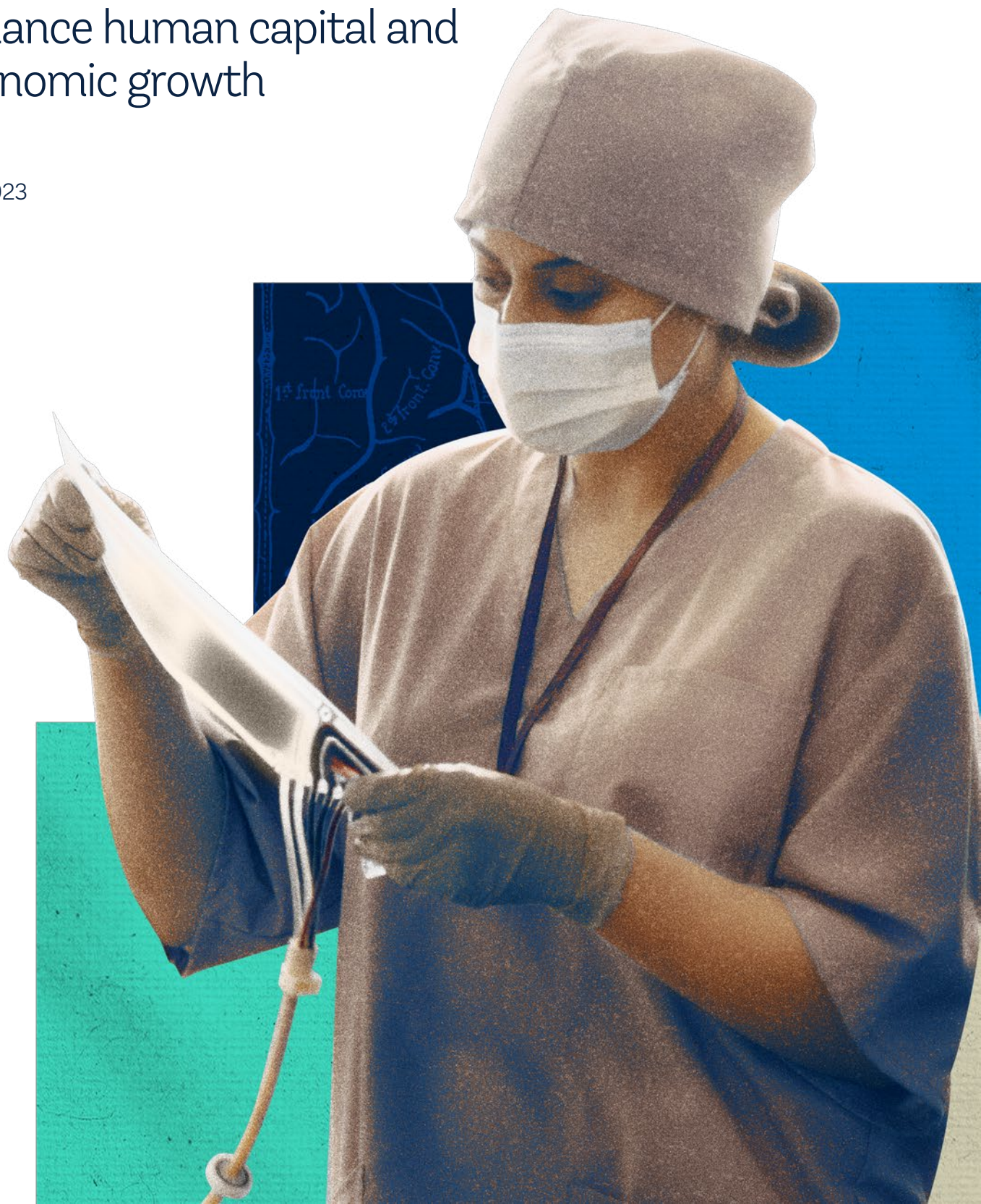




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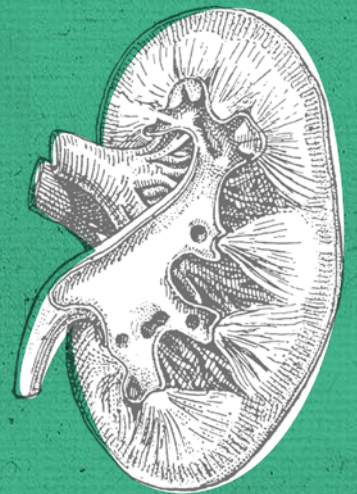
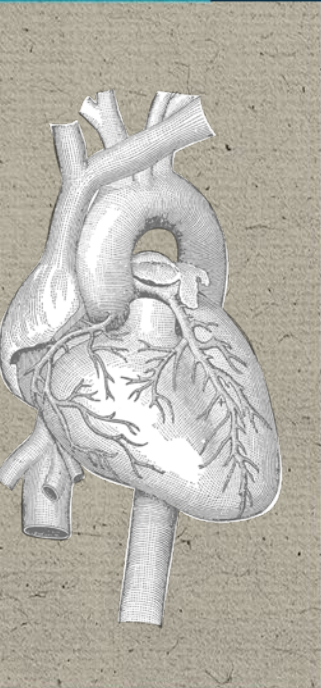
Tackling noncommunicable diseases in Kosovo to enhance human capital and economic growth

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May 2023



KEY MESSAGES

1. The health and economic burden of NCDs represents a significant toll on Kosovo.
2. Enhancing prevention and management of NCDs is essential to reduce the NCDs burden.
3. Proactively addressing NCDs will foster human capital and economic growth.



Noncommunicable diseases (NCDs) hamper the development of human capital for current and future generations

