

Estonia's health system in 2010:

Improving performance while recovering from a financial crisis

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Summary: Estonia was struck by the worst financial crisis since regaining independence in 1991. High unemployment rates combined with shrinking revenues in both the public and private sector have had an impact on the available funding for Estonia's health system. Several austerity measures were taken. These include changes in value added tax and excise taxes, as well as health sector specific measures such as changes in the benefit basket and a reduction of prices. However, the crisis has also provided opportunities. It enabled implementing necessary but unpopular reforms and significant stimulus money was directed to health infrastructure.

Key words: health care reform, public health, financing, delivery of health care, Estonia

Much has happened since the launch of the Estonia Health System in Transition review at the WHO European Ministerial Conference on Health Systems on 25 June 2008 in Estonia's capital Tallinn. At this conference, Estonia recognised that a healthier population is a key asset in achieving economic growth. It therefore expressed the commitment to invest in further improving the performance of Estonia's health system in line with the adopted WHO Tallinn Charter: Health Systems for Health and Wealth. This commitment has since been put to the test, as the country has been struck by the worst financial crisis since regaining independence in 1991. Estonia's vulnerable, small and open economy, already plagued by a large, persistent current account deficit and a rapidly expanding gross external debt, declined by 3.6% in 2008 and 14.1% in 2009 as a result of the crisis. The unemployment rate, which was hov-

ering around 4% as late as the second quarter of 2008, rose in the fourth quarter of 2009 to over 15%, the highest level since 1991, and only surpassed by Latvia, Spain and Lithuania.¹

At the same time, Estonia's prudent and balanced fiscal policy of recent years will result in the joining of the Euro in 2011 but it has also led to a shrinking public sector. The shrinking revenues both in the public and private sectors reduced the availability of funding for public health and investments in population health, albeit to a lesser degree than other publicly funded sectors. Furthermore, the situation in the labour market has had important repercussions for the funding of health care, where earmarked social payroll tax is the main source of funding. Ironically, perhaps, the financial crisis has also provided opportunities for the health system, for example in terms of implementing necessary but unpopular reforms and in the form of significant amounts of stimulus money directed to health infrastructure. In this review, we assess the Estonian health system in light of the financial crisis. Based on the health system review we made in 2008, we will examine the various components of the Estonian health system and their specific recent reforms, as well as progress achieved, before concluding with an outlook for the future.

Background

Estonia, the northernmost of the Baltic States, with a population of 1.32 million, is a democratic parliamentary republic and has belonged to the North Atlantic Treaty Organisation (NATO) and the European Union (EU) since 2004, and the Organisation for Economic Cooperation and Development since 2010. Since regaining independence, the political environment has been stable enough to implement various economic and social sector reforms which aim to further ensure stability in the country. Until the financial crisis hit in 2008, Estonia had enjoyed a level of continuous above EU average annual economic growth. Since the late 1990s, an increasing birth rate has been observed, yet this is around 4% lower than current death rates. Life expectancy has been steadily increasing since the mid-1990s and in 2008 for women and men respectively was 79.6 and 68.7 years, being one of the largest gender differences in Europe.²

The main challenge in terms of disease burden is premature mortality caused by external causes as well as lifestyle-related risk factors. The working-age population bears more than half the current burden of disease that to a large extent could be avoided.³ The main risk factors leading to ill health are related to tobacco use, alcohol consumption, low levels of physical

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activity and unhealthy nutrition. Some positive trends are visible regarding decreasing tobacco use among adults; moreover since 2008 there has also been a decrease in alcohol consumption. This can be seen as the result of the financial crisis and a new emphasis on indirect taxation and other measures. Excise taxes have been gradually increased for both tobacco and alcohol products since 2008 and are likely to be increased further. In addition, the overall increase in value added tax (VAT) has contributed to price increases in health-damaging products (but controversially also made healthy products more expensive).

Despite this, the rising alcohol consumption and drug use among adolescents remains a worrying trend. Other positive trends since the early 2000s include high vaccination rates and decreasing incidence rates of communicable diseases. One of the most serious public health challenges facing the Estonian health system is the continuing high HIV prevalence and incidence (which peaked in 2001).⁴ During the financial crisis investments in prevention and treatment of tuberculosis and HIV/Aids have been sustained and both diseases show declining incidence rates. However, this was done at the expense of the investments in the prevention of non-communicable diseases. The mid- and long-term impact of this measure is unclear.

