CASE STUDY

The impact of the financial crisis on the health system and health in Latvia

Maris Taube Uldis Mitenbergs Anna Sagan





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Abbreviations

DRG Diagnostic-related group

EU European Union

EU12 Member States before 1995

Member States before May 2004 **EU15** Member States at January 2007 **EU27**

European Union Statistics on Income and Living Conditions **EU-SILC**

GDP Gross domestic product GP General practitioner

IMF International Monetary Fund

National Health Service NHS

Out of pocket OOP

SDR Standardized death rate

VAT Value added tax

WHO World Health Organization

Foreword

This report was produced as part of a series of six country case studies and forms part of a larger study on the impact of the financial crisis since 2008-2009 on health systems in the European Region. The countries studied in depth are Estonia, Greece, Ireland, Latvia, Lithuania and Portugal, which represent a selection of countries hit relatively hard by the global financial and economic crisis. In-depth analysis of individual countries, led by authors from the country concerned, adds to understanding of both the impact of a deteriorating fiscal position and the policy measures put in place as a result. These case studies complement a broader analysis which summarizes official data sources and the results of a survey of key informants in countries of the WHO European Region; they will also be published as part of a two volume study conducted jointly by the European Observatory on Health Systems and Policies and the WHO Regional Office for Europe.

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Introduction

Latvia's economy and its health system were not well prepared for the financial crisis. As a result of growth in gross domestic product (GDP) driven by consumption and real estate investment, in addition to a growing current account deficit, the economy developed dangerous imbalances and fiscal space was constrained when capital inflows from abroad stopped. Population health was relatively poor compared with the rest of Europe, total spending on health was low (including as a share of public expenditure), out-of-pocket (OOP) payments were high and there was not enough emphasis on primary care and prevention. Although the financial crisis brought enormous social and economic challenges, the presence of external agents and Latvia's commitment to loan conditionalities provided strong impetus for the Ministry of Health to push through less popular reforms that had been difficult to implement previously.

Health system reforms introduced in response to the crisis did not always follow objective and verifiable criteria and were sometimes influenced by political opportunities. Nevertheless, many necessary changes were made, including a shift away from hospital care to ambulatory and home care, concentration of state functions into fewer institutions with reduced staff numbers and rationalization of publicly financed pharmaceutical care. Throughout the reform process, the government tried to protect the most vulnerable groups of the population. The challenge now is to continue the reform effort in the context of an improving economy and less political pressure for change. The key challenges are to ensure a stable flow of funds to the health sector, while increasing public spending on health and reducing heavy reliance on OOP payments, and to continue to improve efficiency and equitable access to health care.

The nature and magnitude of the financial and economic crisis

1.1 The origins and immediate effects of the crisis

The 1990s and 2000s were turbulent decades for the Latvian economy. GDP declined by nearly 35% in 1992 and fluctuating growth rates persisted in the latter part of the 1990s (Mitenbergs et al., 2012). From 2000 to 2007, Latvia grew faster than any economy in the European Union (EU), reaching doubledigit real GDP growth rates in 2005-2007 (the annual average growth rate was 10.3% during that period) (LV Table 1) (Ministry of Economics, 2012). High GDP growth was driven by a rapid expansion in domestic demand. Private consumption and investments were fuelled by large foreign capital inflows and a very high credit growth, which were mainly concentrated in real estate and other non-export sectors of the economy. Another factor driving domestic demand was high government spending fuelled by high tax revenues1 and the government's pro-cyclical fiscal stance. Expenditure in all governmental functions at least doubled between 2004 and 2008 (World Bank, 2010a). This boom was not sustainable and the economy developed dangerous imbalances: on the eve of the crisis in 2007 consumer price inflation had reached double-digits, property prices had increased four-fold in the previous few years and nominal wages had doubled between 2004 and 2007, increasing much more than productivity. Imports grew much faster than exports and resulted in current account deficits above 20% of GDP in 2006 and 2007 (European Commission, 2012). Despite this, Latvia had no problems in attracting funding until the global financial turmoil worsened in late 2008.

¹ This was the case despite a relatively low tax burden; in 2007, Latvia's tax burden as a percentage of GDP was the fourth lowest in the EU.

LV Table 1 Demographic and economic indicators in Latvia, 2000–2012

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total population (in thousands)	I	I	1	2,331.5	2,319.0	2,306.4	2,294.6	2,281.3	2,270.9	2,261.3	2,248.4	2,074.6	2,041.8
People aged 65 and over (% total population)	I	I	I	15.9	16.2	16.5	16.8	17.1	17.2	17.3	17.4	18.4	18.6
GDP per capita (€)	3,700 (b)	4,000 (b)	4,300 (b)	4,700 (b)	5,200 (b)	5,800 (b)	(a)	7,200 (b)	7,000 (d)	5,900 (b)	6,400 (b)	6,800	
Real GDP growth (%)	I	1	I	7.6 (b)	8.9 (b)	10.1 (b)	11.2 (b)	9.6 (b)	-3.3 (b)	-17.7 (b)	-0.9 (b)	(p) 2.5	5.6
Government deficit (% GDP)	I	I	-2.3	1.6	0.1-	4:0-	-0.5	4.0-	-4.2	8.6-	<u>—</u>	-3.4	-2.1
Government consolidated gross debt (% GDP)	I	1	13.6	14.7	15	12.5	10.7	0.0	19.8	36.7	44.5	42.2	44.4
Long-term interest rates (10-year government rate) (%)	1	1	1	I	4.85	3.53	4.16	5.63	6.71	15.5	6.85	00.9	4.10
Total unemployment (% total labour force) ^a	14.5	13.4	13.4	10.7	10.1	0.0	7.0	0.1	7.7	17.5	19.0	16.5 (b)	13.8 (f)
Long-term unemployment (% active population)	7.9	7.2	Ω. Θ.	4.7	0,4	4.4	2.7	1.7	2.1	6.4	<u>α</u>	<u>α</u>	7.8

Notes: a Employment data for 2011 and 2012 have been recalculated using data from the Population Census of 2011; recalculations for earlier years were not available at the time of writing. Therefore employment data for 2011 and 2012 cannot be compared with data from the previous years. (b): Break in the series; (f): Forecast. Sources: Ministry of Economics, 2012; European Central Bank, 2013; Eurostat, 2013a.

Already in early 2007, increasing awareness of the country's economic imbalances prompted speculation about a potential devaluation of the lat (from 2005 to 2013 the lat had been pegged to the euro within the EU's exchangerate mechanism) and whether the Bank of Latvia would have to intervene to support the currency. By 2008, economic recession had begun in Latvia. The contraction reflected a combination of the sudden stop in capital inflows, a freeze on liquidity and weak external demand, exacerbated by a loss of competitiveness (wages increasing faster than productivity) dating back to the boom years. This was further aggravated by the unfolding global financial crisis and record commodity prices (European Commission, 2012). The general risk aversion in global markets reached a peak after the collapse of Lehman Brothers, when the Latvian Government lost access to financial markets and the second largest bank, Parex, had to be bailed out in November 2008 (European Commission, 2012; Delna, 2013). A renewed bout of speculation in late 2008 prompted further concerns over the sustainability of the lat's peg to the euro (Economist Intelligence Unit, 2009).

These developments inevitably had a significant impact on public finances, with the budget deficit widening from 0.4% of GDP in 2007 to 4.2% in 2008 (LV Table 1, Central Statistical Bureau of Latvia, 2013). General government gross debt, which used to be one of the lowest in Europe, at only 9% of GDP in 2007 (Eurostat, 2013a), increased to almost 20% of GDP in 2008, and to over 42% of GDP in 2011; yet it still remained well below the average for the 27 EU Member States (EU27) of over 80% of GDP (Eurostat, 2013a). GDP contracted by 10.5% in the last quarter of 2008 (Cochrane, 2009) and at the end of February 2009, Standard & Poor's lowered Latvia's credit rating to BB+, one level below investment grade, as the country faced bankruptcy if budget spending was not cut (Cochrane, 2009). Long-term interest rates on government bonds doubled between 2008 and 2009 (LV Table 1).

1.2 Government responses to the crisis

In late 2008, Latvia applied for financial assistance from international lenders. The agreed programme was centred on maintaining the currency peg in order to create conditions for accession to European Economic and Monetary Union in the medium term (the authorities had initially aimed to join in 2008 but high inflation forced them to drop this goal) (Economist Intelligence Unit, 2009). A total of €7.5 billion was made available between the end of 2008 and the first quarter of 2011, including a stand-by loan of around €1.7 billion from the International Monetary Fund (IMF) approved on 23 December 2008. The balance was provided mainly by the EU (a medium-term loan of up to €3.1 billion, with a maximum average maturity of seven years, agreed in

early 2009), Scandinavian countries and the World Bank. As a precondition to the loan, the government pledged to implement significant restructuring measures in the Economic Stabilization and Growth Revival Programme.² The key features of this Programme, adopted by the Latvian authorities on 12 December 2008 (Cabinet of Ministers, 2008), included:

- stringent and stable monetary policy: fixing a peg rate for the Latvian lat to the euro;
- stringent fiscal policy: balancing of state and local government expenditure with their revenues (e.g. setting the upper limit for the state budget deficit at below 5.0% of GDP in 2009, 4.8% of GDP in 2010 and 2.8% of GDP in 2011):
- reducing salaries of public sector workers;
- reducing the number of public administration employees by at least 15% within two years;
- increasing the elasticity of the labour market by supporting employment (including training) of the temporarily unemployed;
- facilitating investment, including maintenance of investments in state financed and supported programmes;
- ensuring the availability of financing for activities related to the restructuring of the national economy, particularly for programmes co-financed with EU structural funds under conditions of "frozen" (i.e. severely constrained) credit resources;
- stabilizing the financial sector: provision of state aid to, and intensified supervision of, credit institutions in order to strengthen their reliability and performance; and
- maintaining social security measures to support the socially most vulnerable groups.

