Title:

Consensus Statement

Bridging the Gap

in the diagnosis & management of Lung Cancer

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on behalf of the Faculty & Attendees of the 9th International Lung Cancer Network, Athens, 23-25 June 2023.

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Demographic Burden of Lung Cancer

With an estimated 2.3 million new cases (ASIR, Age Standardized Incidence Rate 27.66/100,000 worldwide) and 1.8 million deaths, lung cancer remains the leading cause of cancer mortality, representing approximately 1 in 10 (11.4%) cancers diagnosed and 1 in 5 (18%) cancer deaths.[1] While lung cancer survival rates have increased over the years, there is no room for complacency: the five-year survival rate is only 10 to 20% in most countries. While the disease predominantly affects men, the prevalence increases with age, peaking in the 65-69 age group among both males and females.

From 1990-2020 the incidence of lung cancer globally increased 1.32-fold, with the highest increase recorded in East Asia (2.22-fold increase), South Asia (1.79-fold increase) and Oceania (1.60-fold increase), compared with a decline in incidence in Eastern Europe (0.17-fold decrease) and Central Asia (0.01-fold decrease).[2] The increase in global incidence has been attributed predominantly to population growth (40%) and to population aging (60%). In addition, during the same 30-year period, the increase in global prevalence reflects the progression and continued spread of the tobacco epidemic. In fact, as tobacco use in high-income countries slowly wanes, it continues to grow in some low-income countries, accounting for approximately 58% of lung cancer incidence and 87% of lung cancer mortality. There is a 20-fold variation in mortality rates between men and women. The highest male mortality rates are found in Eastern and Southern Europe, Eastern Asia, and Polynesia and Micronesia. The highest female mortality rates are found in North America, Northern and Western Europe, and Oceania. By the year 2040, forecasts indicate that if the tobacco epidemic continues unabated, there will likely be a 60% increase in global mortality due to lung cancer in both men and women.[3] The most vulnerable populations are those living in countries at the lowest end of the Human Development Index (HDI), women in rapidly emerging economies, and younger generations.

Attention must be given to the fact that tobacco is not the sole culprit behind lung cancer. While among men, smoking is the leading cause of lung cancer around the world, among women in low-income countries in sub-Saharan Africa, lung cancer is more often caused by household air pollution due to the use of solid fuels. Additionally, radon has been shown to have a synergistic effect with smoking. Studies suggest that long-term exposure results in it being the second leading cause of lung cancer. This stems from environmental exposure arising from the diffusion of radon from the soil: as radon gas decays, tiny radioactive elements can lodge in the lung and emit radiation. Air pollution is a risk factor for a range of non-communicable diseases. As air quality deteriorates, the rates of non-communicable diseases, including lung cancer, increase. The World Bank notes that air pollution is the fourth-leading fatal health risk, responsible for nearly 1 in 10 deaths[4] and the World Health Organization (WHO) reports that 99% of people around the world breathe polluted air.[5] According to the Organization for Economic Cooperation and Development (OECD), by 2060, environmental air pollution is estimated to result in an overall economic cost of US$2.6 trillion due to reduced agricultural output, work absences, medical bills, and 6-9 million premature deaths annually.[6]

Worldwide, estimates suggest that the incidence of lung cancer in people categorized as never-smokers is between 10-25%.[7] Research indicates that women who have never smoked appear to be more likely to receive a diagnosis of lung cancer than men who have never smoked. While the characteristics of this population are still being explored, scientific research is demonstrating that lung cancer is not one disease: there are distinct differences in the histology of tumors found in never-smokers compared to lung cancer tumors in smokers.[8] For the moment, however, established guidelines for screening non-smoking women do not exist because of a lack of sufficient data identifying specific predisposing risk factors.

Research is showing that a homogenous approach towards addressing non-sex-related cancers is no longer accurate. The differences observed in lung cancer between smokers and non-smokers point to the need for greater understanding beyond using a framework based upon tobacco use. Improved knowledge of the role of genetics in the biology of cancer can help to further illuminate risk factors for cancer aiding the development of better approaches for screening, diagnosis, and treatment. Research must focus on identifying the unique genetic differences in non-sex-related cancers. This will enable the appropriate modification of lung cancer guidelines to ensure that the right approach is outlined for assessing and acting on risk among females versus males as well as smokers versus non-smokers.

