Foundation for a Smoke-Free World Health, Science, & Technology (HST) Research Agenda

THE CONTEXT FOR THE FOUNDATION'S HST RESEARCH AGENDA

Innovation turned smoking into a major public health issue

Smoking tobacco became a major cause of death and disability starting in the early part of the 20th century. This change was driven by technological innovations that enabled the mass production of low-priced cigarettes, and by innovations in sales and marketing that stimulated demand to meet this increased supply. In the United Kingdom, for example, cigarettes accounted for less than 20% of all tobacco consumed by men at the beginning of the 20th century and 80% by the 1940s, and cigarettes have always been the main form of tobacco use by women in the United Kingdom.[1]

The world has made progress in tobacco control…

Large epidemiologic studies as early as the 1940s and 1950s linked cigarette smoking and lung cancer, but it took decades to establish consensus on the harms of smoking. This was due to the long time-lag between exposure and adverse health outcomes, the need to develop new research techniques to assess outcomes not uniquely attributable to smoking, and the tobacco industry's sustained and organized efforts to undermine the growing scientific consensus. The 1964 Report of the Advisory Committee to the US Surgeon General was a milestone in driving acceptance of the causal relationship between smoking and disease and led to some early measures to curb smoking. These in turn drove early declines in smoking prevalence, particularly in high-income countries, such as the United States (from 42% in 1965 to 25% in 1997)[2] and the United Kingdom (from 52% for men in 1972 to 32% in 1997).[1]

The World Health Organization's Framework Convention on Tobacco Control (WHO FCTC) opened for signing in 2003 and is now legally binding in 181 ratifying countries. It is the most comprehensive effort to date to reduce tobacco use, with articles that address not only demand reduction, but also supply-side issues such as illicit trade, second-order consequences such as the livelihoods of tobacco farmers, and the need for ongoing research.[3,4]

Implementation of the FCTC has largely focused on a subset of these articles to protect the public from secondhand smoke, reduce smoking initiation and encourage cessation, prevent tobacco industry marketing, and monitor progress. These initiatives are described in the MPOWER package,[5] launched in 2008: (1) monitor tobacco use and prevention policies; (2) protect people from tobacco smoke; (3) offer help to quit tobacco use; (4) warn about the dangers of tobacco; (5) enforce bans on tobacco advertising, promotion, and partnership; and (6) raise taxes on tobacco. Currently, 4.7 billion people are covered by at least one MPOWER intervention at the national level.[6]

…but much more needs to be done

The global prevalence of smoking peaked in the 1980s and has been falling since then, from 41% to 31% for men by 2012, and from 11% to 6% for women by 2012.[7] Since 2000, smoking prevalence for men has fallen in 125 countries and for women in 155.[8]

This progress nonetheless masks significant challenges:

- More people smoke now: the number of people who smoke has increased from around 720 million in 1980 to approximately one billion today,[6] as population growth has outstripped prevalence reduction everywhere except in countries with a high social development index.[9]
- The demographics have changed: today, 80% of people who smoke live in low- and middle-income countries[8] (e.g., 260 million in China, 104 million in India,[1] 54 million in Indonesia),[10] many with limited ability to implement and enforce tobacco control policies. In high-income countries, smoking is increasingly concentrated in vulnerable populations and in people with lower incomes or educational attainment (see below).
- A billion lives are at risk: a billion people who use tobacco – mostly smokers – will die because of it over the course of this century, ten times as many as died from smoking in the 20th century. Most of these deaths will be in low- and middle- income countries, whereas most of the last century's deaths were in high-income countries.[11]

THE OPPORTUNITY

Preventing a billion deaths in this century by accelerating FCTC implementation

The need to rapidly drive down death and disability from smoking is clear, and there are a number of avenues to pursue:

- Likely the fastest way is to help current smokers to quit as quickly as possible: smokers who quit before age 40 reduce their risk of excess mortality by more than 90% compared to those who continue to smoke, and even smokers who quit at age 50 reduce their risk by more than 50%.[12,13]
- Continuing to prevent smoking initiation will, of course, remain extremely important, while recognizing that the main health benefits of efforts today will appear after 2050.[11] Similarly, it will be important to continue to protect the public from the harms of secondhand smoke.
- Harm reduction, for those who cannot quit or do not want to quit, must be explored, especially in light of recent technological innovation and the rapid pace of change in this area.
- All these efforts must be designed to be implemented effectively, not just in high-income countries but also in low- and middle-income countries, where most smokers live.

Looking at these avenues through the lens of the FCTC, it is necessary both to accelerate the implementation of MPOWER and to drive implementation of the other key articles.

Accelerating the effective implementation of MPOWER is already a priority. It has become a major area of focus for Bloomberg Philanthropies, with further financial support from the Bill & Melinda Gates Foundation, technical support

i. The Foundation recognizes that in some countries, and particularly in India, a significant amount of harm is caused by oral use of unrefined smokeless tobacco preparations. Helping users of these products to quit or reduce their risks by switching to less harmful substitutes is also part of the Foundation's research agenda.

from WHO, and implementation support by a range of partners. In this approach, the main levers for driving improvement are policy levers, and governments are the main agents of change and scale-up.

Implementing the rest of the FCTC, and closing four gaps in particular, in countries with the greatest need, is also required (Exhibit 1):

(1) *Reducing smoking-related harm in specific population segments:* The increasing smoking prevalence among women, compared with men, is of growing concern.[14] In many countries, smoking during pregnancy continues to be a threat affecting not only women's health, but also that of future generations.

Smoking prevalence remains high in vulnerable populations, including indigenous peoples,[15-17] people with serious mental health disorders,[18] people with TB[19] or HIV/AIDS,[20] and military personnel[21] and veterans.[22]

In high-income countries, smoking is increasingly concentrated in people with lower income or educational attainment. In the United States, it is highest among people with a high school equivalency certificate (34%) and lowest among those with a graduate degree from university (4%)[23]; smoking rates are higher among Americans making less than $20,000 a year (26%) than those making $20,000 a year or more (14%).[24] Similar observations have been made in France and Germany.[25]

(2) *Providing effective tools to help smokers quit:* FCTC Article 14, which is part of MPOWER, focuses on offering cessation support. However, existing products and services to help smokers quit have low effectiveness, with 6- to 12-month abstinence rates of 2% to 5% for behavioral interventions and 6% to 15% for pharmaceutical products.[26]

(3) *Offering harm reduction options alongside cessation:* FCTC Article 1(d) includes harm reduction in the definition of tobacco control, but this option is not covered in MPOWER. Little research has been conducted on harm reduction: Over the past 10 years, there have been two orders of magnitude fewer academic publications on smoking harm reduction compared to smoking cessation.[2]

(4) *Expanding research and scientific collaboration:* FCTC Articles 20 and 22 focus on research and scientific cooperation. Eighty percent of smokers today live in low- and middle-income countries, but most research today is led by centers in the United States and Europe.

Funding for research is also limited, particularly outside the United States: Of the $31.4 billion in development assistance for global health in 2011, only $68 million went to tobacco control.[27] Among the top funders for tobacco control, the Bloomberg Initiative to Reduce Tobacco Use explicitly does not fund basic research, academic studies, or cessation services,[28] and the focus of the Bill & Melinda Gates Foundation is on preventing initiation by new smokers, decreasing overall tobacco use, and reducing exposure to secondhand smoke.[29]

From the perspective of new researchers, a recent article focusing on high-income countries highlighted the shortage of academic positions related to tobacco control and the importance of seeking experience outside of traditional academic settings, along with incorporating the innovative research methods that have evolved over the last decade.[30] The picture in lower-income countries is even less positive, especially given the need to build institutional and human capacity for research to address noncommunicable diseases in these countries.

ii. PubMed journal article search (2007-2017): articles containing both terms in title or abstract. Search terms used: 'smoking' AND 'cessation', 'smoking' AND 'harm reduction'.

