### Funding gaps for diseases caused by smoking in Mexico

Health care costs may be more than seven times higher than revenue from IEPS on tobacco

Centro de Investigación Económica y Presupuestaria, A.C.

Judith Senyacen Méndez Méndez¹ I judithmendez@ciep.mx

## 1 | Introduction

Tobacco use leads to increased health care expenditure and lost human capital. In 2018, close to **eight million people worldwide died due to smoking-related diseases** and 9.1% of disability-adjusted life years lost can be attributed to smoking (IMHE, 2022). In Latin America, an estimated 8.3% of total expenditure on health care can be attributed to smoking (Pichón-Riviere et al., 2016).

In Mexico, the population without social security receives healthcare mainly from the states' health systems. This study explores whether the revenue received by states from the IEPS tax on tobacco is sufficient to cover health care costs for three conditions caused by smoking in each of Mexico's states.

# 2 | Results, data, and evidence

In every state there is a fiscal gap with respect to the amount needed to cover the cost of health care caused by just three smoking-related diseases, even if considering only tobacco-attributable costs. Nationally, this deficit totals over 80 billion pesos. The fiscal gap would be even wider if the full range of diseases associated with tobacco use was considered.

The cost of health care in 2020 for just three smokingrelated conditions comes to 93.379 billion pesos for all Mexicans who lack social security coverage. This is 7.4 times the amount of tobacco IEPS transferred to states (Table 1).

#### KEY MESSAGES

In 2020, nationwide, the cost of treating three diseases caused by smoking may be more than seven times the amount of revenue received by states from IEPS on tobacco. This means that the funds from IEPS received by states are not sufficient to cover healthcare costs caused by tobacco.

The estimated cost of care for lung cancer (LCa), chronic obstructive pulmonary disease (COPD), and acute myocardial infarction (AMI) in 2020 in Mexico is **93.379 billion pesos**, while states receive just **12.539 billion pesos** in tobacco IEPS transfers.

In every state, health care costs for those not covered by social security exceed by 3 to 12 times tobacco IEPS transfers. This is an additional reason to increase excise taxes on tobacco products.

TW: @ciepmx FB: /ciepmx

<sup>&</sup>lt;sup>1</sup> Economist and doctoral student at the School of Government and Public Transformation at Tecnológico de Monterrey. Assistant research director and specialist in health and public finance at Centro de Investigación Económica y Presupuestaria A.C.

TABLE 1. Health care costs for three major tobacco attributable diseases, 2020

Disease	Prevalent cases (General population)	Prevalent cases (Population without SS)	Unit cost (2020 pesos MXN = 100)	Total cost, population without SS (millions of pesos)	Attributable costs, population without SS (Scenario 1, millions of pesos)	Attributable costs, population without SS (Scenario 2, millions of pesos)	IEPS revenue transferred to states (millions of pesos)
<u>LCa</u>	12,885	7,067	131,743	931	353	680	
LCa*12			328,366	2,320	879	1,694	
COPD	2,822,189	1,619,478	56,069	90,802	32,639	56,297	
AMI		1,165	185,930	257		56	
Total	-	1,627,709	-	93,379	33,518	58,047	12,539

Note: Scenario 1 employs the PAF by state given by the IHME. Scenario 2 uses the national PAF. The IHME has no information on the attributable fraction for AMI.

Source: Authors' calculations based on data from CNPSS (2020), IHME (2022), INEGI (2020), and INSABI (2020).

## 3| Public policy implications

Treating conditions requiring highly specialized care has become more difficult with the launch of the entity IMSS-Bienestar, as the intention is to use leftover resources from the Health Fund for Well-Being (FONSABI) and no clear strategy exists for sustainable funding. There has been no mention of any new funding in addition to that already allocated for health care for members of the population without social security coverage.

Beyond the economic implications for the fiscal system, the population lacks effective access to these health services not just due to a lack of financial means, but also because conditions like COPD and lung cancer are not included in the catalog of services available to those not registered with any social security institution and therefore will face out-of-pocket expenditures, with often catastrophic consequences.

It is important to link state revenue from IEPS on tobacco to health care costs and actual spending on treating and preventing smoking-related diseases. Excise taxes on tobacco are low in Mexico still and that is one reason for the insufficient transfers to the states. This is an additional reason to increase taxes on tobacco products.

An urgent discussion is needed to align the priorities of the health sector with the Mexican fiscal system. Fundamental to this discussion should be the generation and integration of sources of sustainable funding to support those with reduced access to health services. Increasing the low excise taxes on tobacco can fill the fiscal gap by increasing the revenue transfer to the states.



#### References

IHME. (2022). *GBD compare*. Retrieved from https://vizhub.healthdata.org/gbd-compare/#
Pichon-Riviere, A., Bardach, A., Augustovski, F., Alcaraz, A., Reynales, L., & Teixera-Pinto, M. (2016). Impacto económico del tabaquismo en los sistemas de salud de América Latina: un estudio en siete países y su extrapolación a nivel regional [Financial impact of smoking on health systems in Latin America: A study of seven countries and extrapolation to the regional level]. *Rev Panam Salud Pública*, 40(4): 213-221.



CIEP is a not-for-profit, non-partisan civil society research center that provides accessible, relevant, and technically sound information and analyses to influence, enhance, and democratize discussions and decision-making on the economy and public finance, with the goal of making the tax system sustainable for the benefit of current and future generations.