Understanding and identifying specific biological differences underlying variations in the causation and incidence of lung cancer between the sexes will help to elucidate whether specific interventions and treatments might enable improved opportunities for diagnosis and treatment to eliminate inequities and achieve better outcomes. The role of estrogen, progesterone, and testosterone as well as menopause and hormone replacement therapy on risks of and prognosis for lung cancer are important research questions that need to be explored. The answers will help to address challenges faced by women as well as those in the LGBTQ community.

Socioeconomic Burden of Lung Cancer

Socioeconomic status, measured by educational attainment, income, and/or occupation, is linked to cancer. Throughout Europe, people with lower levels of education have higher mortality rates from nearly all types of cancers than their more educated counterparts. National statistics clearly illustrate the impact of socioeconomic status on lung cancer incidence as well as access to diagnosis and treatment. People in lower socioeconomic groups are not only more likely to develop lung cancer but are also more likely to die from it than people in higher socioeconomic groups due to having a greater likelihood of comorbidities and reduced access to treatment (whether established or new treatments). Developing the right steps to mitigate these inequities is vitally important and can begin with improving health literacy.

Incidence of lung cancer is greater among people in lower socioeconomic groups. In England and Scotland there is a nearly threefold greater incidence of lung cancer among the most deprived versus the least deprived populations. The Independent Cancer Task Force in England concluded that if socioeconomically disadvantaged populations in the country had the same incidence rates as more advantaged population groups, there would be 11,700 fewer cases of lung cancer each year.[9] Similar inequities have been documented in Norway and several European countries. More can be done from a public health standpoint to target specific hard-to-reach populations, including deprived populations whether in urban or remote settings, where people who experience poorer health-related behaviors often lack the understanding of the steps they can take to modify them.

Despite the significant developments in lung cancer management in the last decade, recent evidence indicates that people in lower socioeconomic groups can be less likely to benefit from these improvements. In the United States, lower socioeconomic status is associated with lower rates of lung cancer screening and lower rates of utilization of the latest treatments.

Socioeconomic status has been linked to health literacy. Health literacy measures a person's ability to understand how to achieve a healthy lifestyle and collaborate effectively with health professionals. Poor levels of health literacy generally result in an inability to comprehend or act upon public health messages and awareness campaigns. Lower socioeconomic groups and older populations are more likely to demonstrate lower levels of health literacy. These and other disadvantaged populations need to be targeted with health promotion activities that are designed to be comprehensible and accessible. While the socioeconomic effects on lung cancer are not limited to tobacco use, it provides a useful example. Tobacco use is greater in the most deprived areas of the world compared with the least deprived. In 2021, in the United Kingdom, approximately 1 in 4 unemployed people smoked compared with approximately 1 in 8 people in paid employment.[10]

Health literacy goes beyond health promotion to include an individual's interaction with their health systems and within the doctor-patient relationship. People with higher levels of health literacy often find it easier to ask their clinicians about treatment options and are better placed to understand their care plans than people with lower levels of health literacy. Yet, as scientific innovations impact the complexity of medical care, people of all backgrounds need help understanding the health information they are given. Overcoming barriers to understanding and improving access to information can help individual health decision-making that can positively influence wellbeing.

Addressing the impact of socioeconomic status to reduce inequalities in access to primary prevention, diagnosis, and treatment can help to address the greater incidence and excess mortality rates of cancer among people in disadvantaged and lower socioeconomic groups, helping to alleviate the inequities that have been identified cross-nationally as well as within national borders.

Bridging the Gap in Lung Cancer

Lung cancer is a global health challenge that must be at the top of every country's agenda and incorporate public health and clinical tactics. In recent years improved screening, diagnostic, and treatment options for lung cancer have become more widely available and may help patients live longer with a better quality of life. Incorporating the latest knowledge and technologies into clinical guidelines and care pathways can help to guide health professionals to improve outcomes through better recognition and treatment.