Harnessing innovation to drive a consumer-oriented approach

A century ago, innovation, in the form of mass-produced cigarettes and their marketing, drove the dramatic increase in death and disability from smoking. Today, innovation – properly harnessed – can help close the four gaps in FCTC implementation and reduce future harm from smoking. Two technological innovations are particularly relevant:

(1) Tools to help people measure and change their behavior

Smartphones and consumer-oriented sensors and apps have become widely used over the past decade, including in many low- and middle-income countries. Smokers can use these tools to better measure and understand their own smoking behavior and its impact on their health, and to receive customized feedback and intervention to help them quit or smoke less. These tools can also be used at large scale in low- and middle-income countries, as shown by the Be He@lthy, Be Mobile mCessation initiative run by WHO and the International Telecommunications Union in India.[31] They can also be used by researchers in observational and interventional studies.

(2) Products that deliver nicotine with significantly less harm

Nicotine creates dependence but does not itself cause the harms associated with smoking.[32] Most of the harm from smoking is caused by chemicals created by burning tobacco, a notion articulated as early as 1976: "People smoke for the nicotine, but they die from the tar."[33] Sweden's experience with snus, a refined smokeless tobacco product, suggests that it is significantly less harmful than smoking.[34] The miniaturization of batteries, sensors, and control systems has led to the development of consumer products that can deliver nicotine without the combustion of tobacco, or indeed without any tobacco. These products are not completely harmless, and more research is needed to establish their specific harm profiles, but their greatly reduced levels of toxins and evidence from biomarkers suggest that they should offer far lower risk than smoking,[35,36] a view that has led the UK Royal College of Physicians and Public Health England to support their use to reduce smoking. Smokers can use these products either to help them transition to complete cessation or to deliver the physiological or psychological experiences they seek with far lower exposure to the harmful substances in smoke.

It is important that these two innovation categories are both *consumer* products, available in many different forms and evolving in response to consumer demand, rather than medically prescribed treatments. There is great variety in the reasons why people smoke, in their smoking behaviors, in their willingness and readiness to quit, and in the type and amount of help that they need to quit. There is also increasing recognition that some smokers experience pleasure from nicotine or from the rituals of smoking, and would seek to reduce their harm rather than quit.[37,38] These tools and products can help people who smoke to find the best solutions for their needs and wants; they bring new companies into the market; and they challenge incumbent tobacco companies to innovate their product portfolios beyond cigarettes.

Tobacco control to date has been driven by policy levers, with governments as change and scale-up agents. These new technologies enable people who smoke – consumers – to themselves be change agents and leverage the scale-up capacity of the private sector. The opportunity that we see is to accelerate the end of smoking-related death and disability by complementing the existing tobacco control approach with a consumer-oriented approach – appropriately regulated – to help smokers quit or switch to significantly less harmful alternatives.

THE FOUNDATION'S ROLE AND HST RESEARCH AGENDA

Foundation for a Smoke-Free World's role

The Foundation for a Smoke-Free World (the Foundation) is an independent philanthropic foundation whose purpose is to improve global health by ending smoking in this generation (see our website www.smokefreeworld.org for the Foundation's work, and the Appendix for more information on the Foundation's independence).

The Foundation believes that there is an opportunity to accelerate the end of smoking by driving a transformation of the entire tobacco and nicotine ecosystem, including people who smoke, physicians and other health care providers, payors and insurers, policy makers and regulators, the entire supply chain from tobacco farmers to manufacturers of tobacco and nicotine products, and researchers and innovators. Such a transformation builds on the comprehensive set of activities described in the WHO FCTC. It includes work in health, science, and technology to accelerate quitting and switching; in agriculture to help smallholder tobacco farmers find alternative livelihoods; and in influencing industry to move quickly away from cigarettes toward products with significantly reduced risk.