Health care was mentioned explicitly in Latvia's Economic Stablization and Growth Revival Programme as one of the sectors where cuts to public administration would be made (Cabinet of Ministers, 2008, p. 3). The health sector was further singled out in the Letter of Intent signed with the IMF: "We have approached the World Bank to seek technical assistance on the comprehensive reforms of the education, civil service, state administration and the health care systems that we will launch in 2009. Once completed, these could eventually deliver annual savings of about 2% of GDP, including staff savings that will commence in 2010" (Government of Latvia, 2008, p. 10).

These conditions were listed in the Letter of Intent signed with the IMF and the Memorandum of Understanding signed with the European Community.

Between 2008 and 2011, significant budget consolidation measures were implemented, translating into a cumulative fiscal adjustment of 16.6% of GDP over that period (Ministry of Finance, 2013a). These measures included the following.

Cuts in public sector expenditures. This included the health sector and the Ministry of Health's budget dropped by 12.6% in 2009 (to LVL 503.7 million) and by 1.5% in 2010 (to LVL 496 million) (Ministry of Health, 2012) along with a minimum 10% cut in prices and an average 20% cut in the salaries of all health workers in 2009 (van Ginneken et al., 2012).

Increases in tax rates. In 2009, there were increases in the the rate of value added tax (VAT) rate (from 18% to 21% and from 5% to 10% for goods with a reduced tax rate, including pharmaceuticals and medical devices). In 2011 the VAT rate increased to 22% (to 12% for goods with a reduced tax rate) and was reduced back to 21% in July 2012 (no change for goods with a reduced tax rate). Excise tax on alcohol, tobacco and fuel also increased (rates vary depending on the amount purchased). The personal income tax rate was reduced from 25% to 23% in 2009, increased to 26% in 2010, and then reduced again to 25% in 2011 (and to 24% as of January 2013) along with an increase in the social insurance tax from 33.09% to 35.09%.

Public administration reforms. There were reductions in the number of ministries and public agencies.

From early 2010, economic growth slowly resumed and GDP increased by 5.5% in 2011, mainly driven by an increase in exports. Since then, private consumption has been gradually stabilizing but public consumption is very low because of the budget consolidation measures implemented in 2010. However, these measures allowed Latvia to keep its budget deficit well below the target agreed with the EU and the IMF, in order to comply with the Maastricht stability criterion on budget deficits in 2013 and 2014; the country joined the Eurozone and adopted the euro as its national currency in 2014. In addition, after the initial deflation caused by the crisis, prices grew again (at 4.4% in 2011) and GDP grew at about 5% in 2012 and 4% in 2013 (Ministry of Finance, 2012; Eurostat, 2013a). The situation in the labour market was expected to gradually improve in subsequent years; however, increases in employment are likely to be moderate (on average 2% per year) as growth will mainly depend on productivity increases (Mitenbergs et al., 2012).

On 22 December 2011, the IMF's Board supported the closure of Latvia's international loan programme. Of €7.5 billion that was made available, Latvia used only €4.5 billion. The IMF country report released in early 2012 stated that Latvia achieved many of its main objectives: "International reserves have recovered to above pre-crisis levels and the exchange-rate peg has held. The

financial sector has strengthened, while fiscal adjustment ... has preserved fiscal sustainability. Competitiveness has improved but this was accompanied by a collapse in output, high unemployment, and (despite the programme's emphasis on emergency safety nets) increasing poverty, while external debt and problem assets in the banking sector have also increased" (International Monetary Fund, 2012, p. 4).

1.3 Broader consequences

With strong economic growth, the level of registered unemployment had been steadily falling in recent years, from 14.4% in 2000 (Tragakes et al., 2008) to 5.7% in 2007 (Economist Intelligence Unit, 2009). However, low saving rates, likely encouraged by the easy availability of credit, made Latvian households more vulnerable to economic shocks. In 2007, the household savings rate in Latvia was the lowest in Europe and it was the only country in Europe with a negative savings rate (-4.3%).3 Low (but positive) savings rates were also recorded in other Baltic countries (Lithuania, Estonia) and the United Kingdom, compared with an average of 10.8% in the EU27 (Eurostat, 2009).

Although according to the Central Statistical Bureau of Latvia (2013) the overall share of households reporting economic strain decreased between 2005 and 2008, as much as 80.4% of the poorest quintile indicated suffering from such strain in 2008. According to the World Bank (2010a), household spending on health rose significantly between 2003 and 2008, from 3.6% of household budgets to 4.8%. During this period, health care expenditures of the population increased by 99% while total expenditure grew by 46%. However, in 2008, the share of respondents to the European Union Statistics on Income and Living Conditions (EU-SILC) survey reporting unmet need for medical examination or treatment because it was "too expensive" was at its lowest point since 2005 (see LV Figs 4 and 5 in section 4.2).

Health expenditure as a percentage of all expenditures grew more among the three poorest quintiles, implying that financial protection for the poor worsened. Poorer households also spent more on health as a percentage of their expenditure compared with the richer households: in 2008, the three poorest quintiles (i.e. the first, second and third quintiles) spent 4.8%, 6.6% and 5.4%, respectively, compared with 4.1% and 4.2% for the fourth and fifth quintiles.

³ A negative savings rate means that households spend more than they receive as regular income, and finance some of their expenditure through credit or, to a lesser extent, through exceptional resources such as gains arising from the sale of (mostly financial) assets or running down cash/deposits. One factor that might have contributed to this negative savings rate was tax evasion (grey economy).

⁴ Households that indicated that they could not afford at least two of the following items were considered to suffer from economic strain: eat a meal with meat, chicken or fish or equivalent vegetarian meal every second day; cover unexpected expenses from own resources; spend one week annual holiday away from home; financially afford to keep their dwelling warm; cover utility costs, rent and credit (including loans and purchase instalments for purchase of goods).

However, combining household and government spending on health services (2008 data) suggests that, on the one hand, public spending in Latvia almost fully covered a catastrophic insurance system, financing 95% of inpatient care and emergency services and 76% of general and secondary ambulatory services. On the other hand, it financed only 28% of pharmaceuticals and medical devices, and 11% of dentistry (most state expenditure on dentistry is for children only) (World Bank, 2010a).

Health system pressures prior to the crisis

Prior to the crisis, the Latvian health care system faced a number of pressures and challenges. These are discussed first in terms of demand for health care and then in terms of health care supply.

2.1 Demand-side pressures

Latvia has been slow relative to other EU accession countries to shake off the inheritance of poor health outcomes from the Soviet era (World Bank, 2010a).⁵ The average life expectancy in Latvia, although significantly higher than in the 1990s, remains the lowest among the Baltic countries and is much lower than the average for the EU27 (approximately eight years lower for males and four years lower for females, according to 2010 data). Diseases of the circulatory system are the main cause of mortality and the standardized death rate (SDR) for these diseases is considerably higher than the average for EU12 and almost three times higher than the EU15 average. Malignant neoplasms (cancers) remain the second most common cause of mortality. The SDR for malignant neoplasms has been fluctuating at about the same level since the 1990s and incidence has increased by over 30% between 2000 and 2010. Death attributable to external causes (injury or poisoning) remains the third most important cause of death and is the second highest in all EU27 Member States (after Lithuania; 2010 data).

Risk factors for circulatory diseases, such as unhealthy habits and behaviour (smoking, unbalanced diet, low physical activity and the consequently high body mass index), remain highly prevalent in Latvia (e.g. Latvia is placed second, after Greece, among the EU27 in terms of smoking prevalence). In addition, the incidence of diabetes mellitus (another risk factor for circulatory

⁵ Although most data in this section is for 2010, similar observations can be made for 2007 (i.e. before the crisis).

diseases) more than doubled between 2000 and 2012, from 145 to 388 per 100 000 (Mitenbergs et al., 2012). Little attention and resources were given to reversing the mortality trends through better primary care and prevention. Instead, resources were spent to improve acute care upon occurrence of a health event (World Bank, 2010a). Population ageing, like elsewhere in Europe, is putting additional pressure on the health system and its resources.