Concerted action must be taken to address the burden of lung cancer existing both between and within countries. Inequalities result from the uneven distribution of resources available while inequities result from the unwarranted differences in prevention, screening, diagnosis, and treatment. The COVID-19 pandemic has underscored numerous disparities while causing interruptions in screening, disrupting detection and diagnosis, and delaying treatment. We must redouble efforts to address the range of challenges posed by lung cancer and maximize opportunities emerging from new research to ensure improved access and greater equity.

Awareness, prevention, and health literacy campaigns improve public health outreach. Engagement with people living with lung cancer helps to ensure that their needs are heard by decision-makers, as improvements are needed in all aspects of a person's journey with lung cancer. Including people living with lung cancer in the development of treatment plans positively acknowledges their role in the decision-making process, enabling them to share what they are experiencing because they are the ones living through their treatment. As clinicians, we must be there to help, support, and listen.

There are five unifying principles upon which stakeholders can unite to create and strengthen policies to improve outcomes for people at-risk for and living with lung cancer worldwide:

1. Improving and expanding prevention programs

Improving prevention efforts through awareness and health literacy campaigns can contribute to public health outreach by empowering people through knowledge to do what they can to reduce the incidence of lung cancer. Between 30-50% of all cancers can be prevented and approximately 33% of all mortality due to cancer is due to behaviors we can modify: eliminating the use of tobacco and limiting alcohol intake, improving the amount of exercise

we get, consuming healthier diets, reducing our body mass index, and working with others to reduce air pollution.[11] More can be done to support public health approaches that focus on primary prevention.

Tobacco is recognized as the most important risk factor for all cancers, responsible for 80-90% of lung cancer cases and 25% of all cancer deaths.[12] WHO has called the tobacco epidemic one of the most significant challenges to global public health. Strengthening anti-tobacco legislation must be a first step. Although the WHO Framework Convention on Tobacco Control (FCTC) went into effect on February 27, 2005, no country has fully implemented the commitments laid out within the treaty. Despite numerous public health warnings over the dangers of tobacco use, there is an urgent need for action. Globally, the number of men who use tobacco (36.7%) is more than four times the number of women (7.8%). One-third of people worldwide over the age of 15 used some form of tobacco in 2000, declining to 22.3% in 2020. However, during this same 20-year period, the number of men who use tobacco rose in four out of six WHO regions and is expected to continue to climb in the African Region, the Eastern Mediterranean Region, and the Western Pacific Region.[13] More must be done to ensure that the risks of tobacco use are effectively communicated to people in these regions.

Exposure to carcinogens, such as asbestos, arsenic and radon, have a synergistic impact with tobacco use. In recent decades occupational exposure to asbestos and arsenic have declined and may have resulted in a reduction in lung cancer seen among men. A similar decline in exposure to secondhand smoke or exposure to outdoor air pollution has not been shown to differ between men and women.

2. Focusing on early detection

Delays in screening result in delayed diagnosis which, in turn, delays the initiation of treatment. In late 2020, the *British Medical Journal* reported that a one-month delay in cancer treatment can increase a person's risk of mortality by approximately 10%.[14] The European Cancer Organization has predicted that the COVID-19 pandemic will be the cause of 1 million missed cancer diagnoses in Europe.[15] Yet, simply catching up to pre-pandemic levels of screening is not sufficient. Beyond initiatives to reinvigorate screening programs is the need to improve screening among underserved populations that have traditionally had low rates of screening. Working with public health outreach and primary care providers, health systems can improve their ability to reach populations where tobacco use is rising.