HST research agenda

In its HST work, the Foundation seeks to complement ongoing tobacco control efforts and focus on the four FCTC gaps in countries where most smokers live, with a smoker-oriented agenda to accelerate quitting and switching to reduced-risk nicotine alternatives (Exhibit 2).

A consumer-focused approach to accelerating quitting or switching to reduced-risk nicotine alternatives strives to help people who smoke to change their behavior and to engage their influencers (family and friends; physicians and other health care providers; media; health insurers and payors; policy makers) and other mediators (e.g., academics, think tanks, consumer groups, and charities) to support that change:

- The Foundation's HST work will focus heavily on smokers to understand their needs and wants; engage them in research, product design, and policy discussions; help them quit or switch to reduced-risk nicotine alternatives as part of a broader effort to improve their overall health; and promote solutions that are appropriate for older adults, for both men and women, and for different vulnerable populations.
- The Foundation's HST work will engage all stakeholders; work with scientists across academia, government, and industry; and support public–private partnerships.

As with all consumer-oriented approaches, the HST research agenda will focus largely on the levers of *consumer perceptions, product characteristics,* and *price*. For smokers to reduce their health risks by quitting or switching to a reduced-risk nicotine product (or combination of nicotine products) that meets their individual needs, they require:

- **Perception** and correct understanding of the health benefits of quitting or switching to reduced-risk nicotine alternatives; of how quickly these benefits may be realized, even after many years of smoking; and of which product constituents are responsible for the dependence, harms, and pleasure they experience – and, in particular, the role of nicotine
- **Products** and services that are genuinely attractive for quitting or switching to reduced-risk nicotine products. These must be highly effective (for cessation) or much less harmful (for switching) and must also meet individual smokers' unique physiological, sensory, emotional, and social needs

- **Pricing** and price differentials that encourage quitting or switching to a reduced-risk nicotine product, while discouraging uptake by nonsmokers. (Other economic incentives such as health insurance and life insurance premiums that are proportional to product risk can play an important role.)

To drive perceptions and pricing in ways that accelerate quitting or switching to reduced-risk nicotine products, the HST research agenda includes three activities:

- Research to:
  - Answer questions from consumers, physicians, regulators, and other stakeholders about perceptions of risk, various nicotine products, and product pricing
  - Strengthen research capacity in countries where most smokers live
- Innovation to:
  - Develop significantly more effective smoking cessation and reduced-risk nicotine products
  - Explore affordable solutions for low- and middle-income countries
- Data-gathering and analytics to:
  - Measure progress to end smoking
  - Inform the actions of consumers, policy makers, researchers, other stakeholders, and the Foundation itself

Funding research and strengthening research capacity

There is a clear need for more research to answer stakeholders' key questions and for strengthening research capacity in countries where most smokers live. A number of organizations have laid out research gaps, including the WHO,[6] the US National Academies of Science, Engineering, and Medicine (NASEM),[35] and Public Health England.[36]

There are exciting opportunities to use advances in science and technology to conduct research on smoking in ways that were not previously possible, practical, or affordable, including:

- Mobile and internet-enabled devices to monitor smoking behavior accurately through wearable exposure monitors, and to provide just-in-time and context-appropriate support messages for cessation attempts[39]
- Behavioral psychology and behavioral economics to better understand the drivers of consumer choice, especially regarding products for cessation and harm reduction used to substitute cigarettes or other combustible tobacco products,[40] and the drivers of success and failure in behavior change
- Data science and machine learning approaches to combine and analyze large genetic, physiological, and behavioral datasets to yield new understanding and inform future research[41]
- Nanotechnology, for example, synthetic biomarkers (currently being explored to improve cancer detection)[42] for the early detection of smoking-related harms
- Systems science and implementation research (e.g., to assess the synergies of multi-initiative rather than "silver bullet" strategies) to reduce smoking harm

The Foundation's approach to funding and supporting research

The Foundation funds research primarily through *major, multiyear grants* to research institutions and global research networks. These entities are free to design their own detailed research programs under the supervision of their scientific advisory and institutional review boards, in order to find robust and reliable answers to the high-level questions on our HST research agenda.