NCDs are chronic conditions that are often untreatable and require close monitoring to control the progression of the disease. They account for 70 percent of all deaths worldwide and directly affect countries' economies, as every 10 percent increase in mortality due to NCDs reduces economic growth by 0.5 percent.ⁱ NCDs have a direct and indirect impact that threatens the human capital of current and future generations (Figure 1).

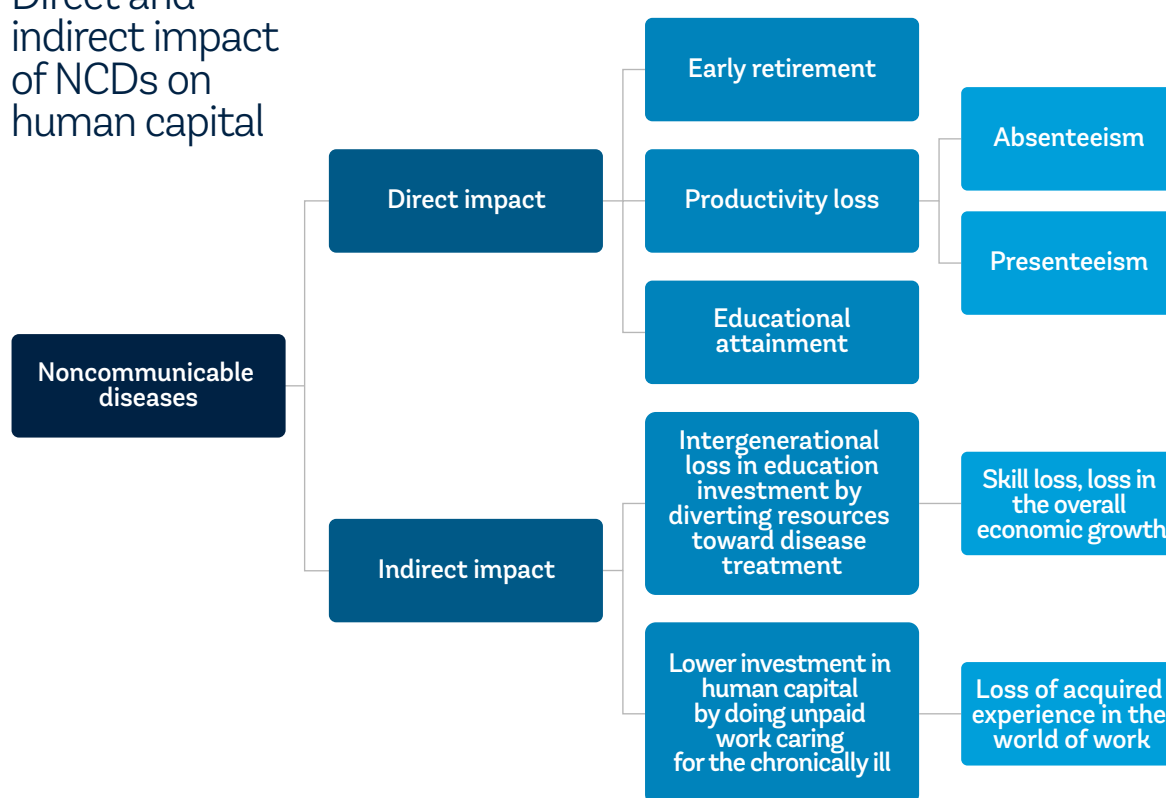
Kosovo is a young state that benefits from a young population which plays a key role in the country's European progression. Economic growth has outperformed neighboring peers, leading to significant reductions in poverty. Yet, the country remains with a high unemployment rate that calls for major investments in building skills and creating quality jobs to boost Kosovo's human capital and economic growth.