Earlier diagnosis improves outcomes. The final report of the Nederlands-Leuvens Longkanker Screening Onderzoek (NELSON) trial clearly supports the conclusions found in earlier studies with evidence to show that screening can successfully detect lung cancer in earlier stages of the disease.[16] This randomized controlled trial demonstrated a large reduction in lung cancer mortality from the use of low-dose computed tomography (LDCT) screening in people at high-risk for the disease. The trial compared outcomes between two groups: those who received screening with LDCT and those who did not. The results reaffirmed evidence obtained in other LDCT screening trials of high-risk populations, such as those conducted in the United States,[17] Denmark,[18] France,[19] Germany,[20] Hungary,[21] Italy,[22] Russia,[23] the United Kingdom,[24] and the International Early Lung Cancer Action Program.[25] The body of evidence from studies analyzing screening trials has resulted in action. Croatia is the first European country to establish a nationwide screening program. In 2020, the Croatian Ministry of Health launched the National Lung Cancer Screening Program to improve early disease detection by targeting all active smokers between 50 and 70 years of age as well as those who ceased smoking within the last fifteen years.[26] In May 2023, Australia announced that they will introduce a national lung cancer screening program by July 2025.[27] In June 2023, the United Kingdom announced that a lung cancer screening program will cover the entire population by March 2030.[28] While it is encouraging to see countries moving from conducting screening studies to developing fully-fledged screening programs, there is no time to delay: health systems need to move swiftly to launch nationwide screening programs.

The research on the benefits of screening is clear. Lung cancer clinical guidelines should reflect the scientific evidence and incorporate best practices encompassing clear referral pathways, timeframes, and quality indicators. Time is of the essence with lung cancer. Awareness needs to be improved throughout the primary care system to ensure that people at high-risk for lung cancer are identified and obtain the necessary screening and diagnostic testing to ensure the disease is identified as early as possible.

Opportunities for earlier diagnosis, treatment and better outcomes must be maximized and utilized for everyone facing a diagnosis of lung cancer. Steps must be taken to ensure that the needs of never-smokers with lung cancer receive appropriate consideration as research provides improved understanding of the molecular differences in this population. Unique genetic differences in non-sex-related cancers, such as lung cancer, must be explored to ensure that opportunities for improved screening and early detection are equitably available and appropriately targeted.

3. Ensuring equitable and sustainable access to treatment

3.1 Financial and regulatory barriers

Beyond the individual challenges confronting people living with cancer are the wider access challenges for getting innovations to them. Improved policies are needed to ensure sustainable and equitable access to treatment. New innovations offer great promise, but stakeholders, health technology assessment (HTA) authorities, and government decision-makers need to prioritize their efforts to get them to people who need them in a timely manner. In a post-COVID-pandemic world, payors face challenging financial constraints as national budgets strive to recover from the economic costs of the pandemic in addition to the cost-of-living crisis. Yet, delays between marketing authorization and availability of a new therapy have a very real impact on people who face a diagnosis of cancer and their families. Collaboration between an array of stakeholders is necessary to ensure that treatments are available in a timely and financially sustainable way.

Attaining marketing approval is only the first hurdle for getting a new treatment to those who can benefit from it. Once approved, a country's health system must determine how new therapies will be reimbursed. While the European Medicines Agency (EMA) provides regulatory approval under a centralized process for European Union (EU) Member States by evaluating safety and effectiveness, the time between EMA approval of a product to when it is available as a reimbursed treatment option for patients is concerning. Delays can be due to pricing negotiations, deliberations during the HTA process, fragmentation in the healthcare system, or because decision-making in some countries is decentralized to regional levels. Delays can also result if new treatments are not incorporated into clinical guidelines quickly.

The EMA's Priority Medicines (PRIME) scheme was established in 2016 to promote early access to promising new medicines and enhanced scientific regulatory support to address unmet medical needs for patients, enable better clinical trial design, and acceleration of product development and evaluation. However, concerns have been raised that the criteria for eligibility might be too rigorous to promote innovation in Europe: approximately one-quarter of 384 requests were granted in the first five years of the scheme and of those 95 requests granted, only 24 moved on to the evaluation phase or beyond.[29] Europe's Beating Cancer Plan discusses the opportunity for a permanent framework for EU cooperation on HTA to support Member States with high-quality and timely reports enabling the sharing of resources, expertise, and capacity relevant to diagnostic procedures and treatments. Improving access to cancer medications is on the EU agenda; it is up to us as stakeholders to ensure progress is achieved.