The Foundation expects its grantees to:

1. *Engage people who smoke or use nicotine* in the design and conduct of research, across age groups and genders, including smokers from vulnerable populations
2. *Strengthen research capacity* in countries where most smokers live, both through direct partnerships and through building of global networks of research institutions spanning low-, middle-, and high-income countries
3. *Attract the best researchers* with relevant expertise from diverse fields, including those who are not currently engaged in research on smoking
4. *Apply a broad range of research techniques and analyses* (e.g., building large transnational cohorts of users to document lived experience over time; looking at new ways to measure health outcomes and exposures; designing appropriate intervention experiments)
5. Conduct research and publish findings according to *open science principles,* including declaring hypotheses and proposed analyses upfront; making raw data available for reanalysis; publishing all results, whether positive or negative; and publishing in journals that offer open access

Potential research questions

New and better tools for research

- Biomarkers of exposure and future harm:
  - *What biomarkers of exposure can describe a person's current smoking status (smoker, tobacco user, nicotine user, dual user, etc)?*
  - *What early biomarkers can predict future harms from smoking?*
- Product characterization:
  - *What are the constituents and toxicological profiles of tobacco- and nicotine-containing products that are available in different countries?*
  - *How can better and cheaper assays for these constituents and toxicants be developed, especially for use in low- and middle-income settings?*

Outcomes research

- Using the latest technology:
  - *What should a technology-enabled 21st century cohort study look like?*
- Benefits of quitting or switching to reduced-risk nicotine alternatives in high-risk populations of smokers:
  - *What are the outcomes, their timing, and their variation by gender in populations with the following?*
    - Chronic health conditions (e.g., cardiovascular disease, chronic obstructive pulmonary disease, diabetes, multiple morbidities)
    - HIV/AIDS and tuberculosis
    - Schizophrenia and other serious mental health conditions
    - At-risk populations (e.g., indigenous populations, veterans)
    - Otherwise healthy smokers >50 years of age
- Long-term health outcomes of using alternative nicotine delivery systems:
  - What will large-scale, long-duration, international cohort studies assess:
    - Absolute and relative harms of alternative nicotine products, by specific harm or disease
    - Dose/response-time relationships between exposures and outcomes
    - Effectiveness of different cessation and harm-reduction interventions
    - Differences in outcomes across gender, age, and other characteristics

Research to improve the effectiveness of cessation and harm-reduction interventions

- Smoker characterization and tailoring of quitting/switching approaches:
  - *How can smokers be characterized by smoking history and their genetic, physiological, psychological, and social factors?*
  - *How can such a characterizations lead to more effective approaches to quitting or switching to reduced-risk nicotine alternatives for different types of smokers?*
- The role of other health-related behaviors, notably physical activity:
  - *How can these be used to increase the likelihood of quitting or switching to reduced-risk nicotine alternatives?*
- Dependence and addiction science:
  - *What are the physiological and psychological bases of dependence, and how can these factors be addressed to make quitting easier?*
- Behavioral psychology and behavioral economics:
  - *What are the drivers of success and failure in behavior change in smoking and other unhealthy behaviors?*

Research on policy-level enablers of smoking cessation and harm reduction

- Effective communication of risk and harm levels:
  - *What are the most effective ways to communicate the harm levels of different products, and of nicotine vs. smokeless tobacco vs. tobacco smoke?*
    - *To smokers and nonsmokers, by gender, by education, and by socioeconomic status*
    - *To physicians and other health care providers*
- Pricing:
  - *What are optimal pricing and tax policies for cessation and reduced-risk products to accelerate quitting smoking or switching to reduced-risk products?*

