The Impact of the Coronavirus Pandemic on Cancer Prevention, Diagnosis, Care and Research

Norman E. Sharpless, M.D.

National Coalition for Cancer Survivorship Policy Roundtable
March 30, 2022
NCI Appropriations
FY 2015 – 2022 (in millions)

21st Century Cures Act - orange
Childhood Cancer Initiative - green

$4,950 $5,215 $5,689 $5,965 $6,144 $6,440 $6,559 $6,913

Also, ARPA-H: $1B
(available FY 2022 - 24)
White House Commitment to New Cancer Moonshot Goals

“I’m proud to announce our plan to supercharge the Cancer Moonshot as a central effort of the Biden-Harris administration... This is a presidential priority. I will do my part on funding and using my authority as president to speed breakthroughs. I challenge and encourage all of you to do your part.”

— President Joe Biden (February 2, 2022)
COVID-19 and cancer

With the spread of coronavirus disease 2019 (COVID-19), countries and states have implemented lockdowns. These decisions have been difficult and are sometimes described as benefiting the public health at the expense of the economy. Fear of contracting the coronavirus in health care settings has disrupted care for many people across the United States since the start of the pandemic, but there is no reason to believe that the actual incidence of cancer has dropped. Cancer diagnoses missed now will still come to light eventually, but at a later stage (‘upstaging’) and with worse prognosis. At many hospitals, so-called ‘oncology’ treatment sites and surgeries have been de-prioritized to preserve clinical capacity for COVID-19 patients. For example, some patients are receiving chemotherapy and other radiotherapy, and in other cases, patients’ operations to remove a newly detected tumor are being delayed. There can be no doubt that the COVID-19 pandemic is causing delayed diagnosis and suboptimal care for people with cancer.

What will be the long-term impact of the pandemic on cancer mortality in the United States? Millions of Americans with a variety of conditions have put off medical care for breast and colorectal cancer return together and for breast, lung cancer, and all other cancer deaths at a rate similar to that of other long-term deaths. The number of cancer deaths per year will peak in the next two years. This analysis is conservative, as it does not account for the additional oncologic deaths from旅游景区, and if

The Washington Post

Nation’s cancer chief warns delays in cancer care are likely to result in thousands of extra deaths in coming years

By Laurie McGinley

June 18, 2020 at 7:30 p.m. EDT

STAT

Ignoring cancer care now may trade one public health crisis — Covid-19 for another, NCI chief warns

By Elizabeth Goodyear @goodyear_JJ / JUNE 19, 2020
## Impacts of the COVID-19 pandemic on long-term trends in cancer statistics

| Delayed Diagnosis | • Reduced screening  
|• Reduced follow-up on suspicious findings from screening  
|• Reduced visits to address symptoms | Treatment Delay  
|• Increased Mortality |

| Deferred Care | • Postponed surgery  
|• Postponed radiation  
|• Postponed chemotherapy | Treatment Delay  
|• Increased Mortality |

| Reduced / Non-Standard care | • Less intense chemotherapy  
|• Neo-adjuvant chemo instead of immediate surgery | Reduced Response  
|• Increased Mortality |

### Reduced access to care
- Uninsured
- Under-insured
- Underserved populations
• NCI-funded research network
• 10 diverse healthcare delivery systems across the U.S.
• Goal: To better understand how to improve the cancer screening process in community healthcare settings in the United States
**First Lady Jill Biden and NCI Work Together on Returning to Screening**

<table>
<thead>
<tr>
<th>Healthy People 2030 screening targets*</th>
<th>Current uptake**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lung cancer</strong></td>
<td><strong>Colorectal cancer</strong></td>
</tr>
<tr>
<td>7.5% of adults aged 55-80 years receive lung cancer screening</td>
<td>4.5%</td>
</tr>
<tr>
<td><strong>Colorectal cancer</strong></td>
<td><strong>Breast cancer</strong></td>
</tr>
<tr>
<td>74.4% of adults aged 50-75 years have received a colorectal screening test</td>
<td>67.1%</td>
</tr>
<tr>
<td><strong>Breast cancer</strong></td>
<td><strong>Cervical cancer</strong></td>
</tr>
<tr>
<td>77.1% of women aged 50-74 years have received a breast cancer screening</td>
<td>76.4%</td>
</tr>
<tr>
<td><strong>Cervical cancer</strong></td>
<td><strong>Cervical cancer</strong></td>
</tr>
<tr>
<td>84.3% of women aged 21-65 years received cervical cancer screening</td>
<td>73.5%</td>
</tr>
</tbody>
</table>

*Targets were set based on the USPSTF recommendations in place at that time.