The United States Food and Drug Administration (FDA) has four options designed to reduce the time it takes to review innovative therapies that address unmet medical needs: fast-track, breakthrough therapy, accelerated approval, and priority review. The fast-track designation was established in 1997 for medications that can treat serious conditions and demonstrate potential for addressing unmet medical needs through clinical or nonclinical data. The breakthrough designation was established in 2012 for therapies that can treat serious conditions supported by preliminary clinical evidence to indicate substantial benefit on clinically significant endpoints over available therapies. These designations enable researchers to meet more frequently with FDA officials

to review a treatment's development and ensure that the clinical trial data captured meets the agency's review requirements. Accelerated approval was established in 1992 as an approval pathway to market authorization which allows the use of surrogate endpoints or intermediate clinical endpoints to predict clinical benefit to conserve time during the approval process. To use this system, a therapy is required to provide benefits over available treatments and the developers must conduct additional clinical trials in post-market settings to confirm clinical benefit. Should the treatment fail to show clinical benefit subsequent to approval, it may be removed from the market. In addition, the FDA has a priority review process to review treatments that provide significant improvements in effectiveness or safety over standard therapies. This priority review process is generally conducted within six months instead of the usual ten-month goal for most new drug applications (NDA). The FDA programs have a proven track record of success: in 2021, nearly three-quarters of drugs approved by the FDA were approved via an expedited pathway.[30]

3.2 Wider access barriers

The link between poor access to care and poor health outcomes is well established. Non-financial barriers preventing people from access to healthcare services include geography, language, fear and distrust of healthcare providers, and difficulties getting through appointment or "gatekeeper" systems. The cancer care system is complex; consequently, various barriers that limit or complicate access may surface during any phase of care. Once initial hurdles have been overcome, additional barriers may arise when attempting to navigate health systems. The literal and figurative steps for getting from a primary care provider to a specialist may perplex people who are dealing with their cancer diagnosis as well as their health professionals.

Within health systems, healthcare providers, particularly those in primary care, may lack current information on cutting-edge treatments, have difficulty communicating with patients, or have insufficient staff to coordinate care and provide the range of services patients need. Incorporating the latest knowledge and technologies into clinical guidelines and care pathways can help to guide health professionals to achieve better outcomes through improved recognition and treatment.

Technological innovations must be carefully integrated into health systems in ways that address the needs of people living with lung cancer and health professionals. Health informatics systems, including telehealth, mobile apps, electronic medical records, and telementoring, build upon the advancements witnessed in digital, artificial, and virtual technologies. Digitization utilized during the COVID-19 pandemic has shown the value in telemedicine and artificial intelligence-based tools to support medical decision-making. Improvements in digital literacy skills are needed to enable effective utilization of computers and smartphones across the population. Implementation plans must focus on overcoming inequitable access while not further exacerbating existing inequities. Incorporation of these tools is dependent upon a reliable digital infrastructure for telecommunications and internet services accessible in the most remote areas at costs that are not prohibitive for either individuals or health systems.

Research along with supportive training can enable digital technologies to improve engagement for people living with cancer as well as those supporting them.

4. Building partnerships and promoting investment

Building partnerships and collaboration between stakeholders globally, nationally, and locally will promote meaningful dialogue and policy development. These include forging alliances between the ministries of health and public health, finance, social services, and education, health professionals and patient organizations to build awareness, access, and action.

Improvements are needed in all aspects of a person's journey with lung cancer. Health systems can take steps to address this by improving awareness of lung cancer among both the general population and primary care professionals with a system-wide approach ensuring information is easy to understand. Improvements in health literacy offer many benefits throughout society by making health systems easier to navigate, helping people to become more informed participants in their care, and enabling them to share in the decision-making process. Understanding is the first step towards behavior change.

Investments in prevention, early detection, diagnosis, treatment, and survivorship have contributed to improved outcomes. However, a lag continues to remain in terms of morbidity and mortality in lung cancer compared with other cancer types. Among the top 4 cancers, five-year survival rates show that lung cancer trails behind breast, colon, and prostate cancers.