2.2 Supply-side pressures

Health system financing

Spending on health care increased by more than 82% in real terms (in constant (2005) lats) between 2000 and 2007, outpacing the general economy, which grew by 56% during the same period; however, spending per capita (purchasing power parity), at US\$ 1192 in 2008 (WHO, 2014), remained very low compared with the EU27 average of US\$ 3031 (WHO Regional Office for Europe, 2013). The Ministry of Health's budget increased by 94% in nominal terms between 2005 and 2008 (to LVL 576.6 million) (Ministry of Health, 2012). Following a change in government, with the new government less focused on health care, the share of general government health expenditure as a percentage of total health expenditure started to decline in 2008 (LV Table 2).

The share of private expenditure in health care financing was substantial. Although the share of OOP payments (which account for almost all private expenditure) as a percentage of total health expenditure dropped significantly in 2006, when general government health expenditure grew by 33%, it never fell below 30% and was as high as 34% in 2008. Voluntary health insurance plays a marginal role in health care financing. Its population coverage peaked at 16% in 2008 (Financial and Capital Market Commission, 2005-2012); however, even then, most of the population remained exposed to high OOP payments: about 7% of the population reported foregoing care in that year because it was "too expensive", compared with the average of 2.1% for the EU27 (Eurostat, 2012b).

In the pre-crisis years, Latvia focused additional resources on inpatient care, secondary ambulatory services and patient pharmaceuticals. Inpatient expenditure rose by 79% in real terms between 2005 and 2008; secondary outpatient ambulatory payments rose by 121% and spending on pharmaceuticals increased by 73%. In comparison, payments to general practitioners (GPs) rose by 45%. In 2008, inpatient and secondary outpatient spending accounted for 68% of total spending on medical care (see LV Table 5 below).

LV Table 2 Health care expenditure trends in Latvia, 2000–2012

	2000	2005	2006	2007	2008	2009	2010	2011	2012
THE per capita (US\$ PPP) a	479	826	1,014	1,198	1,192	1,088	1,104	1,141	1,188
ТНЕ (% GDP)а	0.0	6.4	8.0	7.0	9.9	6.8	6.5	0.0	0.0
Mean annual real growth in THE (%)	1.0	25.0	18.0	-2.0	0.6-	-15.0	-5.0	-2.0	2.0
Mean annual real growth in GGHE (%)	-7.0	26.0	33.0	-8.0	-6.0	-19.0	-5.0	0.9-	1.0
GGHE (% THE)	54.4	57.1	64.1	60.7	62.2	59.5	59.5	57.1	299
Private health expenditure (% THE)	45.6	42.9	35.9	39.2	37.7	40.5	40.4	42.9	43.3
GGHE (% general government expenditure)	8.7	10.1	4.11	11.8	10.6	6.3	∞ ⊙.	0.8	8.0
GGHE (% GDP)	8.3	3.6	4.4	8.4	1.4	4.1	3.9	3.4	3.4
Out-of-pocket expenditure (% THE)	44.1	40.7	32.4	34.9	33.7	35.3	34.9	37.1	37.4
Out-of-pocket expenditure (% private health expenditure)	8.96	94.8	90.4	88.9	89.2	87.2	86.4	86.4	86.4
Private health insurance (% THE)	1.5	2.2	2.4	0.1	6.	0.8	2.3	2.5	2.5
Private health insurance (% private health expenditure)	3.2	5.2	9.9	8.4	8.4	0.1	2.7	2.7	5.7

Notes: GGHE: General government spending on health; PPP: Purchasing power parity; THE: Total health expenditure; a Constant 2005 international dollar. Source: WHO, 2014.

Fee for service was an important element of reimbursement in the hospital and outpatient care sector, incentivizing providers in these sectors to provide more services for each patient. GPs, by comparison, were compensated for the most part through capitation and so had a financial incentive to do less (World Bank, 2010a).

Health care delivery

Although there were some improvements in the accessibility of day-care services and specialist outpatient care, and the funding for outpatient care increased, the implementation of the Development Programme for Outpatient and Inpatient Health Care Services Providers 2005–2010 (the so-called Master Plan), which was supposed to downsize hospital care and to support the development of ambulatory care, advanced very slowly because of strong opposition from local communities and concerned politicians.

There is little doubt that Latvia had an overcapacity of acute care hospitals and beds before the financial crisis. There was almost no change in the number of acute care beds between 2005 and 2007, and in 2007 there were 255 acute care beds per 100 000 people in Latvia, compared with an average of 205 per 100 000 in the EU15 (2006 data) (WHO Regional Office for Europe, 2013). In addition, financing for the inpatient sector was not reduced because of the increasing intensity of hospital care (i.e. higher cost per patient) and the expenditure for inpatient care grew by much more than expenditure on GPs between 2005 and 2008 (World Bank, 2010a; see also Health system financing above). The number of inpatients increased by only 5% and the number of bed-days rose by 4% during that period (World Bank, 2010a). The inflation rate in the health care sector was slightly lower than the general inflation rate but at the same time much higher than health care inflation rates observed in the EU27 (LV Table 3). The average length of stay in hospitals was, at 9.44 days in 2007, slightly higher than the EU15 average of 8.63. The hospital occupancy rate was good (above 76.1% in 2007 compared with the EU15 average of 75.7%) (WHO Regional Office for Europe, 2013).

The number of long-term (nursing and elderly home) beds in Latvia, at 234 per 100 000 population in 2007, clearly lagged behind western European countries (there were 865 long-term beds in the United Kingdom in that year; the average for the EU15 is not available) (WHO Regional Office for Europe, 2013). By contrast, despite a strong decline in the number of psychiatric hospital beds per 100 000 population, Latvia still has one of the highest rates in Europe (154 compared with 66 per 100 000 in the United Kingdom; the average for EU15 is not available) (WHO Regional Office for Europe, 2013).

LV Table 3 Harmonized indices of consumer prices for all-items and for health in Latvia and in the EU27, 2006-2012

	2006	2007	2008	2009	2010	2011	2012
Latvia (all items HICP)	106.57	117.32	135.21	139.62	137.91	143.73	147.02
Latvia (health)	106.58	114.12	129.37	152.49	152.65	148.64	149.2
EU27 (all items HICP)	102.31	104.73	108.56	109.63	111.91	115.38	118.43
EU27 (health)	101.66	103.91	106.43	108.39	109.91	112.15	115.02

Note: Harmonized indices of consumer prices (HICP) for all-items and health (CP06) where 2005 values equal 100.

Source: Eurostat, 2013b.

The overall availability of human resources was good. However, the number of GPs per 100 000 population, although above the average for the EU12 (29), was lower than the EU15 average of 91 (authors' estimates; no data on the number of GPs per 100 000 in Latvia from WHO Regional Office for Europe, 2013), and the proportion of nurses was very low (556 per 100 000 in 2007 compared with 847 in the EU15 (WHO Regional Office for Europe, 2013). Latvian patients have direct access (with restrictions, e.g. only patients with diabetes have direct access to endocrinologists) to many (11) types of specialist, including psychiatrists, oncologists, gynaecologists, paediatricians, endocrinologists, dermatovenerologists, ophthalmologists, narcologists (addiction specialists), and GPs do not usually deal with such patients. Family medicine was introduced as a new specialty in Latvia only in 1990 and considerable efforts were undertaken to retrain doctors who wished to become GPs in order to build a stronger primary care level (Mitenbergs et al., 2012).

Health system responses to the crisis

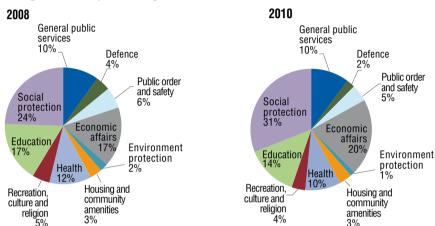
3.1 Changes to public funding for the health system

Total health expenditure consistently increased until 2007. In real terms (in constant 2005 lats), spending on health care increased by more than 82% between 2000 and 2007, outpacing the general economy, which grew by 56% during the same period. However, with the emergence of the economic crisis in 2008, total health expenditure started to decrease and in 2009 it fell below the 2005 level (WHO, 2014).

The share of health expenditure as a percentage of total general government expenditure, at 11.4% in 2006 and 11.8% in 2007, declined to 10.6% in 2008 and fell further to below 9% between 2009 and 2010 (or from 12% to 10% according to Eurostat data; Eurostat, 2013a). Other sectors that saw a decrease in the share of government expenditure were education and defence. At the same time, in accordance with the Economic Stabilization and Growth Revival Programme, spending on social protection and economic affairs was prioritized (LV Fig. 1).

