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Analysis of the Health Care System in Estonia

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Abstract

The aim of this paper is to analyze the health care system in Estonia, with particular emphasis on financing mechanisms, organization of services, reforms, and the drug reimbursement system. Estonia, being one of the leaders in the digitalization of public services, has implemented a number of innovative solutions in the field of e-health, which have contributed to improved efficiency and accessibility of medical care.

The paper presents key demographic and epidemiological indicators that shape the challenges for the Estonian health care system, such as population aging, negative natural growth, and the increasing burden of chronic diseases. The structure of health care financing is discussed, in which the Estonian Health Insurance Fund plays a dominant role, financed mainly from salary contributions and budget transfers. The growing share of out-of-pocket expenses by patients is highlighted, especially in the area of dental care and the purchase of medicines.

The analysis also covers the most important reforms of recent years, including the strengthening of primary health care, the expansion of dental services, and the implementation of the Pharmaceutical Policy 2030. The drug reimbursement process is described in detail, including the role of the State Agency of Medicines and the Committee for Medicinal Products, as well as the mechanisms for setting reference prices and limiting patient co-payments. Attention is drawn to the challenges related to the availability of innovative therapies, including oncological and orphan drugs, and to the relatively long waiting time for their reimbursement compared to the EU average.
Despite limited resources and demographic challenges, the Estonian health care system is characterized by high efficiency, transparency of decision-making processes, and openness to digital innovation. Further challenges include ensuring long-term financial stability, improving access to services for vulnerable groups, and further integration of health and social care.

The health care system in Estonia serves as an example of a dynamically developing model of health care in Central and Eastern Europe. Over the past decades, the country has implemented a series of reforms aimed at improving the efficiency, accessibility, and quality of health services, while maintaining the financial stability of the system.[1,2] Despite its small population and limited resources, Estonia has achieved significant progress in the digitalization of health services, introducing advanced e-health solutions and modern medical data management tools.[3,4]

The population of Estonia in 2025 is 1,369,000, which represents a decrease of 5,500 people compared to the previous year. In 2024, there were 9,500 births and 15,500 deaths in Estonia, resulting in a negative natural increase of 6,000 people. The age structure of Estonia's population is changing, with a significant increase in the proportion of elderly residents. In 2023, approximately 15.97% of the population was aged 0 to 14 years. The median age rose to 42.2 years in 2021, and forecasts suggest that by 2100 the median age may exceed 50.7 years. This demographic trend creates challenges, including a shrinking working-age population and increased pressure on public services. Projections indicate that Estonia's population may fall to around 1.2 million by 2085, mainly due to a low fertility rate and an aging society. In 2023, the fertility rate dropped to 1.31 children per woman, below the replacement level of 2.1 children. To address these challenges, Estonia is exploring "smart shrinkage" policies, focusing on sustainable spatial planning and adapting public services to the needs of an aging society.

Estonia's economy is characterized by a gross domestic product (GDP) of approximately USD 43.4 billion. Per capita GDP in 2024 was about USD 31,855. The largest sector of Estonia's economy is services, which contribute 64.54% to the GDP. Industry is the second largest sector, accounting for about 21.74% of GDP, while agriculture represents around 1.93% of GDP.

Since the beginning of the 21st century, Estonia has recorded significant improvements in health outcomes. Life expectancy has increased by 7.5 years, reaching 78.8 years in 2023, which is one of the highest increases in the EU.[7] However, the COVID-19 pandemic caused a setback in avoidable and treatable mortality. The main causes of death include heart diseases, lung cancers, and conditions related to alcohol, indicating the need to intensify preventive measures and health promotion.[8]

The Estonian health care financing system is based mainly on health insurance contributions (13% of salaries), managed by the Estonian Health Insurance Fund. Public expenditure accounts for about 75% of total health spending, but the share of out-of-pocket expenses by patients

exceeds 23%, which is above the EU average.[9] Particularly high out-of-pocket spending concerns dental care and the purchase of medicines.

In recent years, a series of reforms have been implemented, including the expansion of dental services, the strengthening of primary health care, and the pharmacy sector reform. The National Pharmaceutical Policy 2030 has also been introduced, aiming to ensure the availability and rational use of medicines.[10] The drug reimbursement system is based on pharmacoeconomic analyses, reference prices, and mechanisms that limit patient co-payments.

