Attachment—Additional Questions for the Record

Subcommittee on Health
Hearing on
"Enhancing Public Health: Legislation to Protect Children and Families"
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Raymond DuBois, M.D., Ph.D., Former President, American Association for Cancer Research

The Honorable Frank Pallone, Jr. (D-NJ)

1. Lung cancer is the leading cause of cancer deaths nationwide, claiming more than 150,000 lives each year. Although lung cancer often has no symptoms until it has progressed, research indicates it responds well to treatment options if detected early. Therefore, early detection is the best way to combat the low survival rate of lung cancer.

    a. What are the benefits of early access to preventative care for those at risk of lung cancer due to genetics, occupation, family history, or other exposures?

According to the National Cancer Institute, approximately 60 percent of patients with lung cancer survive five years after diagnosis if their cancer is found early, compared to 6 percent who survive five years after being diagnosed with lung cancer that has spread outside of the lungs. Unfortunately, more than half of all lung cancers are detected after spreading.

Lung cancer screening greatly increases the likelihood that lung cancer will be found early in at-risk individuals. Numerous studies have found some associations between genetic mutations and a greater risk for lung cancer among adults who have never smoked, but the data are still unclear on causative links or which mutations would indicate benefit from lung cancer screening. A pooled analysis of dozens of studies from the International Lung Cancer Consortium suggests that people without a tobacco use history have a slightly elevated risk of developing lung cancer if an immediate family member (25 percent increased risk), or more specifically, a sibling (44 percent increased risk) has been diagnosed with lung cancer. However, more research is needed to better determine the precise contributions from shared environmental exposures compared to genetic causes. Several reports from the International Agency for Research on Cancer have determined exposure to secondhand smoke, radon, or air pollution from the environment or in occupational settings also significantly increase the risk of lung cancer, but more research is needed to determine what levels of exposure would indicate benefit from lung cancer screenings.

    b. As a physician currently practicing, what does the research say regarding health disparities and gender disparities for lung cancer and preventative services?

The AACR published the first of its kind *Cancer Disparities Progress Report* in the Fall of 2020. The report comprehensively details disparities in lung cancer incidence, environmental health hazard exposure, mortality, preventive services, and treatment outcomes experienced by

historically marginalized racial and ethnic minorities. Disparities in lung cancer screenings, access to care, exposure to air pollution, and insurance coverage gaps contribute to higher lung cancer incidence and mortality in African Americans despite similar tobacco use rates compared to non-Hispanic White Americans. USPSTF lung cancer screening recommendations have been updated to expand eligibility criteria based on smoking history and age. This could help identify a greater proportion of lung cancers earlier among racial and ethnic minorities.

Overall, men have higher incidence and mortality rates from lung cancer compared to women consistent with higher smoking rates among men according to the NCI. However, a 2018 analysis in the *New England Journal of Medicine* found that women under the age of 49 years are more likely than men to be diagnosed with lung cancer, including a 13 percent greater incidence among women aged 40-44 years. Additional research is needed to explain why young adult women experience higher rates of lung cancer despite lower levels of smoking than young adult men.

c. What does the research show regarding incidence of lung cancer in smokers and non-smokers? What questions should further research examine to better understand the incidence amongst non-smokers?

A 2017 analysis in the journal *Cancer*, found that approximately 85 percent of lung cancers are attributable to smoking tobacco. Additional research into genetic predispositions for lung cancer and clinical trials for early detection of lung cancer based on high exposures to occupational or environmental carcinogens would improve our understanding of how lung cancer forms in adults who do not smoke.

2. According to an article in the Journal for ImmunoTherapy of Cancer, titled, "Severity of COVID-19 in patients with lung cancer: evidence and challenges" dated in January 2021, researchers found that the COVID-19 pandemic has gravely impacted patients with lung cancer and impaired the progress of lung cancer research. Specifically, patients with lung cancer are at an increased risk of becoming infected with the virus and experience higher morbidity and mortality than the general population.

    a. Dr. DuBois, what have been the challenges that individuals with lung cancer face in their everyday lives during this ongoing COVID-19 pandemic? And how has the pandemic has impaired lung cancer research?

Yes, patients with lung cancer are particularly susceptible to experiencing severe symptoms if they contract COVID-19. This has caused a lot of fear among patients with lung cancer about visiting medical facilities to treat their cancers. Therefore, it is important to ensure patients with lung cancer receive maximum protection from COVID-19 vaccines. Additionally, household members and caregivers of patients with lung cancer should be fully vaccinated to provide a local level of herd immunity that reduces transmission of the virus in case the patient with cancer does not respond as effectively to the vaccines. Thus, when COVID-19 antiviral pills become available we must insure there is a high priority for their use in this vulnerable group when needed.

The pandemic delayed hundreds of oncology clinical trials and permanently canceled dozens of trials. Additionally, many basic research laboratories were closed for several months at the beginning of the pandemic which forced scientists to cancel long-term experiments, caused expensive reagents to expire, and significantly delayed the careers of young scientists. The AACR, along with many medical research organizations, has supported emergency supplemental funding for NIH, as included in the RISE Act, to alleviate the financial burdens from COVID-19 on medical research including clinical trials.

b. What solutions would you propose to further advance the development of lung cancer research? What can Congress do to help with this?