Organisation and governance

The steward of the health system in Estonia is the Ministry of Social Affairs. The Ministry is supported in its tasks by various public agencies. These include the National Institute for Health Development, the Health Board (which merged several public institutions on health protection and supervision of health care in 2010) and the State Agency of Medicines. Another important actor is the Estonian Health Insurance Fund (EHIF), which is a public independent body responsible for pooling of funds and purchasing health care services (and some disease prevention and health promotion programmes). Health care providers include private primary care units; (mainly publicly owned) hospitals under private regulation; and various nongovernmental organisations (NGOs) and professional associations. Also non-health sectors (for example, transport and economy, agriculture, environment) have started to be more actively involved in health system activities due to the development and

implementation of inter-sectoral public health strategies (for example, tackling HIV/AIDS and cardiovascular diseases strategies).

Fundamental reforms aimed at developing a modern health system took place in the early 1990s. These were followed by a legislative review in the period 2000–2003 that addressed various areas including health financing, service provision and the regulation of relations between different actors (for example, purchaser, provider and patient). The period since 2004 can be characterised by preparing, launching and implementing inter-sectoral public health strategies. To bring the various initiatives under one umbrella and set a clear vision for the future, a long-term overall National Health Plan running until 2020 covering public health and health care, as well as tackling key social determinants of health, was launched a few years ago and finally approved by the Government in July 2008.

Financing

Estonia's health expenditure as a share of GDP is significantly lower than that of other EU Member States. However, government spending on health as share of total social expenditure is similar to the EU-27 average.⁵ Estonian health care is mainly publicly funded through mandatory health insurance contributions in the form of an earmarked social payroll tax, which accounted for two-thirds of total health expenditure in recent years.⁵ The Ministry of Social Affairs is responsible for financing emergency care for uninsured people, as well as for ambulance services and public health programmes. The role of the local municipalities in health financing is relatively small yet diverse. Private expenditure comprises approximately one quarter of all health expenditure. Out-of-pocket payments (OOPs) account for more than 90% of private health spending.⁵ Most OOPs are co-payments for pharmaceuticals and for dental care. This growing out-of-pocket expenditure may hinder access to health care for low-income population groups and as a consequence, health financing has become more regressive over recent years.⁶ From 2009 onwards, this additional financial burden has been shifted to patients. First, small cash benefits for dental checkups for adults were excluded from the benefit package. Second, the VAT on pharmaceuticals was increased from 5% to 9% in early 2009. Third, in 2010, a 15% co-insurance for inpatient nursing care was introduced.

The core purchaser of health care services for insured individuals is the Estonian Health Insurance Fund (EHIF). The health insurance system is mandatory and covers over 95% of the population. In 2007, coverage was extended to cover the registered and job-seeking unemployed, which provided important protection against the crisis. Contributions are related to employment, but the share of non-contributing individuals covered (such as children and pensioners) represents almost half of all the insured. In the longer term this is a threat to the financial sustainability of the health system, as the narrow revenue base is mostly related to wages and the population is ageing. Adding to this already difficult outlook is the sharp rise since 2008 in the number of the unemployed coupled with the decrease in salaries, which together caused a drop in social tax revenues.

Moreover, total health system resources will further decline as the Unemployment Insurance Fund or state contributions on behalf of the unemployed are lower than the average contributions of the employed. Even though over recent years steps have been taken to increase population coverage, as well as the revenue base, the impact of these steps is still marginal. In parallel until 2008, more resources have been allocated to both health care and public health programmes, but the financial crisis reversed this trend. In 2010 the key challenge is to retain the benefits of earlier investments in public health and healthy ageing, while at the same time also providing mid-term solutions for sustainable health care financing. Clearly, broadening the public revenue base is one of the most obvious options, particularly since a recent study shows that efficiency gains alone do not bridge the revenue and expenditure gap in the long term.⁵

The financial crisis provided an opportunity to implement unpopular changes planned for years. More responsibility to cover short term sick leave benefits was shifted from the EHIF to workers and employers in mid 2009. This will likely impact both on the behaviour of employers and the health behaviour of employees. However, the EHIF funds no longer needed for sick leave benefits were reallocated to cover health care. As a result, the reductions in access to care have not been as drastic as might have been anticipated in 2009.