Estonia's economy is characterized by a strong focus on digital innovation, a solid manufacturing base, and a dynamic service sector, all of which contribute to its sustainable economic growth and development. One of the main branches of Estonia's economy is information technology. Estonia is renowned for its advanced digital infrastructure and a dynamic startup ecosystem, with well-known companies such as Skype, Bolt, and Wise originating here. Key manufacturing industries include electronics, machinery, and wood processing. The manufacturing sector comprises 7,981 enterprises employing over 107,000 people, which accounts for about 22% of the employed population. The construction sector has experienced significant growth, with the number of enterprises increasing by 50.1% between 2010 and 2020. In 2020, approximately 90,000 people were employed in the broad construction sector.[5]

In 2023, Estonia's labor force numbered around 755,000 people. The employment rate in 2023 was 82.1%, and the unemployment rate was 6.7%.[5]

Results

In 2025, Estonia's population was 1.369 million, representing a decrease of 5,500 compared to the previous year. The median age increased to 42.2 years, and forecasts indicate further aging of the population. The fertility rate dropped to 1.31 children per woman, which is below the replacement level. Life expectancy rose to 78.8 years in 2023, but the COVID-19 pandemic led to an increase in avoidable and treatable mortality. The main causes of death are cardiovascular diseases, lung cancer, and alcohol-related conditions. In 2022, healthy life expectancy reached 59.2 years, and between 2012 and 2020 Estonia reduced avoidable mortality by 24%.[1,2]

Legal Acts and Reform Measures in the Health Care System

Since 2017, the Estonian health care system has undergone changes aimed at improving efficiency and financial stability. The most significant of these include:

- Primary health care reform (since 2017), which aims to encourage the establishment of health centers, increase infrastructure investment in primary care, promote the creation of multidisciplinary teams, and strengthen the role of family nurses;
- Expansion of the Health Insurance Fund's revenue base (2018–2022) through the introduction of state budget transfers for non-working pensioners and the gradual increase of the state budget's share in the total health care budget;

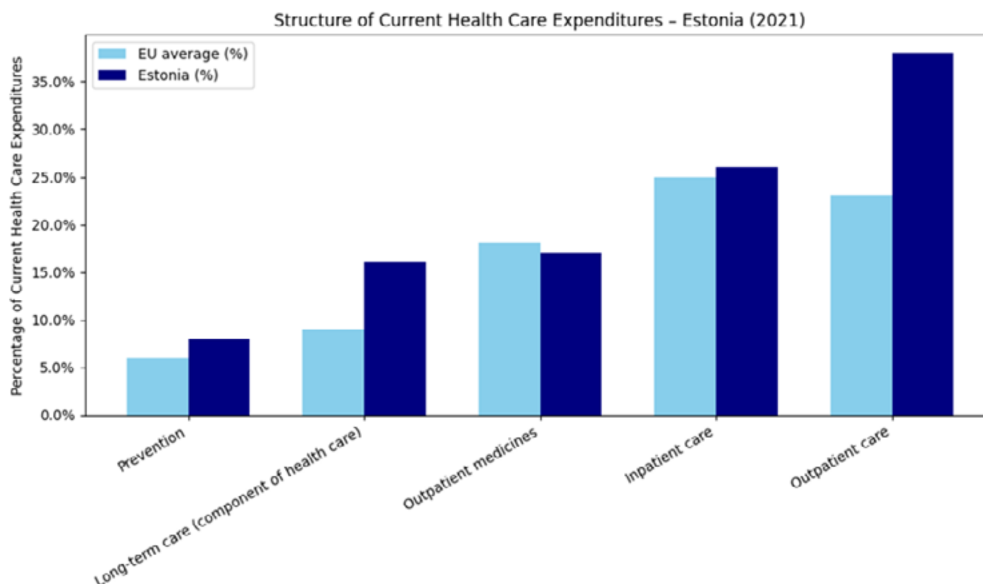

Figure 1. Health expenditure in Estonia – OECD data

- Changes in dental care (2017, 2022) through the reintroduction of dental benefits for adults and increased benefits for the unemployed and those receiving social assistance;
- Pharmacy sector reform (2020), which introduced a ban on wholesalers holding shares in community pharmacies, aiming to prevent vertical integration and consequently strengthen the role of pharmacists.

As a result of these changes and amendments, the revenue base of the Health Insurance Fund was strengthened through state budget transfers for non-working pensioners. The aim was to increase the financial stability of the health care system and make it more resilient to future economic shocks. During the COVID-19 pandemic, it was found that the Fund's reserves were insufficient. Additionally, responsibilities were expanded to include the financing and organization of selected health programs, such as emergency care, health services for people in detention centers, cancer screening programs, residency training, and smoking cessation counseling.