Since 2015 progress in lung cancer has outweighed all the advances of the previous half century resulting from significant investments from which innovative treatment options have ensued. Despite lung cancer's significant health, economic, and social burden, global research in the past had lagged significantly behind research conducted into other cancer types. Thankfully, this is changing. The United States National Institutes of Health (NIH) created the Research, Condition and Disease Categorization (RCDC) system in 2008 to provide information to the public and policy-makers for understanding the NIH research portfolio and how it responds to public health needs. This data illustrates that funding for lung cancer research in the United States increased from US$349 million in 2015 to US$479 million in 2022, an increase of 27%. This is significantly larger in percentage terms than found for breast cancer (8.7% increase) and colorectal cancer (10.7% increase) but lags pancreatic cancer which saw an increase of 34.3% during this period (investment in prostate cancer declined 3.6% during this period).[31] In the coming years, it will be interesting to see how increased research spending for lung cancer translates into addressing the burden of this disease in the United States and worldwide.

Collaboration between a wide array of stakeholders is necessary to ensure that early detection, diagnosis, and treatments are available in a timely and financially sustainable way. We must strengthen global health system resilience, particularly addressing

the escalating challenge stemming from understaffing. In June 2023, the Royal College of Radiologists (United Kingdom) released their workforce census reports for 2022 citing that in 97% of cancer centers surveyed, treatment had been delayed due to staff shortages to the point that 88% of oncologists were worried that these shortages were negatively impacting patient care.[32, 33] The findings were supported by the Royal College of Surgeons of England. The situation is not unique to the National Health Service. In February 2023, the OECD released a report noting that in the last three years, under-preparedness, underinvestment, and understaffing have negatively impacted resilience in health systems worldwide.[34] More must be done to ensure the implementation of balanced and financially sustainable solutions that build greater resilience throughout high-, middle-, and low-income countries.

5. Combating stigma, recognizing it as a social determinant of public health

Combating stigma is an essential step towards ending the blame culture. We need to address and remove the stigma which continues to plague lung cancer. Self-blame and negativity inhibit people from reaching out for help resulting in the loss of valuable time when there is no time to lose. Stigma and discrimination are associated with poorer outcomes in physical and mental health: they are implicated in reducing a person's access to health services along with inequities due to social and/or financial status, ethnicity and/or geographic location. We need a greater focus on stigma because it is a social determinant of public health.

Stigma grows from a lack of understanding and apprehension. Clearly communicating the risk factors for lung cancer can help to empower people to ask their primary care physicians whether they should be screened. Improved knowledge and health literacy can help individuals to modify their risk factors and make healthier lifestyle choices. Stigma has an impact beyond an emotional toll: it can create barriers for people resulting in a reluctance to take part in screening, delaying opportunities for early detection. Many lung cancer patients are aware of symptoms that they may have had for some time prior to discussing them with a clinician and report feelings of guilt in addition to a sense of stigma associated with the disease's link to smoking. Insights into the perspectives of people living with lung cancer and finding sensitive ways to build understanding and destigmatize this disease may help primary care providers to recognize those at-risk for, or in earlier stages of, lung cancer more swiftly and thereby speed their referral for diagnostic testing and treatment.

Stigma is also a problem for clinicians. Some health professionals have spoken about the unconscious bias they have towards lung cancer patients and treating them for a disease they judge to be self-inflicted. Both clinicians and patients themselves may question the use of expensive treatments and whether a patient can be deemed worthy of receiving them. Recognizing and eliminating unconscious bias is an important step towards destigmatization. An increased recognition that not every case of

lung cancer is due to tobacco can help people living with lung cancer who have felt stigmatized by others, including those in the health professions. Indeed, many people are diagnosed with lung cancer after quitting their tobacco habits and, as discussed above, approximately 10-25% of those with lung cancer are never-smokers. Oncologists and pulmonologists have expressed the importance of partnering with their primary care colleagues to raise awareness and improve early detection. Reducing negative attitudes and pessimistic thinking has been shown to help reduce stigma at a professional level and across wider society.