Systems science and implementation research

- Lessons from different countries' experiences:
  - *What can be learned about helping smokers quit or switch, from:*
    - *Countries with large-scale experimentation with potentially less harmful alternatives to cigarettes (e.g., Japan, Sweden, United Kingdom)?*
    - *Countries in which the prevalence of smoking has always stayed very low?*
    - *Countries in which the prevalence of smoking has decreased very sharply?*
- Portfolios of interventions:
  - *How can a portfolio of synergistic interventions be constructed to drive a "tipping point" in smoking cessation and harm reduction?*

Stimulating innovation

Quitting smoking is hard, and most smokers have trouble quitting without help. The Foundation's 2018 global poll of smokers showed that this is still the case across a large number of countries. Current smoking cessation tools (products and services) have low effectiveness, with 6- to 12-month abstinence rates of 2% to 5% for behavioral interventions and 6% to 15% for pharmaceutical products.[26] A global landscape analysis of smoking cessation products and services, commissioned by the Foundation, showed that prescription drugs and nicotine replacement therapies have a 12-month abstinence efficacy rate of up to 23%, as opposed to behavioral interventions, which had an estimated efficacy rate of 13%. Additionally, the number of pharmaceutical and medical device candidates in the development pipeline was limited, suggesting no breakthrough treatments are to be expected within the next 5 to 10 years.

In low- and middle-income countries, where most smokers live, this problem is compounded by the poor availability and affordability of existing smoking cessation products. A similar picture is expected for reduced-risk products.

The Foundation will support work to understand the underlying drivers of low innovation in this field, and to stimulate innovation to more rapidly develop smoking cessation tools and reduced-risk products that are highly effective, acceptable from a consumer's point of view, and affordable in low- and middle-income settings.

Potential innovation questions

- *How can we develop highly effective smoking cessation tools (e.g., with >50% 12-month effectiveness)? How can these tools be optimized for men and women, for older smokers, for vulnerable populations, and for other types of people who smoke?*
- *How can we make cessation tools and reduced-risk products accessible and affordable for people in low- and middle- income countries?*

Funding data-gathering and analytics

The environment for smokers in many countries is changing rapidly, whether due to the introduction of new reduced-risk products or changes in product prices or regulations. It will be important to have up-to-date (ideally real-time) data available and analyzable at national and subnational levels to track progress and to inform the actions of consumers, regulators, and other stakeholders, and to continually refine the Foundation's own activities. Such data include:
Data to complement what is already being collected by the Global Adult and Youth Tobacco Surveys, particularly smoking cessation rates and the prevalence of ex-smokers in the population

- Surveys of consumers' perceptions; intentions; and behaviors related to smoking and use of other nicotine products, cessation, and harm reduction
- Surveys of physicians' and other health care professionals' perceptions and understanding of issues related to smoking, cessation, and harm reduction
- Surveys of media coverage of cessation and harm reduction, focusing on the scientific accuracy of the content
- Real-time information on product availability, prices, and sales volumes: cigarettes, cessation tools, reduced-risk products
- Up-to-date information on legislation and regulation, on their alignment with the best available scientific evidence, and on the effectiveness of their implementation and enforcement