However, despite the increased role and responsibility, the governance framework remained unchanged, raising concerns about the effectiveness of checks and balances. Efforts were made to enhance financial protection, including expanding coverage for pharmaceutical services and increasing dental benefits for low-income individuals. In 2022, Estonia expanded eligibility criteria for increased dental benefits to include those receiving subsistence allowance or registered as unemployed. This is the first health benefit linked to household income, albeit indirectly, as the subsistence allowance is income-dependent.

Recent primary health care reforms (since 2017) have emphasized the importance of multidisciplinary care and prioritized the establishment of primary health care centers over individual practices. EU structural funds have been used to invest in the infrastructure of primary care providers and the expansion of e-Health services to support this reform. Future efforts will need to focus on improving population coverage, planning and maintaining the medical workforce, and above all, ensuring long-term financial stability of the health care system.

Health Care Financing

The Fund also receives transfers from the state budget, as nearly half of the insured are non-contributors, such as children, pensioners, and the unemployed. Special transfers are also made, as during the COVID-19 pandemic. Direct state budget transfers to the Health Insurance Fund have increased significantly over the years and constitute an ever-growing part of Estonia's public funding sources. This approach expands the Fund's revenue base beyond employment-related contributions. For example, in response to the COVID-19 pandemic, the Fund received an additional EUR 221 million from the state budget to manage pandemic-related expenses. While budget transfers had been made previously, the growing share of this funding source aimed to improve the financial stability of the health care system. Nevertheless, these transfers were insufficient, and the Fund's budget deficit was approved for 2025. The Fund allocates the health care budget by organizing purchases from contracted providers.
The Health Insurance Fund's revenues are also supplemented by donations and income generated from financial activities. Despite these diversified revenue streams, the Fund faces financial challenges. Forecasts indicate that while revenues are expected to grow by about 3.2% annually, expenditures may need to increase by 5% annually between 2023 and 2040 to maintain the current level of health care services. This disparity highlights the need for sustainable financial solutions to ensure the long-term viability of Estonia's health care system.

In recent years, a series of reforms have been implemented, including the expansion of dental services, the strengthening of primary health care, and the pharmacy sector reform. Estonia is a leader in digitalization – electronic medical records, e-prescriptions, and the e-Health system, which integrates medical data at the national level, have been implemented. 100% of prescriptions are issued electronically, and citizens have full access to their medical records onlin .[3,4]

Expenditure

Health care expenditures in Estonia amount to 6.9% of GDP, which is lower than the EU average. Adjusted for purchasing power parity (PPP), Estonia's per capita health care spending increased from USD 878 in 2005 to USD 3,313 in 2022. Three-quarters of health care spending is financed from public sources, and public spending as a share of government expenditures gradually increased from 12.2% in 2005 to 15.0% in 2022. Out-of-pocket spending reached 23% in 2022, exceeding the 15% target set in the National Health Plan and the EU average of 14%. Most of these expenditures (32%) are for dental care. Another significant component is the purchase of medicines, with spending on prescription drugs accounting for 14% of total out-of-pocket expenses, and another 12% for over-the-counter medicines. Long-term care services account for 18% of expenditures, and 11% is allocated to consultations and specialist treatment within outpatient specialist care. The Estonian government has implemented reforms to address these disparities, focusing on expanding the health insurance revenue base and consolidating purchases within the Fund. Additionally, efforts have been made to strengthen primary health

care, increase the coverage of dental care, and finance remote consultations in specialist care.

The drug reimbursement system is based on pharmacoeconomic analyses, reference prices, and mechanisms that limit patient co-payments. Reimbursed medicines are assigned to different reimbursement categories (50%, 75%, 90%, 100%). In 2023, the value of the medicinal products market reached 456 million euros. The share of available innovative and orphan drugs is lower than the EU average, and the waiting time for reimbursement is longer than in most European countries.[9,10]

The health insurance system covers about 94% of the population. About half of the insured are covered by employment-related or state contributions, while the other half qualify for insurance without contributions, such as children and people unable to work. People employed part-time, in unstable or informal jobs are more likely to be uninsured. In terms of scope, the Health Insurance Fund offers a wide range of benefits to the insured, although there are some gaps. Nevertheless, uninsured individuals have access to emergency care, cancer screening programs, HIV and tuberculosis treatment, smoking cessation and addiction services (including substitution), COVID-19 diagnostic tests, and related treatment.[1,2]