The threat NCDs pose to Kosovo's progress calls for a proactive approach to address them. Protecting Kosovars from NCDs will promote healthier lives, accelerate economic growth, and reduce the financial burden on the health system.

Figure 1

Source:
Adapted from Nikoloski et al 2021

Direct and indirect impact of NCDs on human capital



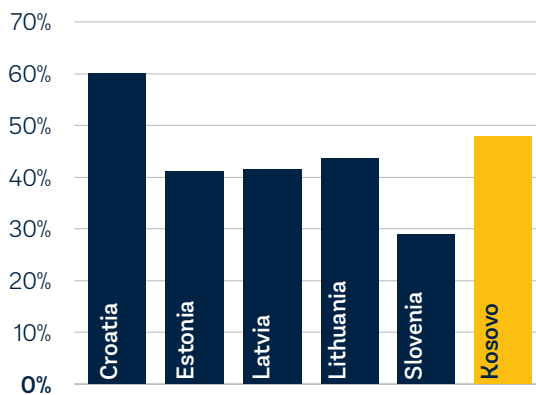
Risk factors for NCDs

Behavioral, metabolic, and environmental factors influence the development of NCDs. Behavioral factors are related to the individual's behavior, for instance, smoking. Metabolic factors refer to alterations in parameters such as body-mass index. Lastly, environmental factors are mainly attributed to air pollutants.

Smoking prevalence in Kosovo is at similar levels compared with Western Balkans peers, yet prevalence among men is the second highest in the region (48.9 percent), only behind North Macedonia (57.9 percent).

Second-hand smoke is widely prevalent, with around half of the population aged 13–15 years exposed to its harmful effects, higher than most of Kosovo's aspirational peers (Figure 2).

Figure 2 Prevalence of second-hand smoking at home



Source: GYTS 2017 or latest available.

Around a third of children aged 2–7 are at risk of being overweight. The prevalence of obesity among this age group is 2.3 percent, but higher among boys (2.7 percent) than girls (1.4 percent). The share of overweight boys and girls is higher with 10.9 and 5.9 percent, respectively.ⁱⁱ

Annually, Kosovo's two coal plants release over 7,500 tons of PM_{2.5} particles, the most

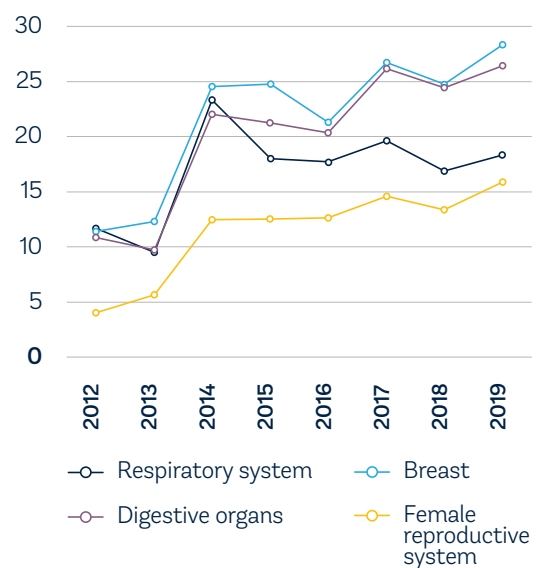
damaging pollutant for health that affects human organs. Moreover, it is estimated that almost 400 premature annual deaths are attributed to air pollution, which accounts for up to 320 EUR million per year.ⁱⁱⁱ

The health and economic burden of NCDs

NCDs pose a major challenge to Kosovo's health system and the population's health. According to the Kosovo Agency of Statistics, since 2015, the major NCDs – circulatory system diseases, diabetes, cancers, and chronic respiratory diseases – account for over two-thirds of all deaths. Although mortality due to NCDs is higher among the elderly, around 25 percent of deaths in 2019 were attributed to these conditions in the 20–29 age group.