Health services purchasing builds on a contractual relationship with providers, as

well as being linked to financial incentives. Contracts and procedures to involve providers in negotiations have continuously been developed and, similarly, new payment mechanisms have been introduced. For hospitals a diagnosis-related group(s) (DRG) system has been implemented since 2004, complementing the fee-for-service payments and those related to bed-days. Gradually the proportion paid by the DRG system has been increased, culminating in a final increase in 2009, from 50% to 70%. With regard to primary care, age-adjusted capitation, fee-for-service payments for selected areas and basic allowances have been complemented by a quality bonus system, implemented in 2006, which aims to foster disease prevention and management of selected chronic conditions.

Further discussions on how to stimulate the performance of the providers, including quality considerations, have been ongoing in recent years.^{7,8} To respond to the decreasing revenues resulting from the crisis, the prices paid to providers for services covered by the EHIF have been decreased by 6% until the end of 2010. Moreover, the volume of contracted care was reduced by extending waiting times and by reducing treatment cases in specialist care by 5%, while simultaneously shifting more cases to day care and outpatient settings. At the primary care level, contract volumes have remained stable in order to respond to the most urgent needs adequately.

Physical and human resources

Estonia inherited from the Soviet era a large, ineffective hospital network with poor facilities. Various structural and managerial reforms in the 1990s reduced the number of hospitals (and beds) and restructured the providers' network. The reforms aimed to modernise the network and enable the provision of high-quality services, while also ensuring sufficient health services access. As a result, Estonia has developed a well-equipped infrastructure for primary care that builds on family physicians and nurses. However, the process to modernise the facilities is still ongoing and is supported by various resources, including EU structural funds. Part of a stimulus package was aimed at fostering ongoing and new investments in high level hospitals; new high-tech facilities that were opened in Tartu and Tallinn in 2009.

In addition, long-term care infrastructure

investments from EU structural funds have started in the 2010 to upgrade around twenty hospitals with long term care facilities. Interestingly, in parallel to these additional investments, the government stopped the yearly transfers to the EHIF intended for capital investment, even though this is a legal duty. Although there is a net increase in investments in hospital infrastructure, recent analysis shows that it is important that (1) excess hospital capacity is reduced along the lines proposed in the Hospital Master Plan 2015; (2) a better investment strategy is developed, which serves health system objectives rather than individual providers; and (3) a further fragmentation of health care financing is avoided.

Medical training for doctors is provided by one university in Tartu. For other professionals (including nurses) this has been centralised to a few medical schools to ensure a higher quality of training. The curricula for health specialists and other health workers were reviewed in the 1990s and were brought in line with EU law in anticipation of the 2004 accession. Since a general lack of human resources exists in the health care sector, strong emphasis has been laid on long-term planning and increased training for nurses and doctors. EU accession in 2004 led to a temporary migration spike in doctors and nurses migrating to neighbouring EU countries. In recent years until 2009, however, migration has decreased and the main challenges are to retain qualified professionals in the health care sector, along with the ageing of the current workforce.

The period since the mid-1990s can also be characterised by high investments in information and communication technologies. This has led to e-health solutions which aim to achieve better coordination, improved access and transparency. Since 2005, a countrywide e-health approach encompasses four innovative pillars: Electronic Health Records (EHR), Digital Registrations, Digital Imaging and Digital Prescriptions. Although progress has been made on all fronts, implementing this system countrywide has proven more difficult than initially anticipated. As a first concrete step, the digital prescription was launched and has become gradually functional in 2010.

Provision of services

Reforms which started in the early 1990s introduced a purchaser and provider split; strengthened primary care; free choice of

provider; and a high level of provider autonomy in the Estonian health system. As a result, the current health system is built around countrywide primary care centred on family medicine, with specially trained doctors and nurses. The aim is to provide both curative and preventive services by teams led by family physicians. Further primary care is supported by ambulance services with medical teams (including a doctor) available all over Estonia. Recently, individual nurse visits have been introduced and since 2010 midwives are permitted to operate their own private practice. This should broaden the scope of primary care services available and builds on the national primary care strategy adopted in 2009.

Specialised care has increasingly been provided in outpatient settings and care involving high technology has been further centralised in key hospitals. Furthermore, over the years, the availability of and access to pharmaceuticals has improved significantly and more recently promotion of generic substitution has become a priority. Increasing importance of public health services has led to development of services and standards, raised awareness of population needs, as well a more public health approach to health care services.