Improvements in health literacy can help to alleviate some of the damaging aspects of stigma because knowledge dispels misunderstanding. An unintended consequence of efforts to encourage cessation of tobacco use has been the completely unintentional rise of negative stereotypes and victim-blaming. Civil society and the private sector can partner with public health professionals, policy-makers and governments to develop tailored messaging that conveys facts while improving health literacy locally, nationally, and globally. Changes within health systems can help to ensure that information is communicated that can be readily comprehended by the wider population. Campaigns that promote health and positively empower people to make health-affirming decisions without cruelly classifying or labeling can improve awareness of all risk factors for lung cancer, thereby helping to combat the stigma of this disease.

In 2019, the Canadian Chief Public Health Officer published a report drawing attention to stigma and the need to prioritize interventions to address its impact on social identities and health. The report calls for improved health policies that are culturally sensitive to protect people and ensure that they are not barred from accessing health services due to stigma.[35] It brings attention to the fact that we all have unconscious biases stemming from our personal histories: we need to be aware of our own vulnerabilities so that we can be mindful of how we interact with others.

Receiving a diagnosis of lung cancer causes immense psychological distress for individuals and their families. Despite the availability of treatment options, some people continue to consider this diagnosis to be a death sentence. Combating these views along with stigma can help to ensure that people living with a diagnosis of lung cancer are able to receive the supportive care they require along with their medical treatment. Unfortunately, too often these psychological needs are not met. Cancer patients who have managed to access psychological support services have reported being seen by professionals who either lacked a proper understanding of cancer or were unable to provide the help that they and their families needed, while some report that what they did receive was inappropriate and hurtful. More must be done to ensure that people living with lung cancer have access to psychological support to alleviate the mental health impact of their disease.

A global commitment to prioritize Lung Cancer

Over the last decade significant steps have been made towards improvements in prevention, screening and early detection of lung cancer, better use of existing therapies, and introduction of innovative treatments. Nevertheless, these advancements have not been accessible to all who can benefit from them. Many people in low-income countries and disadvantaged populations within high-income countries continue to experience increased morbidity and worsening outcomes from lung cancer.

As health professionals committed to addressing the needs of people at-risk for and living with lung cancer, we are united in ratifying *Bridging the Gap in the diagnosis and management of Lung Cancer*, the Consensus Statement presented at the 9th International Lung Cancer Network in June 2023. This Consensus Statement reinforces our commitment around five unifying principles upon which all stakeholders – health and public health professionals, policy-makers, government departments of health, finance, social services, and education, patients, and patient organizations – can unite to create and strengthen policies to improve outcomes for people at-risk for and living with lung cancer worldwide:

1. Improve and expand prevention programs

- Enact all commitments within the WHO Framework Convention on Tobacco Control (FCTC) in all countries worldwide.
- Improve awareness of primary prevention and encourage healthy behaviors including elimination of tobacco products and reduction of environmental air pollution.

2. Focus on early detection

- Initiate national screening programs targeting at-risk populations where not already in place.
- Enhance outreach to underserved, hard-to-reach, and marginalized populations.
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- Ensure awareness of lung cancer is improved and ensure that the needs of never-smokers are not overlooked.

3. Ensure equitable and sustainable access to treatment

- Improve collaboration between stakeholders to ensure timely and financially sustainable access and availability of treatments.
- Reduce time between market authorization and access to therapies.

- Ensure lung cancer clinical guidelines are regularly updated to reflect the latest in care.
- Improve ease with which people can navigate their health systems.
- Integrate technological innovations to support needs of people living with cancer and health professionals.
- Promote digital literacy skills.
- Strengthen digital infrastructure to safeguard equitable access in the most remote areas at costs that are not prohibitive for either individuals or health systems.

4. Build partnerships and promote investment

- Build alliances to improve awareness, access, and action to ensure lung cancer is prioritized.
- Strengthen health system resilience to ensure screening, early detection, and treatments are available in an equitable, timely, and financially sustainable way.

5. **Combat stigma, recognizing it as a social determinant of public health**

- Openly address unconscious bias throughout society and the health care community.
- Improve awareness that lung cancer is not a death sentence by improving knowledge.

There is neither time nor room for complacency. Lung cancer touches all of us because anyone with a lung can get lung cancer.

Ratified by the Faculty & Attendees of the 9th International Lung Cancer Network, Athens, 23-25 June 2023

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