Economic stabilization (and budget deficit targets agreed with international lenders) necessitated a contraction in public expenditure, including reductions in the statutory resources for health. While the total expenditure of central government decreased by 6.6% in 2009 (Ministry of Finance, 2013a), general government health expenditure decreased by almost 19% in 2009 compared with 2008. The Ministry of Health's budget fell by 12.6% in 2009 (to LVL 503.7 million) and after falling slightly again (by 1.5%) to LVL 496 million in 2010, it remained steady in 2011 and 2012 (Ministry of Health, 2012). The total budget subsequently increased by 4.1% in 2013 compared with 2012, reaching LVL 524.4 million (Ministry of Health, 2014). It is important to note that from 1 November 2011, the Ministry's

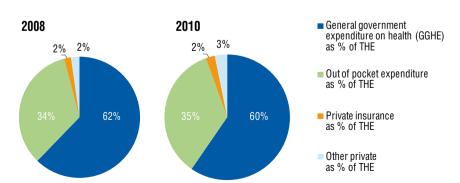
budget did not include EU funds available for health care institutions that are not under its direct supervision. This funding is now included in the budget of the Ministry of Finance (and amounted to LVL 7.3 million in 2011, LVL 27.8 million in 2012 and LVL 32.3 million in 2013; U. Mitenbergs, personal communication with the Department of Budget and Investment, Minstry of Health 2013).



LV Fig. 1 Public expenditure by sector in Latvia, 2008 and 2010

Source: Eurostat, 2013a.

As a result of budget consolidation measures, private expenditure on health as a percentage of total health expenditure increased between 2008 and 2010 (see LV Fig. 2 and LV Table 4). Co-payments, which had been unchanged since 2005, rose significantly in 2009 (see section 2.2).



LV Fig. 2 Total expenditure on health by source of revenue in Latvia, 2008 and 2010

Note: THE: Total health expenditure. *Source:* WHO, 2014.

LV Table 4 Cost-sharing and OOP payments in Latvia, 2009–2012

	2008 (LVL)	2009 (LVL)	2010 (LVL)
Outpatient visit to GP	0.5	1	1
Outpatient visit to specialist	2	5	3
Outpatient visit to hospital	2	5	3
Outpatient surgery in hospital	0.5	5	5
Daily inpatient charge in hospital	5	12	9.5 (starting day 2)
Maximum patient contribution for one hospital episode	80	250	250
Maximum patient contribution for one year	150	400	400

Note: LVL: Latvian lats. Source: World Bank, 2010a.

The gross of reductions in the health sector concerned the following areas (World Bank, 2010a).

Expenditure on health care provision. This accounted for 64% of spending in 2008 and was cut by 27% in 2009. Services in the following areas were prioritized (in relative terms, as all areas were cut): primary care (GPs), services for children and pregnant women, emergency medical assistance (ambulance services and emergency care at hospitals), subsidies for reimbursed pharmaceuticals and emergency safety net provisions. Hospital and secondary ambulatory services experienced the largest cuts. Public health (disease prevention, health promotion, environmental health, health statistics, public health surveys) also saw substantial reductions in financing; the budget for this sector was cut by 24% in 2009 compared with 2008 (Brigis, 2010).

Expenditure on specialized health care provision. This included areas such as infectious disease control and treatment of communicable diseases, accounting for 12% of spending in 2008 but was cut by 17% in 2009. Among all categories of specialized health care provision, emergency medical assistance experienced the smallest reductions.

Expenditure on sector management. This was cut by 33% in 2009: the Ministry of Health and its affiliated agencies were reorganized and employment was cut; a number of organizations were eliminated or merged. However, as expenditure on sector management accounted for only 1% of the total budget in 2008, cuts in this area had little impact on the total amount saved.

3.2 Changes to coverage

Population entitlement

There have been no changes to population coverage since the emergence of the crisis. Universal population coverage is guaranteed in the Constitution (basic medical assistance) and in the Medical Treatment Law (1997) (emergency medical care). The only (presumably small) population group without coverage are aliens and stateless individuals whose passports do not include a personal identity number and who have not been registered in the Population Register (Mitenbergs et al., 2012). However, one of the main priorities of the Ministry of Health is to implement a compulsory health insurance scheme or - at least - to link eligibility to receive health services to the payment of an earmarked income tax. The reason for this is that the current system of financing falls short in meeting the health needs of the population and there is little political or public support for increasing the share of the government budget to be allocated to health. As a result, OOP payments, in particular for pharmaceutical care, continue to be high and waiting times are increasing, which further increases dissatisfaction with the health system. A significant proportion of the population either does not pay income tax or does not pay as much as it should. The government hopes that it can increase the populations' willingness to contribute financially to the health system if it links entitlement to payment of a contribution, as is the case in social health insurance systems. However, linking entitlement to payment of a contribution means a move away from universal population coverage and this will need to be managed extremely carefully to avoid adverse effects (Mitenbergs et al., 2012).

The benefits package

While universal population coverage was maintained, both service and cost coverage deteriorated. Although no benefits were explicitly removed from the benefits basket, certain services were implicitly removed through changes in the benefits basket legislation (e.g. Regulation No. 1046, Government of Latvia, 2006) and in national health service (NHS) contracts. Global budgets were introduced to control hospital spending; at the same time, certain services (e.g. emergency assistance) and population groups (e.g. children and pregnant women) were prioritized in the contracts with providers. Consequently, as hospital budgets were used up for prioritized care, patients were faced with substantial waiting times for non-prioritized services, up to a point where these services can be considered to be implicitly excluded.

User charges

Co-payments for specialist outpatient care and per diem charges for inpatient care increased considerably in 2009, while co-payments for GP visits were kept relatively unchanged (to steer patients away from inpatient care and specialist outpatient care). In 2010, fees for specialist outpatient visits and per diem hospital charges were reduced by 40% and about 21%, respectively (LV Table 4).

In addition, a co-payment of up to LVL 30 (€42.77) was introduced in 2009 for inpatient surgical interventions. Patients also have to co-pay up to LVL 25 (€35.64) for various diagnostic/therapeutic services. There are no user charges for approved laboratory tests for which patients are referred by a physician; however, patients may be charged for syringes, needles and collection of blood samples for tests. Co-insurance for certain pharmaceuticals also increased in 2009, along with the change in the reimbursement system (see below). Most of the co-insurance increases were applied to medicines for cardiovascular diseases (the main cause of mortality in Latvia). In 2010, the co-insurance rate for cardiovascular diseases was reduced from 50% to the previous level of 25%.

Several mechanisms exist to protect the population from catastrophic expenditures or underuse of services, which could result from user charges.

Exemptions for certain population groups. These were based on medical, social, poverty and insurance cap criteria and existed before the emergence of the financial crisis (e.g. pregnant women and victims of political repression were exempt from user charges for certain medical services).

The Emergency Social Safety Net Strategy. Additional protection mechanisms for low income households were implemented in 2009. Households with incomes below LVL 120 per family member per month were exempted from user charges

⁶ The Emergency Social Safety Net Strategy came into legal effect on 1 October 2009. It was developed with technical input from the World Bank and it underpins fiscal consolidation and structural reforms by deploying supplementary support to ensure that basic social services are maintained. The World Bank also provided financial support for the implementation of the Strategy. The Strategy finances and coordinates the efforts of national and local government agencies to (1) maintain pre-primary education and child development programmes for 5- and 6-year-old children; (2) cover the costs of transporting students from communities where schools have closed to their new places of instruction; (3) exempt needy households from health service co-payments; (4) subsidize pharmaceutical costs of needy households; (5) sustain and improve GP and primary health care services and access; (6) increase the coverage and pay-out period of unemployment insurance; (7) increase the coverage and amount of targeted social assistance benefits administered by local governments; and (8) for the growing number of unemployed who are not covered by unemployment insurance or other social support, the government has fortified the Strategy by re-allocating financing from the European Social Fund to expand and rapidly deploy labour-intensive emergency public-works programmes (World Bank, 2010b). "The most important ESSNS [Emergency Social Safety Net Strategy] measures concerning the health sector that were implemented between 2009 and 2011 were: (1) the exemption of needy persons (and people with low incomes) from user charges; (2) free accommodation for needy and low-income persons in hotel-type hospitals beds (in connection with travel for day surgery or chemotherapy); (3) the introduction of home care services for the chronically ill; (4) the development of day care centres for the mentally ill; (5) the provision of funding for an additional nurse at primary health care providers; and (6) the development of a family physician advisory telephone service" (Mitenbergs et al., 2012). According to Ministry of Welfare estimates, this new system was applicable to 700 000 adults (Bite, 2012). In reality, a much smaller number of people received the benefits. In 2010 about 21 500 patients were exempted from user charges for pharmaceuticals; co-payments were covered for 23 400 inpatient stays, 42 200 day cases, 129 100 outpatients and 5800 home care patients (Mitenbergs et al., 2012).

and households with incomes below LVL 150 per family member per month were eligible for a 50% reduction in user charges. For these categories the copayment for surgery during treatment in hospital was set at LVL 15 (€21.30). Since January 2012, lack of funding has made it necessary to discontinue all exemptions and reductions except for needy households with incomes below LVL 90 (€128) per family member per month (Mitenbergs et al., 2012).

A cap on user charges. The cap on all co-payments for outpatient and inpatient health care services per person per year was increased from LVL 150 to LVL 400 (€570) and the cap on total payment per hospitalization episode was increased from LVL 80 to LVL 250 (€356) in 2009.