The Estonian Ministry of Social Affairs plays a key role in shaping and overseeing the national health care system. Its responsibilities cover a wide range of activities aimed at ensuring the health and well-being of Estonia's population. Established in 1993 as a result of the merger of the ministries of health, social affairs, and labor, it was designed to create a unified approach to social policy in Estonia. This consolidation aimed to streamline activities in health, social services, and employment, providing a coherent strategy for improving the quality of life of citizens. In recent years, the Ministry of Social Affairs has played a key role in implementing reforms to strengthen primary health care. These reforms emphasize multidisciplinary care, involving specialists such as home nurses, midwives, and physiotherapists, and promote the creation of primary health care centers instead of individual medical practices.[12,13]

Public Health

Public health in Estonia operates as a decentralized, multi-faceted system addressing major health threats, particularly those that are preventable and related to lifestyle choices. Its goal is to increase positive health outcomes and minimize health risks arising from the living environment. The Estonian Public Health Act, adopted in 1995, provides the basic legal framework for protecting and promoting the health of citizens. This act defines the responsibilities of various government bodies and establishes principles for disease prevention and health promotion in the country. The main objective of the Public Health Act is to protect human health, prevent diseases, and promote overall health status. This is achieved through the fulfillment of duties and obligations assigned to national and local government agencies, as well as other legal entities and individuals.

The act contains definitions related to public health, ensuring a comprehensive understanding of the terms used in legislation. It also specifies the responsibilities of government bodies:

- The Ministry of Social Affairs is responsible for developing and implementing health policies, coordinating public health initiatives, and overseeing the entire health care system;

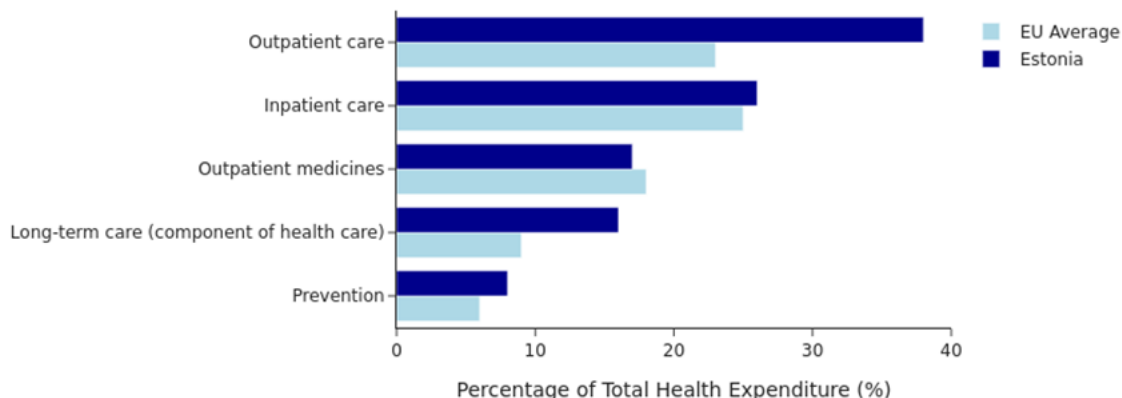

Figure 2. Structure of current health care expenditures in Estonia (2021) by category

- The Health Board acts as the main government agency in the field of public health, responsible for health protection, environmental health, chemical safety, and medical device safety;
- Local authorities are entitled to establish health care centers in their territories, although most local providers operate privately rather than directly under local government units.

The act specifies detailed health protection measures, including regulation of health risks in the environment, surveillance and control of infectious diseases, and implementation of national vaccination programs. The act also mandates the development and implementation of national health programs targeting priority areas such as HIV prevention, cardiovascular diseases, injury prevention, family planning, and anti-smoking initiatives.

National Health Plan

The National Health Plan 2020–2030 is a strategic document based on the foundations set out in the Public Health Act. Building on previous health initiatives, the Plan aims to improve life expectancy, increase the number of healthy life years, and reduce health inequalities among Estonians.