Cancer cases have considerably increased over the last decade. From 2012 to 2019, there was a three- to fourfold increase in the cases of the most prevalent types of cancer (Figure 3). Women are mainly affected by breast cancer while the main type of cancer in males is cancer of the digestive organs.

Figure 3 Trend of the five main types of cancer per 100,000 population



Source: KAS.

The prevalence of hypertension (28.4 percent) and diabetes (4.3 percent) is lower than structural peers,¹ however, most cases remain undiagnosed, untreated, or uncontrolled. A World Health Organization (WHO) STEPS NCDs survey in 2019 found that over half of the detected people with criteria for hypertension were previously undiagnosed.

The country's recent conflicts have left a high mental health burden. It is estimated that of over 900,000 war survivors, more than 60 percent experience post-traumatic stress disorder or major depression. These figures are expected to worsen due to the impact the COVID-19 pandemic had on people's mental health.

The direct and indirect costs of NCDs threaten the financial sustainability of Kosovo's health system and economic growth in general. A rapid cost-of-illness analysis of six NCDs estimated that the financial cost of these conditions will account for up to 714.89 million EUR in 2023. Indirect costs due to premature death and absenteeism are the main contributors to the financial burden, representing 85 percent of costs (Table 1).

Risk reduction and screening for NCDs

Although Kosovo has conducted health promotion campaigns to reduce the risk of NCDs, these campaigns are scattered and mainly donor-driven initiatives. Moreover, vaccination campaigns to reduce the risk of cervical cancer are missing despite the fact that the Human Papilloma Virus (HPV) vaccine reduces cervical cancer rates by almost 90 percent. Consequently, over 70 percent of women have never heard of the HPV vaccine, and less than one percent have received it.^{iv}

Kosovo lacks systematic screening for NCDs. Less than 1 in 100 women has been tested for cervical cancer, and only 5 percent of eligible women have been screened for breast cancer. The poor screening of NCDs has also led to over 90 percent of lung cancers being detected at late stages, where survival is poor and often requires more expensive treatments, increasing the financial burden on the health system.

1 Structural peers are Albania, Armenia, Moldova, North Macedonia, and Kyrgyz Republic.

Table 1 Estimated economic burden of NCDs in 2023 (EUR millions), by disease

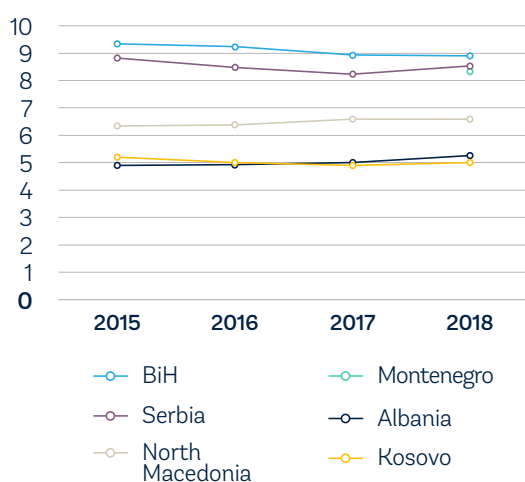
Disease	Health care costs	Indirect costs	Total	%
Hypertension	68.76	233.94	302.7	42.3%
Diabetes	24.78	100.21	124.99	17.5%
Breast cancer	5.28	86.54	91.83	12.8%
Cervical cancer	1.79	27.12	28.92	4.0%
Lung cancer	2.23	136.01	138.24	19.3%
Colorectal cancer	1.96	26.25	28.21	3.9%
Total	104.8	610.07	714.89	100%
%	14.7%	85.3%	100.0%	

Source: Main report.

Management of NCDs

Kosovo's health system is characterized by low health expenditure and a high reliability on out-of-pocket (OOP) payments. Total health expenditure in Kosovo as a share of GDP is the lowest among Western Balkans (Figure 4). Consequently, OOP expenditure accounts for up to 60 percent of total health expenditure, exposing families to impoverishing health expenditures.