The role of voluntary private health insurance

Voluntary private health insurance has never substantially contributed to total health care expenditures in Latvia. However, it slightly increased from 1.8% of total health expenditure in 2008 to 2.5% in 2010 (LV Table 2 and Fig. 2) despite state institutions ceasing to sign new contracts with suppliers for their employees because of financial austerity measures. The voluntary private health insurance industry has not responded to the changes in coverage by, for example, developing new products to fill coverage gaps. One reason for this may be that coverage gaps are not well defined in Latvia.

3.3 Changes to health service planning, purchasing and delivery

A number of efficiency-seeking measures have been implemented in response to the crisis. Key measures include reduction of administrative expenditures, restructuring of the hospital sector, reform of emergency medical services, changes to pharmaceutical reimbursement and changes to the quality of care system. Moreover, increased emphasis on ambulatory care, through, for example, the introduction of home care services, was another measure through which efficiency savings were sought.

Changes to state health administrations and health sector salaries

Reduction of administrative expenditures was the main driving factor for institutional reforms in 2009. Between 2009 and 2012, both the number of employees and salaries were cut at the Ministry of Health and its agencies: overall, the number of employees at the Ministry and its agencies was reduced by 55% (Cabinet of Ministers, 2012). Numerous agencies were closed down within one year, including the State Agency of Health Statistics and Medical Technologies, the State Centre of Medical Professional Education and even the previously strengthened Public Health Agency. The financial pressure

behind the closure of these institutions was so high that the process was at times chaotic and lacked a clear plan about which institutions would take over responsibilities of those that ceased to exist. For example, almost all public health functions were unassigned for three years after the Public Health Agency was closed down.

Health system restructuring

In November 2011, the NHS was created by merging two institutions (both established in 2009): the Health Payment Centre (responsible for purchasing) and the Centre of Health Economics (responsible for economic analysis and health technology assessment), which had an overlap in responsibilities for the evaluation of medicines and formulating tariffs for services. The NHS is now the most important national institution for the implementation of health policies, administering public resources, determining the content of the benefits package (including the positive list of pharmaceuticals), contracting with providers, implementing the e-health system and registering clinical guidelines and medical technologies. However, by merging the two institutions, the health technology assessment function may have been somewhat weakened (even though the NHS has increased the number of staff working in this area) as the payer (the NHS) is now also responsible for setting tariffs. This poses a risk that some tariffs are set below real costs, affecting quality of care. However, as a diagnostic-related group (DRG) type of system is currently being introduced in the hospital sector, the NHS is not actively working with the new tariffs and therefore this risk may be minimized.

Hospital sector restructuring and payment system

The 2009 cuts accelerated restructuring of the hospital sector that so far had proceeded at a very slow pace under the Master Plan, which was officially discontinued in 2009 (perhaps to allow for faster changes). In parallel, the ongoing shift away from hospital care and towards service provision in ambulatory settings was accelerated: the number of hospitals contracted by the NHS was reduced from 72 in 2008 to 43 in 2009 and to 39 in 2012 and the number of (less intensive and less costly) day surgeries increased rapidly to compensate for reductions in inpatient surgical activity. For inpatient and secondary outpatient care, an Annex to Regulation No. 1046 (Government of Latvia, 2006) listed hospitals and priority secondary outpatient providers (hospitals) that were to be contracted by the NHS; hence, competition between these providers for contracts is rather limited (Mitenbergs et al., 2012). During

During the 20 years since independence, Latvia has experimented heavily with different approaches to health care organization and financing. Health reforms in the early 1990s aimed to create a social health insurance type of system. However, apparent problems with decentralized planning and financing subsequently led to a reversal of this process. For more information, see Mitenbergs et al. (2012).

this process, the status of several hospitals, which had been recently renovated and equipped with new technologies, was changed (e.g. to care hospitals or day hospitals) and the scope of provided services was substantially reduced, casting doubt on the usefulness of prior investments and leaving them with excess infrastructure (Mitenbergs et al., 2012).

Non-urgent surgeries (except for those within "earmarked services" as defined in Annex 22 of Regulation No. 10468) that could be performed in outpatient settings were moved from inpatient settings to outpatient settings and were then paid in accordance with tariffs for day-care hospitals (the number of patients that can be treated is determined by the amount of the allocated budget divided by the price of treatment; treatment of additional patients is not paid for by the NHS) and day care has become an important part of hospital activity. To encourage greater use of day hospitals, the day-bed payment to hospitals was increased in 2009 by over 500% (to LVL 7.43). In mid-2009, chemotherapy and radiotherapy, previously available as an inpatient service, became available also on an outpatient basis. In 2010, day-care services were provided at 105 medical institutions, including almost all hospitals contracted by the NHS (37 out of 39), and the number of patients who received day-care services doubled between 2008 and 2010.

While the number of inpatient surgeries fell by 30 000 from 2009 to 2010 (a decrease of 21%), the number of day-care surgeries, which are counted as outpatient surgeries in Latvia, increased by almost the same number (WHO Regional Office for Europe, 2013). However, there is some anecdotal evidence that some of the outpatients may in fact be "hidden" inpatients (with patients paying for the overnight stays as OOP payments because of limited funding for inpatient care). Spending on inpatient services was substantially reduced: while inpatient care accounted for almost 50% of Ministry of Health expenditure in 2008, this share was reduced to below 35% in 2011 and the share of spending on GP care increased from 9% in 2008 to 14% in 2010 (LV Table 5) (Mitenbergs et al., 2012). By comparison, home care (medical care provided at home by nurses or physicians' assistants to chronically ill patients or patients after surgery) was included in the statutory benefits basket (Mitenbergs et al., 2012). Moreover, to prevent situations where an ambulance is called unnecessarily, in 2011 a family doctor service was introduced, where everybody can obtain advice over

⁸ Each "earmarked service" refers to a specific service programme (a specified set of interventions, e.g. cardiac surgery, angioplasty or treatment of a condition such as cystic fibrosis or tuberculosis) or management of broadly defined conditions (e.g. psychiatric care, oncology programme). The idea of defining "earmarked services" is similar to the basic idea of diagnostic-related groups. Each type of "earmarked services" is assigned a corresponding tariff. However, the grouping into "earmarked services" is relatively rudimentary as there are only 55 types and it is applied only to some patients. Annex 22 also distinguishes a group of tariffs for "other services" (which may vary depending on the group of hospitals and which are broken down for some hospital groups into one tariff for other surgical services and one tariff for other therapeutic services), one tariff for the treatment of patients in care hospitals and one per diem tariff for artificially ventilated patients.

the phone or other electronic means (e-mail, Skype, MSN Messenger) (Bite, 2012). The consultations are provided by GPs or physicians' assistants and are available from 5 pm to 8 am during weekdays and around the clock during weekends and holidays. From 2009, home care for chronically ill patients became a reimbursable service and the scope for home psychiatric care and care at day centres was expanded (while at the same time financial incentives were introduced to shift patients from psychiatric hospitals to social care institutions), creating further potential for reducing the use of inpatient facilities (World Bank, 2010a).

LV Table 5 Distribution of medical care spending in Latvia, 2005–2010

A		Percenta	ge	
Area —	2005	2008	2009	2010
Inpatient	48	50	45	35
Secondary ambulatory	14	18	18	18
GPs	11	9	11	14
Dentists	2	1	1	2
Emergency medical assistance	6	6	6	7
Patient pharmaceuticals	15	15	16	22
Centrally procured pharmaceuticals	4	1	1	2
Settlements with the EU	0	0	1	1

Note: GP: General practitioner. Source: World Bank, 2010a.

In order to improve cost control, a global budget system for hospitals was introduced in 2010 (replacing per diem fees with additional activity-based payments). The fixed monthly budget is one-twelfth of the calculated annual budget and does not depend on the current number of patients in the hospital. Emergency hospitals receive an additional budget for emergency room and admission services. The hospitals bear the financial risk of running over their budgets if they have higher costs, even if they treat more patients or provide more services. In 2012, a decision was taken to introduce Nord-DRG (the Nordic DRG scheme) in hospitals in 2014. This is seen as a considerable advantage compared with the current payment system.

Emergency care restructuring

A reform of the emergency car service was undertaken in 2009 in order to save financial resources and to increase the effectiveness of service provision in the pre-hospitalization phase. As a result of the reform, the emergency care services of 39 municipalities, each with its own unique structures for the provision of emergency care, were merged into the state service under the supervision of the

Ministry of Health. Consequently, the accessibility and quality of emergency care in most of the country has been harmonized and inefficiencies have been reduced. Access also improved through better coordination of emergency care (there is now a central call centre in Riga providing a single system for the whole country).

Reductions in health sector salaries and changes to working conditions

In addition to these changes to the health sector structure, the average monthly remuneration of all employees working in the health sector decreased by 3% between 2009 and 2010 (from LVL 446 (€635) to LVL 434 (€618)) while the average monthly salary stayed the same, at LVL 335 (€477). The average monthly remuneration of physicians, which includes salary, additional payments and bonuses, was, according to the Ministry of Health, LVL 657 (€935) in 2010. Since 2011, there has been a slight increase in salary levels (Mitenbergs et al., 2012).