The Plan sets out the main goals to be achieved by 2030:

- Increase life expectancy – the plan assumes that men will reach an average life expectancy of 78 years and women 84 years;
- Increase healthy life years to 62 for men and 63 for women, ensuring that most of life is lived without significant health limitations;
- Reduce health inequalities between genders, regions, and education levels, with particular assurance that life expectancy in no region will be lower than the national average by more than two years, and that the difference in life expectancy between people with primary and higher education will not exceed six years.
- The Plan also defines specific objectives, including:
- Ensuring that the environments in which people live, work, and learn are designed to support healthy choices, making such choices simple and accessible regardless of demographic characteristics;
- Focusing on creating environments that promote health, with easily accessible information on potential health risks in the environment and strategies to mitigate them;
- Developing integrated, high-quality, safe health and social services tailored to individual needs and expectations.

The National Health Plan emphasizes a collaborative approach, involving more than 30 organizations during its formulation. Stakeholders include patient representatives, health care workers, industry partners, researchers, and local authorities, ensuring a comprehensive and inclusive strategy. To ensure the effectiveness of the plan, measurable goals with detailed indicators have been established. These are directly linked to the state budget, and actions and expenditures are subject to annual reviews to assess progress and implement necessary adjustments.

Prevention

Estonia places great emphasis on preventive health care, implementing various programs and initiatives aimed at promoting health and preventing diseases among the population.

The Estonian Health Insurance Fund prioritizes health promotion through social campaigns, dissemination of health information, and advisory services. These activities encourage individuals to adopt healthy lifestyles, ultimately aiming to improve the overall health and quality of life of the population. The Fund finances preventive medical examinations and health checks, particularly targeting risk groups. This facilitates early detection of health problems, enabling timely interventions and health preservation. Preventive activities financed by the Fund are evidence-based and integrated with the National Health Plan.

The National Cardiovascular Disease Prevention Strategy in Estonia was a key element of the country's broader public health program, particularly within the National Health Plan for 2009–2020. Cardiovascular diseases are the leading cause of death in Estonia, making their prevention a national priority. The main goal of the National Cardiovascular Disease Prevention Strategy was to reduce premature mortality from cardiovascular diseases by focusing on risk reduction and early detection. Specific objectives included:

- Reducing smoking rates, especially among young people and risk groups,
- Promoting healthy eating, with particular emphasis on reducing salt, sugar, and saturated fat intake,
- Encouraging physical activity across all age groups,
- Increasing awareness of cardiovascular risk factors through targeted public health campaigns,
- Improving early detection and treatment of hypertension, hypercholesterolemia, and diabetes in primary health care.

As part of primary prevention, national public health campaigns targeting lifestyle factors (e.g., the "Healthy Heart" campaign) were implemented. In addition, school health education programs promoting physical activity and healthy eating were prepared, and smoking cessation programs were introduced in primary health care.

As part of secondary prevention, primary care physicians and family doctors assessed risk in adults, especially those over 40 years of age. Regular health checks were also conducted for screening hypertension, high cholesterol, and obesity, as well as detailed preventive examinations for men aged 40–60 and women aged 50–60, focusing on early detection of heart disease and diabetes.

Legal regulations were also introduced to control tobacco prevalence, restrict advertising, and increase excise taxes on tobacco products, and in cooperation with food producers, information campaigns were prepared to reduce salt intake. As part of monitoring activities, regular health surveys were conducted to observe trends in smoking, physical activity, diet, and cardiovascular risk factors. Health outcomes, including mortality rates from cardiovascular diseases, were monitored by the National Institute for Health Development. The data were also used to assess the coverage and effectiveness of screening and preventive programs in primary care.

By 2018, Estonia had seen a decline in the number of smokers, and the mortality rate from cardiovascular diseases had dropped significantly compared to the beginning of the 21st century. Public awareness of cardiovascular disease risk increased, as did the proportion of people regularly engaging in physical activity. However, regional inequalities persisted, with rural areas showing higher rates of smoking and obesity compared to urban centers. Under the National Health Plan for 2020–2030, cardiovascular disease prevention remains a priority, with continued emphasis on early risk detection, digital health solutions, and targeted programs for high-risk populations.

Vaccinations

The Estonian National Vaccination Program, administered by the Ministry of Social Affairs, is developed in cooperation with an expert committee composed of representatives of health authorities, medical associations, and public health organizations. The program specifies the vaccines to be administered at various stages of life, from infancy to adulthood. The schedule is periodically updated based on epidemiological data and international health recommendations. The Estonian Health Insurance Fund is responsible for organizing vaccine procurement. Only vaccines with appropriate marketing authorization in Estonia are purchased, ensuring compliance with national and European standards. The Health Board oversees the storage and distribution of vaccines to providers, including family doctors and school health centers. This ensures that vaccines are handled and administered under optimal conditions. Providers submit vaccination data to the Health Board, which monitors vaccination coverage and evaluates the effectiveness of the program. These data are used to develop future public health strategies and vaccine supply plans.