**Most recent data available as of July 2021.
Adapting Clinical Trials during the Pandemic

- Patient care can be transferred to different participating study sites
- Local healthcare providers can provide study activities to provide continuity of care (oversight by responsible investigator)
- NCI and trial sites can ship oral drugs directly to patients
- Alternative procedures that do not compromise safety or the integrity of the study will be considered minor deviations
- NCI CIRB supports “remote” informed consent: telephone discussion in conjunction with patient signature on written document
Centers on Telehealth Research for Cancer-Related Care
Funding Opportunity Announcement (FOA)

RFA-CA-21-029

To fund P50 Centers dedicated to **advancing a national telehealth research agenda** focused on improving cancer-related care and outcomes across the cancer control continuum.

*Anticipate awards this Spring.*
Perspective

The FDA’s Experience with Covid-19 Antibody Tests

Jeffrey Shuren, M.D., J.D., and Timothy Stenzel, M.D., Ph.D.

February 18, 2021
Recent publications on COVID-19 and cancer

Neutralizing antibody responses elicited by SARS-CoV-2 mRNA vaccination wane over time and are boosted by breakthrough infection

*Science Translational Medicine*
February 15, 2022

Changes in Multiple Myeloma Treatment Patterns during the Early COVID-19 Pandemic Period

*Blood*
November 5, 2021

Longitudinal SARS-CoV-2 mRNA Vaccine-Induced Humoral Immune Responses in Patients with Cancer

*Cancer Research*
December 5, 2021
Lessons from the Impact of the COVID-19 Pandemic on Oncology

Beyond the COVID-19 Pandemic: Sustaining and Improving Equitable Cancer Care and Research
Schilsky, Richard L.

Cancer Care at the Beginning of the COVID-19 Pandemic: Effects on Patients and Early Interventions to Mitigate Stresses on Care
Davidson, Nancy E.; Knudsen, Karen E.; Nasso, Shelley Fuld; et al.

Telemedicine Across the Cancer Care Continuum: Evidence and Opportunities for Clinical Care, Research, and Policy
Nekhlyudov, Larissa; Fleisher, Lee A.; Jacobsen, Paul B.

Clinical Evidence Generation During a Pandemic: Lessons Learned for Sustaining Progress
Rivera, Donna R.; Kluetz, Paul G.; Abdallah, Kald; Lowy, Douglas R., et al.

Patterns of Enrollment in Cancer Treatment Trials During the COVID-19 Pandemic at National Cancer Institute–Designated Cancer Centers
Prindiville, Sheila A.; Sarosy, Gisele A.; Loose, David; et al.
“…communication about COVID-19 vaccines can benefit from drawing on the extant social and behavioral science literature about successful strategies to influence health decisions and behaviors.”

NCI
Wen-Ying Sylvia Chou, Ph.D., M.P.H.
Anna Gaysynsky, M.P.H.

NIH Office of Behavioral and Social Sciences Research
Caitlin E. Burgdorf, Ph.D.
Christine M. Hunter, Ph.D.
New White House Cancer Mortality Goal

"The goal is to cut the cancer death rate in half in the next 25 years."
— President Biden
Feb. 2, 2022

1990 215 deaths per 100,000
2019 146 deaths per 100,000
In 25 years...
73 deaths per 100,000
<table>
<thead>
<tr>
<th>ENDING CANCER AS WE KNOW IT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIAGNOSE CANCER SOONER</strong></td>
</tr>
<tr>
<td>- Increase access to screening, support patients through diagnosis, evaluate new technologies like multi-cancer detection tests</td>
</tr>
<tr>
<td><strong>PREVENT CANCER</strong></td>
</tr>
<tr>
<td>- Explore mRNA technology, address environmental exposures to cancer</td>
</tr>
<tr>
<td><strong>ADDRESS INEQUITIES</strong></td>
</tr>
<tr>
<td>- Ensure every community in the nation has access to diagnostics, therapeutics, and clinical trials</td>
</tr>
<tr>
<td><strong>TARGET TREATMENTS TO THE RIGHT PATIENTS</strong></td>
</tr>
<tr>
<td>- Learn more about genetics, immune responses, and other factors, to tell which combination of treatments will work best in an individual patient</td>
</tr>
<tr>
<td><strong>SPEED PROGRESS AGAINST DEADLIEST &amp; RAREST CANCERS</strong></td>
</tr>
<tr>
<td>- Invest in a robust pipeline for new treatments</td>
</tr>
<tr>
<td><strong>SUPPORT PATIENTS, CAREGIVERS, &amp; SURVIVORS</strong></td>
</tr>
<tr>
<td>- Help people overcome medical, financial, and emotional burdens; provide support to navigate diagnosis, treatment, and survivorship</td>
</tr>
<tr>
<td><strong>LEARN FROM ALL PATIENTS</strong></td>
</tr>
<tr>
<td>- Leverage diverse experiences of patients and families to develop approaches to end cancer as we know it</td>
</tr>
</tbody>
</table>
Emily Tonorezos, MD, MPH
Director
Office of Cancer Survivorship
NCI’s Focus on Survivorship

1998
13 grants
$3,150,482

2020
165 grants
$111,581,130
Discussion