Pharmaceutical sector reforms

In 2012, after difficult and controversial discussions, the government amended the Regulations on the Reimbursement System for Pharmaceuticals and Medical Devices to rationalize the pharmaceutical care provided by the NHS. The reference pricing system for pharmaceuticals in the reference list was changed. Previously, the NHS paid the same (lowest) price (reference price) for all products in the same reference group (products with similar chemical/therapeutic characteristics) and pharmacists and patients could choose any one of these products. The patient would need to pay the difference between the reference price and the actual price of the chosen drug OOP (in addition to the regular drug co-payment) if the drug was more expensive than the reference price. According to the new regulations, there is only one pharmaceutical product in a reference group (usually the one with the lowest price). Prescriptions for new patients now have to be made by the active ingredient (prescribing based on the International Nonproprietary Name) and pharmacists have to dispense the cheapest drug (i.e. the only drug that is in the reference group). If patients choose a different product, they pay the full price OOP (except for existing patients for whom previously reimbursable products will remain reimbursable; however, the co-payments have increased considerably for these patients as the difference in price between the cheapest product and other products is growing constantly). The goal of the new system is to achieve cost savings – it stimulates competition between pharmaceutical companies because they have to rapidly decrease their prices in order to receive the status of being a reference medicine. It is estimated that this policy resulted in savings of about LVL 3.7 million (€5.3 million) in 2012, when the NHS was able to achieve price reductions for 600 pharmaceuticals. However, pharmaceutical companies and medical professionals strongly opposed the reform claiming that it imposed limitations on patient choice and the rational use of drugs (and the reform is being challenged in the Constitutional Court).

In addition, the NHS has implemented a clawback system, where pharmaceutical companies (depending on their market share) have to compensate the NHS to a certain degree if the annual drug budget is exceeded. This clawback system amounted to LVL 4 million (€5.6 million) in 2011 (Mitenbergs et al., 2012).

Measures to improve quality

Since 2009, accreditation of health care providers for inpatient and outpatient care, which was long considered a cornerstone of the quality management system, is no longer mandatory but instead has become voluntary (mainly to cut costs). Later, in 2010-2011, voluntary and compulsory quality incentive systems were introduced for GPs because, although GPs were "safe" from cuts during the crisis, there was growing criticism from the emergency and hospital sectors claiming that patients who should have been treated in the outpatient sector were in fact treated in other settings. The compulsory system sets a number of criteria that have to be achieved by GPs if they want to receive their full reimbursement (no pay for non-performance). The voluntary system incentivizes GPs to increase quality in order to recieve more money (pay for performance). Quality criteria are intended to improve disease prevention and health promotion and were inspired by the United Kingdom's Pay-for-Performance scheme in primary care. However, only a small number of GPs joined the scheme because quality criteria are difficult to achieve and the financial benefits are relatively small. Therefore, a new mandatory quality system for GPs replaced the existing dual system (mandatory and voluntary) in 2013. The new system, which has been in place since the beginning of 2013, is compulsory for all GPs. It comprises 14 quality criteria, including preventive activities, assessment of patients' health status, immunization, assessment of cardiovascular risks, and promotion of cancer screening programmes. GPs failing to meet these criteria will see their annual remuneration (capitation payment) reduced by up to 9%.

Implications for health system performance and health

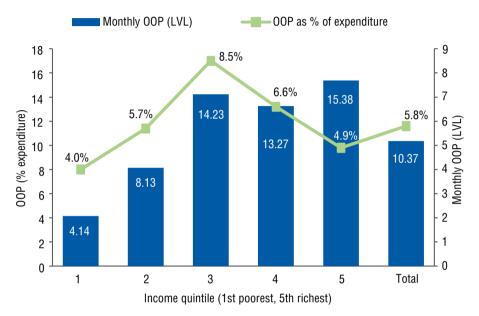
4.1 Equity in financing and financial protection

In Latvia, more than 60% of total health expenditures come from general tax revenue. Therefore, equity in financing depends most importantly on the progressivity of the tax system. Vanags (2010) recently assessed the progressivity of the tax system using the Kakwani index following the implementation of a tax reform in 2010 and found the Latvian tax system to be slightly progressive, with a Kakwani index of 0.048. However, the overall progressivity of health care financing needs to be interpreted in view of the high level of OOP payments as a share of total health expenditures, which increased from 34% in 2008 to over 37% in 2012 (LV Table 2). In 2010, the third income quintile spent 8.5% of total household expenditures on OOP payments: this share was smaller for both the two richer and two poorer quintiles. The richest quintile spent the second lowest share of total household expenditures on OOP payments (LV Fig. 3). The smallest share spent on such payments was by the lowest income quintile, which may indicate that the implemented Emergency Social Safety Net Strategy was effective in protecting the lowest quintile from excessive OOP payments.

In summary, while the tax system is mildly progressive and OOP, as well as tax subsidies for voluntary health insurance are, at least for higher income groups, strongly regressive, the overall progressivity of the Latvian health financing system remains somewhat unclear. It is most likely that it is roughly proportional – if not mildly regressive. If current reform proposals to switch to a compulsory health insurance system and to link a large proportion of personal income tax revenue to health are implemented, the importance of income tax in health care financing will increase, while the reliance on OOP payments will be reduced. This may contribute to a more progressive health care financing

system (Mitenbergs et al., 2012). However, it is not possible to draw a clear conclusion without further analysis (particularly as a part of the population may be excluded from coverage).

LV Fig. 3 Average monthly OOP payments per household member and OOP payments as a percentage of household expenditures by income quintile in Latvia, 2010



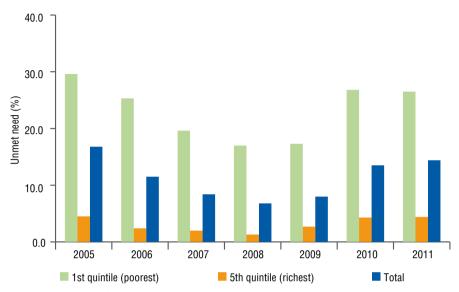
Source: Mitenbergs et al., 2012.

4.2 Access to services

Equity in utilization of health care services may have decreased through the cost-sharing applied to outpatient care, but again, the Social Safety Net measures worked in the opposite direction, protecting the poorest populations. However, despite the introduction of the Social Safety Net, financial barriers remained the main reasons for inequity in access in 2011. According to the EU-SILC survey, almost 26.5% of people in the poorest quintile reported financial constraints as the reason for not accessing services, compared with only 4.4% of people in the richest quintile (LV Fig. 4).

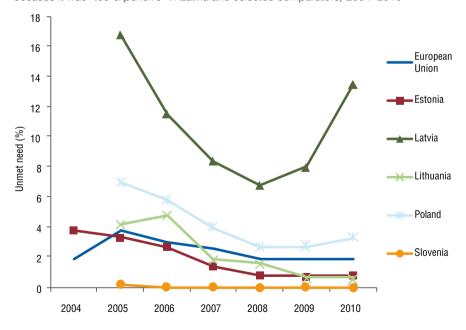
In 2010, 13.5% of the Latvian population admitted having foregone care because it was too expensive (LV Fig. 5). In comparison, this number was below 1% in Estonia, Lithuania and Slovenia, and approximately 2% in most other EU27 Member States (Eurostat, 2012b). When examining the trend over time, it is clear that the percentage of people not obtaining care because of costs increased greatly since the start of the crisis in Latvia (Mitenbergs et al., 2012).

LV Fig. 4 Percentage of self-reported unmet need for medical examination or treatment because it was "too expensive", selected income quintiles in Latvia, 2005-2010



Source: Eurostat, 2012b.

LV Fig. 5 Percentage of self-reported unmet need for medical examination or treatment because it was "too expensive" in Latvia and selected comparators, 2004-2010



Note: EU25 to December 2006, EU27 from January 2007.

Source: Mitenbergs et al., 2012.

Limitations on the number of secondary outpatient visits (specialist consultations, clinical evaluations) affect access to care, particularly for people with low incomes as they are not able to purchase voluntary health insurance or pay the full price for visits. Protection offered within the Social Safety Net Strategy safeguarded access to care for the poor, but it is likely that middle class citizens with relatively low incomes (but not poor) were affected negatively.

4.3 Impact on hospital sector efficiency

The overreliance on hospital care was successfully tackled by the restructuring of hospitals and prioritizing ambulatory and home care, and this will likely result in a more efficient allocation of resources. The strong financial restrictions were a clear message for hospitals to manage with less, limit hospitalizations and shorten hospitalization times. However, there is scope for further improvements in this area; because of political pressure, too many types of hospital service were maintained in different regions when keeping only certain types in certain regions might have been more efficient. The reorganization of health sector institutions, including mergers and closing down of some agencies, might have resulted in some efficiency gains but it lacked a clear plan about which institutions would take over the responsibilities of those that ceased to exist and some functions were unassigned. The rationalization of pharmaceutical care was another area where efficiency gains have been achieved.