EXHIBITS

Exhibit 1: FCTC, MPOWER, and Gaps

Health, science, & technology-related FCTC Articles:	Existing focus	Gaps
Preamble		• Limited focus on indigenous peoples, women, young girls, and on gender-specific strategies
Part I: Introduction		
1 Use of terms		• Very limited work on harm reduction, which is part of the definition of tobacco control
Part II: Objective, guiding principles and general obligations		
4 Guiding Principles		• Limited focus on indigenous individuals and communities, and on gender-specific risks
Part III: Tobacco demand reduction		
6 Price and tax measures	MPOWER	
7 Non-price measures	MPOWER	
8 Protection from exposure to tobacco smoke	MPOWER	
9 Regulation of the contents of tobacco products		• Limited focus on testing and regulating contents and emissions of tobacco and nicotine products, particularly in low- and middle-income countries
10 Regulation of tobacco product disclosures	MPOWER	
11 Packaging and labeling of tobacco products	MPOWER	
12 Education, communication, training, & public awareness	MPOWER	
13 Tobacco advertising, promotion, and sponsorship	MPOWER	
14 Tobacco dependence treatment and cessation support	MPOWER	• Few effective tools available to support cessation, with very little in development
Part IV: Tobacco supply reduction		
15 Illicit trade in tobacco products	MPOWER	
16 Sales to and by minors	MPOWER	
Part VII: Scientific and technical cooperation		
20 Research, surveillance, and information exchange 22 Scientific, technical, and legal cooperation	MPOWER	• Very little research led from countries where most smokers live; limited research funding

1

Exhibit 2: Foundation's HST Agenda

FSFW HST focus:
Accelerate quitting and switching
Complement MPOWER; focus on FCTC gaps

mpower

Four gaps

Reducing smoking-related harm in specific population segments

Providing effective tools to help smokers quit

Offering harm-reduction options

Expanding research and scientific collaboration

FSFW HST agenda: consumer-focused approach to help smokers quit or switch
Focus on smokers, especially those in low- and middle-income countries
Engage with all stakeholders to drive research and innovation

Activities	Levers	Results
Fund research to answers smokers' and others' questions about the benefits of quitting or switching and how to do it, and to build research capacity in countries where smokers live Stimulate innovation for more effective cessation tools and more affordable cessation and reduced-risk products Fund data-gathering and analytics to measure progress and inform consumers and other stakeholders	Better *perception* and understanding of benefits of quitting or switching, and of the drivers of dependence, harm, and pleasure Broader range of attractive, accessible and effective *products and services* for quitting or switching *Prices and price differentials* that encourage quitting or switching while discouraging uptake by nonsmokers	Rapid reduction in smoking-related death and disability through: • Many smokers quitting more quickly • Other smokers switching to less harmful alternatives

2

APPENDIX: THE FOUNDATION'S INDEPENDENT STATUS

The Foundation for a Smoke-Free World (the Foundation) is an independent nonprofit US corporation with US IRS 501(c)(3) status, fulfilling their requirements for independence. It is currently funded by a pledge agreement with Philip Morris International (PMI), which provides the Foundation with US$80 million annually for 12 years, starting in 2018. The Foundation also seeks additional sources of funding.

The Foundation's governance and leadership are entirely independent of its funding source. It will conduct its activities free of any commercial influence and ensure the scientific independence and integrity of the research that it supports. These elements are detailed in the Foundation's Certificate of Incorporation (esp. the third section) as well as in the Foundation's Bylaws (esp. articles VIII and IX).

The Foundation has also carefully reviewed the criteria for accepting tobacco industry funding laid out by Cohen et al. in 2009, and has aligned its governance, management, and operations to adhere to these criteria.

The Foundation's pledge agreement with PMI also allows it to pursue its purpose in a fully independent manner, without any influence from the funder. The agreement:

- Binds PMI to provide the Foundation with US$80 million annual for 12 years, as long as the Foundation operates in line with its stated mission, as attested to by the Foundation's Board of Directors (which has no industry representation) and by independent external auditors hired by the Board and paid by the Foundation
- Recognizes the Foundation's legal and operational independence, and excludes PMI from having any position, role, or influence over the Foundation's governance, Board of Directors, strategic decision-making, or day-to-day operations
- Reinforces the Foundation's commitment to supporting high-quality, peer-reviewed research
- Notes that the Foundation's acceptance of funds does not constitute an endorsement by the Foundation of any of PMI's activities or products
- Places no restrictions on the Foundation's activities, including activities that may be critical of the tobacco industry

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