communities or less educated communities are consistently disadvantaged. (See section 4, pages 25-28.)

- However, cancer mortality rates do show a consistent pattern — poorer and less educated communities have higher rates of death compared to affluent and better educated communities. (See section 4, pages 25-28.)

- Traditionally disadvantaged groups tended to have lower prevalence rates of cancer. This probably reflects lower screening rates and survival rates for vulnerable groups. (See section 4, pages 29-31.)

The estimates of the costs of cancer health disparities show:

- Disparities in cancer health are costly. (See section 5, page 43.)

- The annual costs of racial/ethnic disparities are almost $197 billion:
    - $193 billion for premature death (see section 5, page 44);
    - $2.3 billion for direct medical costs (see section 5, pages 45-46); and
    - $471.5 million for lost productivity (see section 5, page 47-49).

- Because whites have higher cancer incidence and mortality rates than Asians and Hispanics, they bear 80% of the costs of cancer disparities. African Americans bear 17% of the costs of cancer disparities. (See section 5, page 44.)

- The costs of socioeconomic cancer disparities are almost $37 billion. These estimates are conservative because they represent disparities between counties by socioeconomic status versus disparities between individual by socioeconomic status. (See section 5, page 43 and section 2, pages 6-7.)

Methodology

The case statement consists of four analyses:

- A systematic review of the recent literature published from 2000-2010 on racial, ethnic and socioeconomic disparities in cancer.

- An analysis of recent trends in cancer incidence and mortality using data from the Centers for Disease Control and Prevention (CDC), National Vital Statistics System, National Cancer Institute (NCI) Surveillance, Epidemiology and End Results (SEER) Program.

- An analysis of cancer prevalence using the Medical Expenditure Panel Survey (MEPS) 2002-2007.

- An analysis of these data sources to compute the economic burden of cancer incidence and mortality and its variance with race/ethnicity and socioeconomic status.
    - Economic costs of racial/ethnic disparities were calculated by simulating the decline in the number of cancer deaths and new cancer cases if racial/ethnic differences in cancer burden were eliminated.
    - To estimate the potential cost savings associated with eliminating socioeconomic disparities in cancer burden, cancer rates and their associated costs were compared between counties with high poverty rates against counties with low poverty rates. A similar analysis was also conducted for counties with high and low levels of educational attainment.

Notable limitations include:

- Lack of Good Data:
    - Cancer registries do not collect/report socioeconomic information.
    - Population-based surveys do not collect survival or stage information.
    - Administrative data lacks clinical, demographic and socioeconomic information.

- The inability to look at vulnerable subgroups of interest:
    - Socioeconomics: poor and near poor, uninsured and underinsured, & poorly educated;
    - Race/ethnicity: Hispanic subgroups, Asian subgroups, & Native Americans and Alaska Natives.

Recommendations

- Society needs to focus on cancer prevention and cancer treatment that result in long-term survival.
    - Programs designed to lower individual risk of cancer, if they are successful in reducing incidence and mortality among whites and African Americans to levels experienced by Asians and Hispanics, would yield substantial economic value to the nation.

- The nation should invest in policies and programs designed to reduce cancer risks associated with environmental factors and unhealthy behaviors.
    - Regardless of socioeconomic status, individuals from racial and ethnic minority populations experience a myriad of stressors in the context of their social location. The effects of social location are mediated by lifetime exposure to social and environment factors, as well as individually modifiable behavioral risks. Such social and individual-level exposures translate into differential health care quality and access.

- Strategies to reduce race disparities in the quality of cancer-related care must also address the need for care coordination to promote rational utilization of preventive and therapeutic care, including management of comorbid conditions.
    - The available evidence points to opportunities to intervene to reduce disparities in cancer-related care, through health risk management, access to a usual source of care, access to primary and secondary treatment, and adjuvant therapies. However, the evidence also suggests that despite health care coverage, many members of racial and ethnic minority populations underutilize services for cancer detection, diagnosis and treatment.

- There are lessons to be learned from the advantage Asians and Hispanics have over whites and African Americans that can help society address modifiable risk factors.
    - Society should address modifiable risk factors such as physical inactivity, obesity, heavy alcohol consumption, diets high in red or processed meats, diets that lack fruits and vegetables, diets high in animal fat, smoking, and environmental hazards such as radon, asbestos, air pollution, and certain metals (chromium, cadmium, arsenic) (American Cancer Society, 2009).

- Community-level interventions are warranted.
    - At the community level, such interventions might address community norms and lifestyles that promote adverse health outcomes in racial/ethnic minority populations.
    - Community-level interventions should also address potential adverse effects of the physical and social environment, as well community differences in health care availability.

- We need better data.
    - Cancer registries should collect socioeconomic data (income and education).
    - Cancer registries should link existing data to social security records.
    - Population surveys should develop cancer supplements to collect stage and survival information.
    - Possible national survey of new cancer patients based on a sample of new cancer registrants