4.4 Quality of care

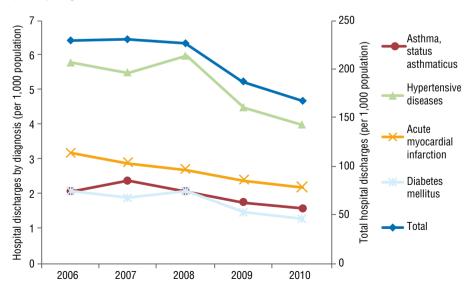
Limitations in the number of secondary outpatient visits probably also had a negative impact on the quality of care (as continuity of care may be affected) as had financial cuts (providers had to cut expenses and staff) and the introduction of payment mechanisms such as global budgets.

According to Mitenbergs et al. (2012), the unsatisfactory health status of the Latvian population, as well as the overall dissatisfaction with the health system (see Users' experience below), underlines the problem of health service quality. The majority of citizens (66%) evaluated the overall quality of health care as bad in 2011 (European Commission, 2011) and 65% thought that the quality of care in Latvia was worse than in the other EU Member States (European Commission, 2010). Currently, there is no comprehensive quality management system that encompasses reliable quality indicators and mechanisms for monitoring and continuous quality improvement. Analysis of health service outcomes and quality of care is hampered by a lack of data on key indicators,

such as patient safety, both at national and organizational level. Consequently, international comparisons on the quality of medical services cannot include any assessment of the situation in Latvia.

Some data are available but only for preventive care. Immunization data show that coverage has decreased since 2008 and is now below the EU average for a number of vaccines and also below WHO's general target of 95%; the reasons for this reduction include socioeconomic factors and also an increasing number of people who are opposed to vaccination. Latvia has also tried to improve cancer care by launching a large-scale public screening programme against breast cancer, cervical cancer and colorectal cancer in 2009. However, in the first year, the population response was relatively low: only 7% of the eligible population received colorectal screening and 21% received breast cancer screening. According to data from the Centre for Disease Prevention and Control, five-year (absolute) cancer survival rates in Latvia in 2010 were 66.5% for breast cancer, 78.2% for cancer of the cervix uteri, 57.3% for colon cancer and 57.1% for anorectal cancers, all of which represented a slight increase when compared with 2009. The number of potentially avoidable hospital admissions is an indicator that is frequently used to assess the quality of the primary/ ambulatory care system. Total hospital discharges (a proxy for admissions) per 1000 population have been decreasing in Latvia since 2006 and more rapidly since 2008 (LV Fig. 6).

LY Fig. 6 Total number of hospital discharges per 1000 population and discharges by primary diagnosis in Latvia, 2006-2010



Source: Mitenbergs et al., 2012.

Users' experience

Although Latvia does not routinely conduct systematic surveys to gauge public perception of the health system, two surveys were conducted in 2008. One was commissioned by the State Compulsory Health Insurance Agency and was a representative survey of those aged 18-74 years to assess Latvians' views on receiving state-paid health care services (State Compulsory Health Insurance Agency, 2008). The other was a survey conducted by the Central Statistical Bureau of Latvia (2009) in the context of the European Health Interview Survey (Eurostat, 2012a). According to the survey carried out by the State Compulsory Health Insurance Agency, 77% of the population was either completely or partially satisfied with their family doctor and only 16% was completely or partially dissatisfied. However, positive responses to a more general question about the possibility to gain access to state-paid care were much rarer, with only 50% saying it was good or somewhat good and 36% saying it was somewhat or completely bad. In the Central Statistical Bureau survey, the numbers were slightly worse, with only 61% being either rather or very satisfied, while about 14% were rather or very dissatisfied with their family doctor. Hospitals scored considerably worse with only 38% rather or very satisfied and 18% rather or very dissatisfied.

In 2011, a Eurobarometer survey assessed consumer opinion on health care. Most Latvians rated health care provision in their country as bad (66%), whereas only 30% judged it as good (European Commission, 2011), placing Latvia in the fourth lowest rank among the EU27. When asked how current health care provision compared with that received five years ago, the majority reported that the situation had deteriorated (58%), while 33% said that it had stayed about the same and only 5% thought it had improved. Nevertheless, it has to be emphasized that despite a substantial reduction in available financing (see section 2.1), the implemented reforms allowed for the delivery of basic health care services without substantial deterioration of the health status of the population (see section 4.6).

4.5 Transparency and accountability

Patients' rights were significantly strengthened by the adoption of the Law on Patients' Rights in 2010. Nevertheless, in practice, a number of problems persist. For example, while the law stipulates that patients have a right to information about quality, these data are generally unavailable. However, the introduction of a web-based information portal for the population in 2010 providing information about state-paid services, including health care services one has received (reported by health care providers), has quickly become very

popular and shows the potential of e-health applications in strengthening patient involvement in holding providers accountable. In addition, there has been very serious interest in the reform process among the Latvian population (in extreme cases manifested by protests and demonstrations), forcing the Ministry of Health to increase its engagement in public discussions and information campaigns, contributing to enhancing transparency in the health sector.

4.6 Impact on health

Although it is premature to assess the long-term effects of the crisis on the health status of the population, available data suggest that there has been no negative short-term effect on mortality: the total SDR decreased from 1006 per 100 000 in 2008 to 939 in 2010; SDR for suicide and self-inflicted injury decreased from 21 to 18, and SDR for diseases of the circulatory system (the leading cause of death in Latvia) went down from 506 to 478.

At the same time, there was an increase in the incidence of mental health disorders: after a decline from 417 per 100 000 in 2008 to 364 in 2009, it increased to 422 in 2010. There was also an increase in the number of new invalidity/disability cases (from 570 in 2008 to 740 in 2010), almost matched by an increase in the number of people receiving social/disability benefits (from 2929 to 3095) (WHO Regional Office for Europe, 2012).

Moreover, there is some evidence on changes to risk factors. For example, the lifetime smoking prevalence among students aged 15-16 years seems to have declined to 54% between 2007 and 2011 (from 80% in 2007). However, the lifetime prevalence rate of cannabis consumption increased from 18% to 24%. The self-perceived ease of obtaining alcoholic beverages, which may be a proxy for alcohol consumption, decreased slightly (in 2011, 84% of students deemed alcohol to be easily or very easily available, compared with 90% in 2007) (Trapencieris et al., 2012). Consumption of sugar-sweetened beverages, including soft drinks, decreased among schoolchildren aged 11-15 years: in 2010, 9.7% of boys and 7% of girls drank sugar-sweetened beverages compared with 13.5% and 12%, respectively, in 2006. Also, 24.4% of boys and 16% of girls in the 11-15 age group reported weekly physical activity to control their weight in 2010 compared with 27.6% of boys and 18.6% of girls in 2006. Lastly, more children ate fruit more than once a day (22.7% of boys and 31.6% of girls in 2010 compared with 18.7% and 27.3%, respectively, in 2006) (Pudule et al., 2012; Currie et al., 2012).

The shift in health spending to favour more intensive use of preventive and day-care procedures is likely to better address the health problems of Latvians in the future (World Bank, 2010a).

Discussion

5.1 Drivers of change

While necessary reforms, such as restructuring of hospitals, were previously avoided despite recommendations from actors such as the World Bank and the WHO, as the country stood on the verge of bankruptcy, all stakeholders (the Ministry of Health, health care providers, patients, etc.) were in agreement that changes in the financing and organization of the health care system were inevitable. National policy-makers regarded the crisis as an opportunity to implement reforms that were difficult to implement previously.

The presence of external agents (IMF, World Bank, European Commission) and Latvia's commitment to loan conditions provided a strong argument for the Ministry of Health to push through less popular reforms. Although the lenders were sometimes used as a scapegoat, it was the Ministry of Health that stood behind most changes. Financial cuts were focused on the health and welfare sectors because they had the biggest budgets. Even before the crisis, discussions about a more effective use of money in the health care sector were often raised by the Ministry of Finance and in the opinion of the Latvian population much of the financial resources received by the health sector was wasted.

5.2 Content and process of change

The implementation of reforms following the onset of the crisis occurred quickly. Some consultations took place (e.g. with the Chief Specialist's Institution), but most reforms were developed within the Ministry of Health, without discussions with other stakeholders or scientific analysis. Recommendations and restrictions imposed by the Ministry of Finance were strictly followed. In general, implemented measures reflected existing national priorities that could not be implemented previously as there was not enough political will and power to take them forward.

Although there was no clear strategy for responding to the crisis, as it was largely unexpected, Latvia had had some prior experience of working together with WHO and the World Bank and there were clear strategic and theoretical views about priorities and the desired organization of health care services (experts' opinions, country visits and reports; Edwards, Jesse & Kutzin, 2009). Moreover, historically, Latvia has had good information systems and registries providing information for planning. Nevertheless, some ideas, such as the shift to home care and day hospitalizations, were not discussed before the crisis and there was no clear methodology on how these would function.