Sustained, predictable, robust funding increases for the National Institutes of Health (NIH) and NCI are absolutely critical for supporting research on lung cancers and other cancers. I strongly encourage Congress to complete Fiscal Year 2022 appropriations as soon as possible with a significant increase for NIH and NCI so this research can be funded without delay.

3. Numerous studies show that young women are particularly vulnerable to lung cancer with little understanding as to why. On top of that, additional research finds that women in the workforce experience long-term unemployment issues years later after they are diagnosed.

a. Dr. DuBois, what are the work-related difficulties lung cancer survivors face?

In a 2021 national survey of cancer survivors by the National Coalition for Cancer Survivors (NCCS), 43 percent reported their cancer diagnosis impacted some aspect of their work, including 21 percent who missed work, 17 percent who took a temporary leave of absence, and 16 percent who permanently quit their jobs or were fired. Survivors younger than 40 years old were disproportionately impacted, with 83 percent reporting work-related issues. A separate 2013 study in the European Journal of Public Health found lung cancer survivors experienced the highest decline in employment rates and great difficulties reintegrating into the work force compared to other cancer survivors.

b. What can employers do to support their employees while they are battling lung cancer?

Having access to high quality, affordable health insurance, whether through an employer or through state or federal insurance programs is one of the most important tools a patient with cancer can have to get the care they need as quickly as possible. Also, employers should show compassion for their employees who receive a cancer diagnosis. According to NCCS, nearly one in five cancer survivors aged 18-39 years old report being mistreated by their work supervisors due to their diagnosis. There are additional situational challenges that patients with cancer and cancer survivors face as they navigate treatment. Employers can provide support by implementing flexible work hours to accommodate medical appointments and treatment side effects, as well as encouraging a phased-in return-to-work schedule once treatment is completed.

c. What further action, if any, should Congress take to support lung cancer survivors return to work?

Almost half of cancer survivors responding to the 2021 NCCS survey reported experiencing financial stress. The top financial concerns include the cost of medical care and prescriptions and lacking necessary financial support. In addition to expanding Medicaid and insurance access to keep patients insured during and after treatment, Congress could take steps to address the significant cost of cancer care and cancer drugs to assist patients with cancer as they recover from fighting this illness.

The Honorable Lizzie Fletcher (D-TX)

We know that breast cancer screenings can save lives. In fact, the American Cancer Society states that mammography can reduce the risk of dying from breast cancer by approximately 20-40 percent. As noted in the testimony you provided, the U.S. Preventative Services Task Force or USPSTF reviews the latest research and either offers or updates guidelines for a range of services, including cancer screenings. But these screening guidelines are not just guidelines, they also are tied to what is covered by insurance with no co-pay. Currently, USPSTF has provided a grade "C" recommendation for breast cancer screenings for women ages 40-49, meaning this age group may not have coverage by their insurance plans. This is worrisome given that according to the CDC, 11 percent of all breast cancers occur in women younger than 45.

1. Dr. DuBois can you comment on how the USPSTF guidelines are tied to insurance coverage with no co-pay? Isn't it true that any preventive screening decision that doesn't receive an "A" or "B" grade is no longer guaranteed coverage with no co-pay?

This is correct. Private insurance plans can choose to cover preventive services that do not receive an A or B grade from USPSTF, but it is voluntary.

2. So, for example, if the policy in the PALS Act to extend the moratorium on these guidelines is not extended by Congress, women ages 40-49 will not be guaranteed insurance coverage with no co-pay for their breast cancer screening, even if their doctor believes they need it?

This is correct. However, patients and their doctors who have specific concerns about breast cancer at any age can still order a diagnostic mammogram and ultrasound, but insurance coverage of diagnostic cancer tests vary greatly depending on the type of insurance. Additionally, the USPSTF is currently reconsidering guidelines for breast cancer screening, which may or may not result in a different grade rating from women in this age category.

The Honorable Michael C. Burgess, M.D. (R-TX)

In your testimony, you mention new research contributing to future of cancer screening being more accurate and efficient. There are inventions, like GRAIL, Inc's cancer screening test, which have the ability to detect more than 50 types of cancer, 45 of which currently have no screening test available. Unfortunately, the progress of this lifesaving test will potentially be reversed as the FTC is challenging the company's merging efforts.

1. How can Congress work to provide access to novel technologies, such as GRAIL's cancer screening test, to enhance early cancer diagnosis?

Less invasive pan-cancer screening tests are potential game-changers for cancer screening. Several of these tests are under development but have not been properly validated for immediate use in routine medical settings. Once validated and proven, these less invasive pan-cancer blood tests could greatly expand access to cancer screening while reducing costs. Further investment from Congress for the NIH's research programs and the FDA's regulatory science and approvals initiatives could help bring such tests to market more quickly. The type of highly innovative cancer research that led to the initial discovery of these "pan-cancer" tests was strongly supported by the AACR and its members.