Vaccinations included in the national schedule (Table 1) are free of charge at the recommended age. The Health Board conducts public campaigns to educate citizens about the benefits and importance of vaccination. As a result, vaccination coverage rates are high, and ongoing efforts aim to maintain and improve these rates.

Screening Programs

Estonia has implemented comprehensive national cancer screening programs aimed at early detection and preven-

Table 1. Scope of vaccinations included in the schedule of the Estonian National Vaccination Program

Age Group	Vaccinations
Newborns	• Tuberculosis (BCG) – administered to all newborns • Hepatitis B – for newborns in high-risk groups
Infancy and Early Childhood	• Diphtheria, tetanus, pertussis (DTaP) – multiple doses from infancy • Poliomyelitis (IPV) – administered together with DTaP • Haemophilus influenzae type b (Hib) – included in the schedule since September 2005 • Hepatitis B – included in the schedule since 2003 • Rotavirus – included since July 2014 • Pneumococcal conjugate vaccine (PCV)
Beginning of School	• Measles, mumps, rubella (MMR) – first dose at 12 months, second dose before starting school • Diphtheria, tetanus, pertussis (DTaP) – booster doses at school entry and during adolescence
Adolescents	• Human papillomavirus (HPV) – introduced in January 2018 for girls aged 12–14 to prevent cervical cancer
Adults	• Tetanus and diphtheria (Td) – booster doses every 10 years • Influenza – annual vaccination, especially for high-risk groups

tion of various types of cancer (Table 2). These programs are an integral part of the country's public health strategy, focusing on reducing cancer incidence and mortality through systematic screening.

The Estonian Cancer Screening Registry, managed by the National Institute for Health Development, oversees these screening programs. The registry collects data on participation, test results, and subsequent treatment, enabling regular analysis and evaluation of the effectiveness and quality of the programs.

Despite the availability of these screening programs, participation rates in Estonia are lower than the European Union average. Efforts are underway to increase awareness and accessibility in order to improve these rates. In addition, feasibility studies are being conducted to explore the implementation of a national lung cancer screening program.

Discussion

The health care system in Estonia, despite limited resources and a small population, serves as an example of an effective model of health care that combines transparency in decision-making processes, high quality of services, and an innovative approach to digitalization. Compared to Poland, where the system is much larger and more complex, Estonian solutions stand out for their simplicity of management, transparency, and effective implementation of modern technologies.

Like Poland, Estonia faces demographic challenges such as an aging population, negative natural growth, and a declining fertility rate. The median age in Estonia has exceeded 42 years, and forecasts indicate further growth, which is consistent with trends observed in Poland. In both countries, the proportion of elderly people is increasing, generating greater demand for long-term care and treatment of chronic diseases. Life expectancy in Estonia has risen to 78.8 years, while in Poland it is slightly lower, which may result from differences in access to services, the level of prevention, and lifestyle. In both countries, the COVID-19 pandemic caused a setback in avoidable mortality, revealing weaknesses in health care systems and the need for further strengthening.

The Estonian system is based on compulsory health insurance, managed by the Estonian Health Insurance Fund. The health insurance contribution is 13% of salaries, and public expenditure accounts for about 75% of total health spending. In Poland, the financing system is similar-based on compulsory health insurance contributions paid to the National Health Fund. However, the share of public expenditure in total health spending is lower than in Estonia, and out-of-pocket expenses-especially for medicines and dental care-constitute a significant part of costs. In Estonia, the share of out-of-pocket expenses exceeds 23%, which is above the EU average, while in Poland this indicator is also high and represents a significant burden for households, especially for the elderly and chronically ill.

The availability of services in Estonia is high in terms of insurance coverage-the system covers about 94% of the population. Estonia has 20 hospitals, and the number of hospital beds is 4.4 per 1,000 inhabitants. The employment rates of doctors and nurses are lower than the EU average, which is a common problem for both countries. In Poland, the number of hospital beds per 1,000 inhabitants is similar, but the availability of medical staff is limited by shortages, migration of doctors, and uneven distribution of facilities. In 2023, Estonia had the highest rate of unmet health care needs in the EU-12.9% of the population reported lack of access to medical care. In Poland, the problem of unmet health care needs is also significant, especially in the context of long waiting times for specialists, limited access to modern therapies, and regional inequalities.