Heightened concerns of the population are waiting times to access outpatient specialised services and overall access to health care services. Various initiatives have been implemented, including opening a 24-hour primary care call centre in late 2005; widening the scope of services; and introducing financial incentives in primary care. Contrasting these initiatives is the new crisis measure of deliberately increasing waiting times for out-patient specialists' visits in a search for savings, even if this has not affected waiting time for planned inpatient care and surgery (for example, hip replacement, cataract removal, cardio surgery). Possible negative effects should be monitored closely.

Nevertheless, the Estonian population continues to be satisfied with their health system and the highest population satisfaction to this date was observed in the last available (late 2009) annual patient survey. The financial crisis has also increased the public's reliance on the insurance system and the need for security. This can be observed in the trend that an increasing number of citizens prefer a situation in which all services are covered but with longer waiting times to a situation with less services but rapid access.⁹

In addition, more emphasis is now being put on quality of care, which is visible in initiatives such as voluntary accreditation of professionals by their associations, introduction of quality handbooks in hospitals and the development of clinical guidelines for both professionals and patients. In relation to both access and quality, the coordination and approach to tackling chronic conditions are continuous concerns. Several additional topics need further attention, most noticeably patient empowerment, self-care, as well as the development of further home care and long-term care services.

Discussion

Estonia has vigorously and quite successfully reformed its health system over recent decades. Larger scale legislative reforms in the early 1990s and at the beginning of this century were followed by incremental changes during the period 2003–2008. Since then, the dominant theme in Estonian health care was coping with the financial crisis and ensuring financial sustainability in the long term. The current system is built on solidarity-based health financing; a modern provider network based on family medicine-centred primary health care; modern hospital services; and more concentration on public health initiatives. This has resulted in a steadily increasing life expectancy and continuously high rates of population satisfaction with access and quality.

The Estonian health system is in search of a new equilibrium after many reforms have been implemented in the health system since 2008. Although more evidence on the impact of these changes should become available in future years in the form of health surveys and more reliable data on key indicators, some preliminary conclusions can be drawn.

First, non health sector specific measures on excise taxes and VAT have increased the prices of health damaging behaviours (for example, alcohol, tobacco) and led to some positive trends among adults in terms of their smoking and drinking behaviours. It needs to be noted, however, that the increase of VAT also impacts on healthy behaviours as nutrition has become more costly in real and relative terms because unemployment rose while the real income of households decreased.

Second, the changes in tax policy since 2009 have not only increased the input prices for the providers but also the price of pharmaceuticals for patients. This may

have undesired effects on OOP spending, which has already been increasing over time, and also on equity of access, although a reference pricing system should keep pharmaceuticals accessible to all.

Third, measures have been concentrating mostly on the demand side. They include expanding cost-sharing requirements; changing the benefit package and thus access to certain services; using some of the financial reserves that were collected in better times by the EHIF; and reducing the prices for health services.

Fourth, on the supply side the responsibility to achieve cost savings and efficiency has been delegated to providers. The government's plan to swiftly implement the hospital master plan has been slowed down (compared to 2009) and no central steering has been introduced for (expensive) high tech equipment. The additional investments in infrastructure will surely improve buildings and access to the latest technologies. Yet it is not clear if these investments are bringing additional efficiency to service provision and how the new structure will be financed in the long term.

Fifth, during the crisis the emphasis has been on primary health care by maintaining the purchasing budget at pre-crisis levels. In addition, public health was made one of the priorities and the EHIF has continuously supported disease prevention and health promotion activities.

Finally, in the public health sector, priority was given to preventing communicable diseases at the expense of investments in non-communicable diseases. But the launch of various initiatives targeting NCD among the working age population supported from the EU Social Fund in recent years is a promising development, which could mitigate the cuts in the public health budget.

Conclusion

Going forward, a number of challenges remain for the Estonian health system. Many of these are the same as before the financial crisis. They include reducing inequities in health status and health behaviour; improving control of and responding to the consequences of the high rates of HIV and related conditions; improving regulation and governance of providers to ensure better public accountability and performance; having the necessary human resources and competences at all levels; and ensuring sustainable health financing arrangements that facil-

itate timely access to care of high quality.

This last challenge is particularly important firstly in the face of rising patient expectations, accompanied with increased costs and volume of health care services, and secondly in the hostile macroeconomic environment. If solidarity and equity are to be maintained and guaranteed for the future, additional resources need to be found from public sources of revenue and from efficiency gains in the system simultaneously. Only time will tell how well the often praised Estonian health system will succeed in protecting population health in this process.

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