Figure 4 Total health expenditure as share (%) of GDP



Source:
Kosovo Health Insurance Fund Financing Plan 2022-2026 and WHO.

Kosovo has one of the lowest supplies of healthcare staff in Europe due to the emigration of doctors and nurses to European countries. Moreover, personnel staying in Kosovo engage in dual practice in public and private facilities, compromising the quality of care delivered. Guidelines for managing NCDs are also insufficient, with only five diseases covered, leaving healthcare workers to make decisions from experience rather than evidence-based.

Kosovo has constrained resources to screen and treat NCDs. For instance, only 11 centers have equipment to

perform mammograms, representing 0.61 mammograms per 100,000 population, almost half the rate in North Macedonia (1.11 per 100,000 population).

Similarly, diabetes care is limited as evidenced by wide differences across municipalities of patients receiving insulin treatment.

The constraints in the public health sector motivate patients toward self-referral to specialized services to access care even for conditions treatable at the primary level. Additionally, the lack of defined clinical pathways complicates adequate follow-up of patients with NCDs, increasing the fragmentation of care and risking prognosis and treatment.

Regulations and policies to reduce the burden of NCDs

Kosovo has made important progress in ensuring that the WHO Best Buys^v regulations are in place, but most are partially implemented (Table 2). The main reasons for the lack of fully implemented regulations are lower taxes, lack of warning graphics, or lack of enforcement and monitoring of existing regulations. Like these products, sugar-sweetened beverages (SSBs) are partially regulated due to low excise taxes and inconsistent taxed products.

Air quality regulations adhere to the European Union standards, but human resource and financial constraints hamper actions to reduce air pollutants. The Law on Environmental Protection was implemented in 2009, and the Law on Air Protection for Pollution in 2010. However, lack of coordination among different government agencies and limited human and financial resources has led to inadequate implementation of the Air Quality Action Plan since 2018. Therefore, Kosovars continue to be exposed to high concentrations of air pollutants.

Table 2 Status of the policies on tobacco products in Kosovo compared to WHO best-buys

Regulation	Status	Rationale	Reference
Increase excise taxes and prices on tobacco products.		Excise tax on tobacco products is applied but remains below international standards.	Law No. 03/L-112
Implement plain/standardized packaging and/or large graphic health warnings on all tobacco packages.		Health warning remarks are present on tobacco products but remain below international standards.	Law No. 02/L-36
Enact and enforce comprehensive bans on tobacco advertising, promotion, and sponsorship.		Advertising, promoting, and sponsorship of tobacco products are banned.	Law No. 02/L-36
Eliminate exposure to secondhand tobacco smoke in all indoor workplaces, public places, and public transport.		Smoking in public areas is prohibited; however, law enforcement remains compromised.	Law No. 02/L-36
Implement effective mass media campaigns that educate the public about the harms of smoking/tobacco use and secondhand smoke.		Public and private media are obliged to broadcast educational programs on the harmful effects of tobacco.	Law No. 02/L-36
Increase excise taxes on alcoholic beverages.		Excise taxes on alcoholic beverages are applied, but remain considerably low for spirits.	Law No. 03/L-220
Enact and enforce bans or comprehensive restrictions on exposure to alcohol advertising (across multiple types of media).		Advertising of alcoholic products is banned from billboards, but there is no evidence of bans from other media types.	RR-110-2782-K.PR
Enact and enforce restrictions on the physical availability of retailed alcohol (via reduced hours of sale).		No evidence of restrictions on the physical availability of retailed alcohol.	N/A

Note:

-  = Present but partially implemented;
 = present and fully implemented;
 = not implemented.

Source: Produced by the authors

Reducing NCDs' burden to increase human capital and foster economic growth

Kosovo has made appreciable efforts in protecting its population from NCDs, yet the increasing health and economic burden due to NCDs calls for a proactive approach to tackle these conditions. As the country continues its journey towards enhancing health system performance and improving the population's health, the burden of NCDs can be further reduced by addressing the following aspects.

Implement a rigorous national campaign on the prevention of smoking, particularly among the youth. Learning from successful campaigns from other countries can provide the basis for a national campaign to reduce smoking. Co-developing campaigns with the targeted audience to ensure their perspectives are considered and adapted to the Kosovar context will increase the campaigns' success.