One of the greatest strengths of the Estonian system is the digitalization of health services. Electronic medical records, e-prescriptions, and the e-Health system, which integrates medical data at the national level, have been implemented. 100% of prescriptions are issued electronically, and citizens have full access to their medical records online. The Estonian e-Ambulance system enables paramedics to access electronic patient records in real time, and the system locates the caller in less than 30 seconds and transmits data to the hospital before the ambulance arrives. Compared to other countries, Estonia stands out for its full integration of e-health systems. Poland has made significant progress in digitalization in recent years-e-prescriptions, e-referrals, and the Internet Patient Account have been implemented, but the level of

Table 2. Summary of Estonian cancer screening programs

Program	Target Population	Method	Invitations
Breast Cancer Screening	Women aged 50–69, every 2 years	Mammography (in one of 11 medical facilities or via a mobile mammography unit)	Invitations sent electronically via notification service or by mail; self-registration also possible
Cervical Cancer Screening	Women aged 30–65, every 5 years	Human papillomavirus (HPV) testing – samples collected by health professionals in medical facilities or using home self-sampling kits	Invitations sent electronically or by mail; possibility to visit health care facilities or order home HPV test kits online
Colorectal Cancer Screening	Men and women aged 60–69, every 2 years	Fecal immunochemical test (FIT) to detect occult blood in stool	Invitations and FIT kits sent by mail

integration and accessibility of medical data is not yet as advanced as in Estonia. Poland is still working on system interoperability and the implementation of telemedicine solutions on a large scale.

The drug reimbursement system in Estonia is based on pharmacoeconomic analyses, reference prices, and mechanisms that limit patient co-payments. Reimbursed medicines are assigned to different reimbursement categories (50%, 75%, 90%, 100%). The share of available innovative and orphan drugs is lower than the EU average, and the waiting time for reimbursement is longer than in most European countries. In Poland, the reimbursement process is regulated by law, and the list of reimbursed medicines is updated every two months by the Ministry of Health. As in Estonia, access to innovative therapies is limited, and the waiting time for reimbursement of new drugs can be long. In both countries, spending on medicines is a significant item in household budgets, indicating the need for further reduction of co-payments and improved access to modern therapies.

Estonia places great emphasis on prevention, implementing national screening programs and public health campaigns. Systematic activities in health promotion and prevention of cardiovascular diseases bring measurable effects, although regional inequalities persist. In Poland, prevention is underfunded, and screening programs have limited reach and low participation rates. Public health indicators are deteriorating, and the growing number of people who are overweight and obese indicates the need to intensify preventive efforts. In this context, Estonian experiences may be an inspiration for Poland, especially in implementing effective prevention and health promotion programs.

In summary, the Estonian health care system, despite limited resources and a small population, is a model of efficiency, transparency, and innovation from which Poland can draw inspiration. Key challenges for both countries include ensuring long-term financial stability, improving access to services for vulnerable groups, further digitalization, and integration of health and social care. The comparison of both systems shows that even with limited resources, it is possible to implement solutions that genuinely improve the quality and accessibility of health care.

Conclusions

The analysis of the Estonian health care system allows for the formulation of several conclusions that are relevant not only for Estonia but may also serve as inspiration for other countries, including Poland. Despite limited financial resources and a small population, Estonia has developed a health care model characterized by high efficiency, transparency, and openness to innovation.

First and foremost, the Estonian system effectively addresses demographic challenges. Population aging, negative natural growth, and a declining fertility rate are problems affecting most European countries. Estonia has implemented health policies tailored to the needs of an aging population, focusing on sustainable planning of public services, development of long-term care, and health promotion. As a result, Estonia has achieved one of the highest increases in life expectancy in the European Union, despite unfavorable demographic trends.

The structure of health care financing in Estonia is based on compulsory health insurance, which ensures system stability and resilience to economic shocks. However, the high share of out-of-pocket expenses, especially for dental care and medicines, indicates the need for further action to reduce financial barriers. A high level of co-payment can lead to inequalities in access to services, especially among low-income and vulnerable groups.

One of the most distinctive elements of the Estonian system is the level of digitalization of health services. The implementation of electronic medical records, e-prescriptions, and an integrated e-Health system enables rapid access to medical data, improves care coordination, and increases patient safety. The e-Ambulance system and the use of blockchain technology to secure medical data are solutions that place Estonia at the forefront of European health care innovators. Digitalization not only streamlines administrative processes but also enables better monitoring of population health and faster response to health threats.

