RECOMMENDATION A

A U.S. National Cancer Control Plan should principally ensure resource integration and operational coordination across the various components of the cancer control system and should actively do the following:

1. Improve, where feasible, effective, and affordable, the availability of preventive, screening, diagnostic, and therapeutic interventions. Encourage timely palliative care, hospice care, survivorship services, and related social services according to the preferences and values of patients and their families.

2. Leverage the advances in and apply “multi-omic” diagnostics to improve therapies and better understand their scientific, clinical, and economic impacts, including their role in creating additional new prospects for cancer control and overall cost reduction.

3. Integrate the use of social, behavioral, and other information made possible by the convergence of communication, social media, cognitive, financial, and sensor technologies as well as electronic health records, cancer registries, and insurance claims to establish large-scale interoperable data sources.

4. Use cloud computing, machine learning, and artificial intelligence tools for continuous analytics, rapid reporting of trends and patterns, and improved forecasting and performance reviews. Evaluate emerging data-intensive technologies not just for their utility in advancing health and economic parameters but also regarding their ability to protect individual privacy and the security of data systems.

5. Apply the tools of complex systems analyses for assessing the “value” of cancer control interventions, establishing robust policy and incentive assessments to guide the development and commercialization of products and services, developing new financing and payment mechanisms that alleviate overall cost burden, and aiding individual patients and their families in making informed decisions about cancer care.


7. Track and monitor financial links, incentives, and disincentives throughout the processes and systems of cancer control and rigorously require conflict-of-interest disclosures across cancer care, research, and patient advocacy activities.

8. Expand and support reproducibility strategies for developing reliable evidence in cancer control from biomedical, clinical, public health, and social science research.

9. Discourage direct-to-consumer marketing and advertising of clinical products and services from companies, medical centers, intermediary firms, and other organizations by terminating the tax deductibility of these business expenses. Furthermore, tighten and enforce rules to particularly curb promotional tactics and strategies that are likely to mislead patients about the benefits of products and care services not based on strong evidence.

10. Launch and expand public engagement, literacy, and outreach activities, starting with K–12 curricula and through technology platforms, to broaden the understanding of cancer prevention as an integral component of a healthy life course.
RECOMMENDATION B

A U.S. National Cancer Control Plan should be led by the Department of Health and Human Services in co-operation with the Office of Management and Budget, Department of Education, Environmental Protection Agency, Department of Defense, Department of Veterans Affairs, Department of Housing and Urban Development, Department of Agriculture, Social Security Administration, Department of Labor, Department of Commerce, Office of Personnel Management, Equal Employment Opportunity Commission, and the Department of Treasury. The Government Accountability Office should periodically review and report to the relevant congressional committees about the achievement of goals specified in the plan.

RECOMMENDATION C

To support a U.S. National Cancer Control Plan, the Department of Health and Human Services and the federal partner agencies should fund and support an independent organization—or a consortium—with principal competencies in systems engineering, industrial design, software development, and information and visual analytics to prototype and develop a publicly available, interactive, and evolvable planning and monitoring tool.

Moreover,

C-1: Periodic consultations with key participants from state and local governments, and for-profit and non-profit sectors should focus on ensuring that data feeds to the planning tool are customized and routinely refreshed and that planning parameters are properly applied and extensively tested for transparency and meaningfulness.

C-2: Leaders from multiple sectors—biomedical, consumer products and services, computing, information technology, financial, transportation, agricultural, and construction—should be engaged through an advisory council mechanism.

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