Although all changes were difficult to implement, some were easier to implement than others. For example, it was relatively easy, on the one hand, for the Latvian Government to cut the number of staff and the salaries of employees at the Ministry of Health and its agencies because public opinion suggested that the public sector was too big and the cause of many problems. On the other hand, shutting down some small local hospitals and the development of a unified emergency service proved much more difficult as these measures were seen as very painful for local populations (because of the convenience of regional hospitals and emergency services to these populations and their symbolic value and function as local employers). Some measures were meant to be temporary. For example, as there was no time to develop more complex payment mechanisms during the crisis, global budgets were implemented first (as an effective measure to cut costs) and a DRG-type system is being developed in the post-crisis environment.

Public reaction to the painful cuts lacked a specific strategy – that is, groups protested against all reforms and cuts in general (all sectors and not only in health care). Nevertheless, the protests opened the door to public discussion, which was not practised previously. Ultimately, society was not really involved in the decision-making process and was not able to stop undesired reforms. However, it is also noteworthy that the population understood that austerity measures were necessary to maintain political stability and to protect the country from bankruptcy. Thus, citizens were supportive of the government and Unity (Vienotība), previously the largest party in the parliament, remained in government after the 2011 parliamentary election (albeit falling to third place in terms of the number of parliamentary seats).

5.3 Implementation challenges

Besides public protests (see above), the speed at which reforms had to be implemented provided another challenge. Inevitably, this speed led to some mistakes in reform planning and implementation. In addition, occasionally, personal interests dominated the decision-making process and not all recommended changes were adopted (e.g. while the Master Plan called for the integration of the State Centre of Infectology into a bigger hospital, it happened only in 2012, after the Centre was initially strengthened in 2009).

5.4 Resilience in response to the crisis

Latvia's economy and health care system were quite vulnerable before the crisis. Economic growth, driven by consumption and investments in real estate along with a growing current account deficit, was not sustainable. As soon as capital inflows from abroad ceased and interest rates surged, there was little fiscal space for manoeuvre. Although the share of registered unemployment has been falling steadily, negative savings rates and high shares of OOP payments made Latvian households vulnerable to economic shocks. At the same time, the population's health status was relatively poor compared with the rest of Europe. Too little emphasis was placed on primary care and prevention, while most resources were spent on acute care. Other factors, such as low total expenditure on health, with a low share of public expenditure and a high share of OOP payments, exposed weaknesses in health system's financing. Excessive hospital capacity consumed most health care resources in 2008 and, as a consequence, this became one of the targets of government cuts when the crisis emerged.

The long-term implications of the crisis in terms of improving the health system's resilience are positive as Latvia managed to tackle many problems in a very short time (restructuring of hospitals, prioritizing primary care, centralizing emergency care services, supporting home care, etc.). Without the crisis, implementation of these reforms would have been lengthy and difficult, if not impossible.

Although restructuring of health care provision was quite radical and much has been achieved, there is scope for more improvement. For example, there are still as many as 42 hospitals, whereas perhaps only 10 or less are needed (authors' estimates based on Edwards, 2011). However, as the crisis period is effectively over for Latvia and the pressure to optimize health care provision is much lower, it will be much more difficult to implement further changes. One area that was negatively affected by the crisis was that of human resources in the health sector: to a certain extent, medical professionals and high-quality state employees found more stable and better paid jobs in other sectors and countries. Public health was also severely affected by the crisis (e.g. by the closing of the Public Health Agency) and will take time to strengthen.

The next step for Latvia is to start analysing the reform process and its results. This will be done in cooperation with the World Bank, particularly with regard to analysing the effectiveness of the Social Safety Net Strategy.

Conclusions

The reform period between 2007 and 2012 can be divided into two stages: before (2007–2008) and after (2009–2012) the economic crisis. However, a substantial degree of continuity can be observed throughout both reform periods. The most important areas of reform (Mitenbergs et al., 2012) were:

- shifting away from hospital care to ambulatory and home care;
- concentrating state functions into fewer institutions (including the
 establishment of the NHS, which is now the main institution for the
 implementation of state health policies and for ensuring the availability of
 health care services in the country);
- reducing the number of staff; and
- rationalizing publicly financed pharmaceutical care.

The first stage of the reform period (2007–2008) was characterized by a continuing institutional centralization process and a slow shift away from hospital to outpatient care. As the magnitude of the economic crisis had not yet emerged, there was no urgent need for reforms. The second stage (2009–2012) was initiated by the enormous financial constraints resulting from the financial and economic crisis in 2009 and it witnessed rapid reforms. Several basic health laws were amended and substantial structural reforms of the health system were achieved. The reform process was very fast and measures were pushed through almost without discussion or scientific analyses. During this period, the Latvian Government succeeded in substantially reducing excessive hospital capacity and inpatient and secondary outpatient services, while prioritizing primary care, services for children and pregnant women, emergency assistance and pharmaceutical policy. The government also managed to concentrate state functions into fewer institutions while reducing the number of staff. A Social

Safety Net Strategy was implemented to protect low income households from user charges and to expand access to health services. Although these were impressive steps in the right direction, Latvia remains the EU Member State with the highest share of the population reporting an unmet need for medical examinations or treatment, and the level of OOP payments as a share of total health expenditure remains very high.

Although assessment of the long-term effects of the crisis is premature, available data suggest that there was no negative short-term effect on mortality. However, there are several challenges that need to be addressed. The first is ensuring sustainable and stable financing of the health care sector, while increasing public expenditure on health and reducing the enormous dependence on OOP payments. The Social Safety Net Strategy, which was implemented in response to the crisis, currently reduces problems in accessing care by the needy population, although only households with an income below LVL 90 (€128) per family member per month are eligible as of 2012. However, there is still room for improving equity, access and health equality for the rest of the population. Explicitly defining the statutory benefits package and increasing the role of private insurance (e.g. with private insurance offering coverage for benefits not included in the statutory benefits package) may contribute to better developing this sector as a source of financing, although the implications for equity should be carefully evaluated.

There is also a need to continue efforts to improve efficiency through structural reforms, including reductions in excess infrastructure and consistent and controlled investment, as well as evidence-based decision-making and more use of health technology assessment processes (currently mainly used for pharmaceuticals) for a more efficient use of existing resources. Reforming provider-payment methods may further contribute to efficiency. While global budgets for hospitals may have contributed to cost-containment and were appropriate during the financial crisis, they do not provide incentives for greater efficiency or higher quality. Hence, the government's work towards the introduction of a DRG-based payment system is well substantiated. Creating an environment of more competition among health care providers of all ownership forms may further contribute to increased efficiency. In addition, the NHS could take greater advantage of its single payer status and engage in more selective contracting and the planned introduction of the e-health system could be another tool that may promote efficiency in the health sector.

Appendix 1

Major crisis related events and changes in the health system in the Latvian health care system, 2009-2012

Date	Event/action				
2009	Discontinuation of the "Development Programme of Out-patient and In-patient Health Care Providers" because of the economic crisis				
	Consolidation of state functions into fewer institutions: closing down of the Public Health Agency, the State Centre of Medical Professional Education and the State Agency of Health Statistics and Medical Technologies; creation of the Centre of Health Economics to replace the State Medicines Pricing and Reimbursement Agency; closing down of the State Compulsory Health Insurance Agency and assigning its functions to three institutions: the Health Payment Centre, Centre of Health Economics and the Health Inspectorate				
	Reduction in the number of staff at the Ministry of Health and its agencies				
	Rapid reduction in the number of hospitals providing statutory services from 72 to 43 (some of the hospital closures had been planned for a long time)				
	Creation of the state Emergency Medical Service, incorporating the State Centre of Emergency and Disaster Medicine, thus centralizing and rationalizing the provision of emergency medical assistance in the country				
	Approval of the Safety Net Strategy by the Cabinet of Ministers (funding provided by the World Bank)				
2010	Law "On the Rights of Patients"				
2011	Cabinet approval of the Public Health Strategy 2011-2017				
	Cabinet approval of the "Regulation of the National Health Service": creation of the NHS as the result of merging the Health Promotion Centre with the Centre of Health Economics				
2011/2012	Reform of the pharmaceutical reference pricing system				
2012	Creation of the Centre for Disease Prevention and Control as the new national institute of public health				
	Political decision to introduce the Nord-DRG system for payment of hospitals: preparatory work for implementation (piloting started in 2013)				
	Reform of Regulations No. 899 ("On the Reimbursement of Expenditures for Medicinal Products and Medicinal Devices"), introducing 50% reimbursement for all prescription medicines (beyond those listed in the positive list) for children up to 24 months and 25% for all pregnant women (including up to 42 days after childbirth)				

Note: Nord-DRG: Nordic Diagnosis-related Group scheme.

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About the authors

Maris Taube is Director of the National Health Service of Latvia and Associate Professor of Psychiatry at the Department of Psychiatry and Narcology, Riga Stradiņš University. He is a medical doctor and holds a doctoral degree from Riga Stradiņš University, Latvia.

Uldis Mitenbergs is a part-time lecturer at the Department of Public Health and Epidemiology, Riga Stradiņš University, Latvia. He is a medical doctor and holds a master's degree in business administration from Yale University, USA. He is a doctoral candidate in medicine at Riga Stradiņš University, Latvia.

Anna Sagan is a research fellow of the European Observatory on Health Systems and Policies, based at the London School of Econimics and Political Science.