The drug reimbursement system in Estonia is based on rational pharmacoeconomic principles, reference prices, and mechanisms that limit patient co-payments. Nevertheless, access to innovative therapies, including oncology and orphan drugs, remains a challenge. Long waiting times for reimbursement and limited access to modern medicines indicate the need to simplify procedures and increase decision-making flexibility. In the context of the growing importance of personalized and highly specialized therapies, the system must be ready for rapid implementation of innovations.

Estonia is also taking steps to integrate health and social care, which is crucial in the context of growing demand for long-term care. Low public spending in this area requires increased investment and the development of interdisciplinary care teams capable of comprehensively addressing the needs of the elderly and chronically ill.

It is worth emphasizing that the Estonian health care model is flexible and open to change. Reforms implemented in recent years, such as strengthening primary health care, expanding dental services, and pharmacy sector reform, show that the system is ready to adapt to new chal-

lenges. Key factors here include cross-sectoral cooperation, stakeholder engagement, and the use of EU funds for infrastructure and innovation development.

Recommended directions for further reforms include:

- Development of long-term care and integration of health services with social care,
- Reduction of co-payments and increased access to services for vulnerable groups,
- Investment in medical staff, including training and incentives to work in the public sector,
- Further digitalization of the system, including the development of telemedicine and data interoperability,
- Improved access to innovative therapies through simplified reimbursement procedures and increased decision-making flexibility.

Estonia's experiences may serve as inspiration for other countries in the region, especially in terms of transparency, efficiency, and openness to digital innovation. They show that even with limited resources, it is possible to create a health care system that meets the needs of society, is resilient to crises, and ready for future challenges.

In conclusion, the Estonian health care system demonstrates that not only financial outlays but above all effective management, innovation, and the ability to adapt to changing socio-demographic conditions are of key importance. The implementation of digital solutions, rational reimbursement policy, and integration of health and social care are directions that should be developed both in Estonia and in other countries striving to improve the quality and accessibility of health care.

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References

1. Kasekamp K, Habicht T, Võrk A, Köhler K, Reinap M, Kahur K, et al. Estonia: Health System Summary. Copenhagen: WHO Regional Office for Europe; 2024.
2. OECD, European Observatory on Health Systems and Policies. Estonia: Country Health Profile 2023. Paris: OECD Publishing; 2023.
3. E-Health in Estonia [Internet]. e-estonia.com. [cited 2025 Oct 26]. Available from: https://e-estonia.com/solutions/healthcare/e-health
4. E-Health Factsheet [Internet]. na.eventscloud.com. [cited 2025 Oct 26]. Available from: https://na.eventscloud.com/file_uploads/7b7e5e7e6e7e6e7e6e7e6e7e6e7e_E-HealthFactsheet.pdf
5. Statistics Estonia [Internet]. stat.ee. [cited 2025 Oct 26]. Available from: https://stat.ee/en
6. OECD Data Explorer. Population density [Internet]. data-explorer.oecd.org. [cited 2025 Oct 26]. Available from: https://data-explorer.oecd.org
7. European Observatory on Health Systems and Policies. Estonia: Health System Summary (updated). Copenhagen: WHO Regional Office for Europe; 2024.
8. Eurohealth Observatory. Current health expenditure in 2022 [Internet]. eurohealthobservatory.who.int. [cited 2025 Oct 26]. Available from: https://eurohealthobservatory.who.int
9. Ministry of Social Affairs [Internet]. sm.ee. [cited 2025 Oct 26]. Available from: https://www.sm.ee/en
10. Estonia State Agency of Medicines [Internet]. ravimiamet.ee. [cited 2025 Oct 26]. Available from: https://ravimiamet.ee/en
11. Statistics Estonia [Internet]. stat.ee. [cited 2025 Oct 26]. Available from: https://stat.ee/en
12. Laarmann H, Reinap M, Kahur K, Litvinova Y. 30 years of primary health care reforms in Estonia: The role of financial incentives to achieve a multidisciplinary primary health care system. Int J Health Policy Manag. 2023;12:10695763. doi:10.34172/ijhpm.2023.10695763
13. Ministry of Social Affairs. Introduction to the Ministry and our structure [Internet]. sm.ee. [cited 2025 Oct 26]. Available from: https://www.sm.ee/en/ministry-and-contacts/organization-and-contacts/introduction-ministry-and-our-structure