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Short communication

Healthcare as an investment: quantifying the economic and societal returns of better health in North Macedonia

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Introduction

Healthcare systems across Europe are increasingly challenged by population aging, the growing prevalence of chronic diseases, workforce shortages, and rising expectations for healthcare services. These pressures are particularly pronounced in countries with limited healthcare resources, where policymakers must balance fiscal sustainability with the need to improve population health outcomes. Traditionally, healthcare expenditure has been perceived primarily as a cost to public budgets. However, emerging evidence suggests that investments in health generate substantial returns through improved productivity, increased labor force participation, reduced disability, and enhanced social well-being.

North Macedonia continues to face significant health challenges, including lower life expectancy and a higher burden of preventable and treatable diseases compared with many European countries. These health gaps are associated not only with adverse patient outcomes but also with broader economic consequences resulting from premature mortality, reduced workforce productivity, and increased social expenditures. Consequently, improving population health should be considered a strategic component of economic and social development.

The objective of this paper is to explore the concept of healthcare as an investment and share good practices from Central Eastern Europe. The paper examines how investments in prevention, timely diagnosis, access to innovative therapies, and outcome-oriented healthcare delivery can contribute to both improved health outcomes and long-term economic growth.

Materials and methods

This analysis draws on publicly available data from Eurostat, OECD, WHO, EFPIA and IQVIA. Descriptive comparisons and correlation analyses were conducted to explore relationships between health expenditure, pharmaceutical investment and population health outcomes across countries.

Results and discussion

The analysis demonstrated a consistent association between healthcare investment, population health outcomes, and economic performance in North Macedonia and across Central and Eastern Europe. Government healthcare expenditure in North Macedonia was estimated at approximately €269 per capita, substantially below both the CEE average (€1,275) and the EU4 average (€3,349). At the same time, out-of-pocket spending remains among the highest in Europe, indicating a considerable financial burden on households.

North Macedonia is also experiencing significant demographic pressures. Between 2020 and 2050, the

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working-age population is projected to decline by more than 25%, while the population aged 65 years and older will increase substantially. This trend is expected to intensify demand for healthcare services while reducing the size of the economically active population.

Comparative analyses revealed strong correlations between economic prosperity and health outcomes. Countries with higher GDP per capita consistently demonstrated longer life expectancy and lower disease burden, measured through disability-adjusted life years (DALYs). North Macedonia achieved important gains in life expectancy over recent decades, yet remains below EU4 levels. Furthermore, countries investing more in healthcare exhibited significantly lower DALY rates, suggesting that health expenditure translates into measurable improvements in population health.

Access to innovation remains another challenge. The average time to availability of new EMA-authorized medicines in North Macedonia was approximately 576 days, considerably longer than the EU4 average of 445 days. Delayed access to innovative therapies may contribute to avoidable disease burden, productivity losses, and reduced economic potential. Overall, the findings support the view that healthcare investment is not merely a social expenditure but a strategic driver of better health outcomes, workforce productivity, and long-term economic development.

Conclusion

North Macedonia faces a combination of demographic, epidemiological, and economic challenges that will place increasing pressure on the healthcare system in the coming decades. The findings of this analysis demonstrate that countries investing more in healthcare achieve better health outcomes, lower disease burden, longer life expectancy, and stronger economic performance. Conversely, underinvestment in health is associated with poorer outcomes, reduced productivity, and growing fiscal pressures.

The evidence supports a shift from viewing healthcare as a cost toward recognizing it as a strategic investment in human capital and economic development. Investments in prevention, timely diagnosis, access to innovative therapies, and outcome-oriented healthcare delivery have the potential to generate benefits that extend beyond the health sector, including increased workforce participation, improved productivity, and greater societal well-being.

To achieve sustainable improvements, healthcare decision-making should incorporate broader measures of value and societal impact alongside traditional budget considerations. Strengthening investment in health today can contribute to better outcomes for patients, a more resilient healthcare system, and a healthier and more productive society in the future.

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