Develop condition-specific registries to improve data quality and monitoring of NCDs. The existing cancer registry has been implemented by law and satisfactorily followed by healthcare staff at regional hospitals and the National Institute of Public Health. Adapting a similar process for major NCDs, such as diabetes and hypertension, is necessary.

Implement lists of patients at primary care facilities for better prevention and control of NCDs. Assigning patients to a specific healthcare facility will improve the screening and management of chronic conditions. Moreover, self-referrals to specialized clinics will be reduced, enhancing the health system's performance.

Develop tailored prevention and screening services driven by a national strategy for NCDs. Access to prevention and screening services remains limited. Developing a national strategy for NCDs will increase the population's access to and use of these services. The strategy should consider the rapidly escalating incidence rates of the main types of cancer and the high numbers of undiagnosed cases of diabetes and hypertension.

Extend the national pilot screening program on breast and cervical cancer throughout the country. The current programs have increased the number of women screened for breast and cervical cancer; however, the majority of eligible women remain unscreened. Expanding the program throughout the country will result in an increased share of eligible women benefiting from early detection of cervical cancer and a better prognosis.

Develop an integrated information system across healthcare institutions to improve care coordination. For better disease management, NCDs will require the input of multiple professionals throughout the progression of a disease. Ensuring that healthcare professionals have access to a patient's record will increase care coordination and enhance health outcomes.

Develop standardized clinical protocols for the prevention and treatment of NCDs and build the infrastructure to provide evidence-based care. Kosovo has recently produced a series of guidelines for only five chronic conditions. Standardizing NCD care through developing clinical guidelines for all of them will ensure that everyone benefits from the same care. Equipping health facilities with resources to implement standardized protocols is important to ensure adherence to standardized care. Hospital and primary care clinics continue to face shortages of pharmaceuticals and medical equipment for everyday care. Clinical audits for implementing the protocols should be embedded as a regular oversight practice. Empowerment and accountability mechanisms for quality care coordinators across health facilities is also of high importance.

Enhance the monitoring and enforcement of policies to reduce tobacco and alcohol consumption while increasing taxes on harmful products to international standards. Ensuring the current policies are adequately enforced while pairing them to international standards will reduce the impact of harmful products and bring economic and human capital development benefits.

Develop strategic planning for human resources for health to improve attraction and retention of healthcare workers.

Emigration of healthcare workers has resulted in limited availability of human resources for health in Kosovo, which compromises the quality of healthcare delivery for patients with chronic conditions. Developing a strategic plan that considers current and future population health needs, and addresses healthcare workers' concerns for their professional practice will increase the attraction and retention of human resources for health.

Build service capacity and increase access to mental health care.

This is especially important for the most vulnerable populations and those with a higher risk of mental illness. The health system should also ensure that enough mental health professionals are available for meeting future trends.

Accelerate the implementation of air quality plans to reduce exposure to harmful concentrations of air pollutants.

Currently, air quality regulations adhere to European standards but have not yet been fully implemented. Increasing the technical capacity and financial resources to implement these plans will result in cleaner air and healthier Kosovars.

Advance health financing reforms to enable adequate resources for the prevention and management of NCDs.

Kosovo has one of the lowest health care expenditures and a high dependency on out-of-pocket payments. Advancing health financing reforms, including strategic purchasing, will increase the availability of resources and infrastructure for the prevention, treatment, and control of NCDs.

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- iii Netherlands Court of Audit, and Supreme Audit Office of Poland. 2019. "Joint Report Air Quality." <https://english.rekenkamer.nl/publications/reports/2019/01/30/joint-report-air-quality>
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- v World Health Organization. 2017. "Tackling NCDs: 'best Buys' and Other Recommended Interventions for the Prevention and Control of Noncommunicable Diseases." <https://www.who.int/publications/i/item/WHO-NMH-NVI-17.9>.

This Policy Note is based on a report written by Ha Thi Hong Nguyen, Mrike Aliu, Alejandro Gonzalez-Aquines, and Ilir Hoxha "The State of Noncommunicable Diseases in Kosovo" (May 2023). The findings, interpretations, and conclusions expressed herein do not necessarily reflect the views of the Board of Executive Directors of the World Bank or the Governments they represent.



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