Croatia

Health Care & Long-Term Care Systems

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Health care systems

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2.4. CROATIA

General context: Expenditure, fiscal sustainability and demographic trends

General statistics: GDP, GDP per capita; population

Croatia, member of the European Union since 2013, has a population of almost 4.2 million inhabitants, which is roughly 0.8% of the EU population. In the absence of any sizeable immigration and a decline in fertility, the population of Croatia is steadily decreasing. In the period from 2016 to 2070 a decrease of 19% can be expected, based on the population forecast of Eurostat, leading to a population of 3.4 million in 2070.

In current prices the GDP of Croatia has been increasing fast from 2005 to 2008, from €37 to €48 billion. Since 2008 it decreased to €43 billion in 2013 and has remained roughly stable at a lower level since then (€44 billion in 2015). GPD per capita was in 2015 with 16,500 PPS well below the EU average of 29,600 PPS.

Total and public expenditure on health as % of GDP

Total health expenditure was at 7.7% of GDP in 2015, lower than the EU average of 10.2%. Total public expenditure on health as a percentage of GDP (6.0%) remains under the EU average (8.0%). Looking at health care without long-term care ([82]) reveals a similar picture with public spending below the EU average (5.7% vs 6.8% in 2015). At the same time, the share of health in public expenditure is with 13.4%, recorded in 2015, of total government expenditure, close to the EU average of 15%. With some 77.7% the share of public expenditure in total expenditure on health was in 2015 also at the EU average of 78.4%.

When expressed in per capita terms, total spending on health at 1,151 PPS in 2015 was significantly below the EU average in the same year (3,305 PPS). So is public spending on health: 895 PPS in 2015 vs. an average of 2,609 PPS in the EU in 2015 ([83]).

Expenditure projections and fiscal sustainability

As a consequence of population ageing, health care expenditure is projected to increase by 0.7 pps of GDP, slightly below the average growth level expected for the EU of 0.9 pps of GDP, according to the "AWG reference scenario" ([84]). When taking into account the impact of non-demographic drivers on future spending growth ("AWG risk scenario"), health care expenditure is expected to increase by 1.5 pps of GDP from now until 2070 (EU: 1.6 pps). Overall, the country faces no fiscal risks in the short-run and medium risks in the medium and long-term ([85]).

Health status

Life expectancy at birth for both women and men is respectively 80.5 years and 74.4 years and is, although having increased during the decade, below the EU average (83.3 and 77.9 years respectively). Similarly, healthy life years at birth for both sexes are with 56.8 years (women) and 55.3 years (men) lower than the EU average (63.3 and 62.6, respectively). Infant mortality has gradually declined to 4.1 per 1,000 live births in 2015, but is still higher than the EU average of 3.6.

System characteristics

Overall description of the system

Since 1990, Croatian health care went through a series of reforms that have helped to transform the once fragmented and highly decentralised health system, inherited from former Yugoslavia and battered by five years of war, into a health care system that maintains the principles of universality and solidarity.

The system of health care in Croatia is based on mixed financing (with predominant public

([82]) To derive this figure, the SHA aggregate HC.3 for LTC (health) is subtracted from total health spending.

([83]) Note that these PPS figures reflect current plus capital health expenditure in contrast to Eurostat data series, which reflect current expenditure only.

([84]) The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

([85]) European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

financing, nearly 78% in 2015) and provision by public and private health services providers. Health care is financed from mandatory contributions (approximately 91%) as well as from taxes, co-payments and private insurance. Also a share of compulsory car insurance premiums is part of the healthcare budget.

Health care is contracted by the Croatian Health Insurance Fund (HZZO), counties (20) and the City of Zagreb, and beneficiaries. The contribution rates for the mandatory health insurance are 15% of gross salary ([86]) and an additional special contribution of 0.5% of gross salary for injuries and occupational diseases. Since 2015, the Croatian Health Insurance Fund is separated from the State Treasury and is functioning as an extra-budgetary fund.

Two basic rights arising from the compulsory basic health insurance include in-kind benefits (right to health protection) and cash benefits (e.g. compensation for sick leave, travel expenses ([87]), etc).

Coverage

The average number of insured persons in 2015 was 4,325,852, however, only 33% of the insured (1,446,654 persons) contributed the full premium of 15% of gross salary ([88]). While it is estimated that only 1/3 of the population is liable to pay health care contributions, the remaining population includes pensioners (who pay a reduced healthcare premium depending on their pension), insured persons' family members, unemployed (health contribution 5% of the prescribed base amount, paid from the state budget) and other inactive persons.

From the share of the population paying the full healthcare insurance contributions in 2015, 47% (685,988) were women and 53% (780,666) persons were men. Furthermore, 1,061,553 pensioners were registered in 2015. The number of farmers was 21,845 ([89]). Other categories of insured (which comprises the unemployed, insured abroad - pensioners, students and high school students, persons incapable of independent life and work, etc.) marked an yearly increase by 29.4% in 2015 ([90]).

Administrative organisation and revenue collection mechanism

Contributions are paid on a monthly contribution base, which represents the salary or other income from employment paid by employer and subject to income tax or income from self-employment, which is calculated as the product of monthly contribution base and a coefficient depending on the nature of self-employment. Health contributions on pensions above the average net wage amount to 3%.

In 2008, the efficiency of the sector was increased through the introduction of public procurement of medication, centralised procurement of medical equipment, better supervision of transfers to households, reorganisation of emergency medical services, use of eHealth tools in primary health care and introduction of national waiting lists. Diagnoses related groups (DRGs) replaced the unpopular payment per therapeutic procedure (PPTPs) in 2009 and allowed for more refined case-groupings.

Role of private insurance and out of pocket co-payments

Patients have to pay co-payments for medicines, which are on a complementary list of medicines, even if they have complementary insurance. Complementary insurance is a voluntary insurance. Patients without complementary health insurance

([86]) In order to boost the competitiveness of the economy, the healthcare insurance contributions were lowered from 15% to 13% in 2012, though this measure was revoked in 2014 with Act on Amendments of the Contributions Act, OG, No. 41/14.

([87]) Insured persons are entitled to claim reimbursement of travel expenses if they used health services at a contracted health facility or physician which is more than 50 km distant from their residence, provided they are not able to obtain the same treatment in the place of their residence. However, complicated rules of reimbursement do not allow for a full reimbursement of costs in all cases.

([88]) Source: Croatian Health Insurance Fund Annual Report for 2015, http://cdn.hzzo.hr/wp-content/uploads/2016/04/Izvjesce_o_poslovanju_hzzo_za_2015_godinu.pdf.

([89]) Source: Croatian Health Insurance Fund Annual Report for 2015, http://cdn.hzzo.hr/wp-content/uploads/2016/04/Izvjesce_o_poslovanju_hzzo_za_2015_godinu.pdf.

([90]) Source: Croatian Health Insurance Fund Annual Report for 2015, http://cdn.hzzo.hr/wp-content/uploads/2016/04/Izvjesce_o_poslovanju_hzzo_za_2015_godinu.pdf.

have to pay additional fixed amount of HRK 10 (€1.50) per prescription and HRK 10 (€1.5) for a GP visit. They also have to pay 20% of hospital expenditures with the maximum amount of approximately €260 per invoice (for treatments, medical tests, hospital bed).

With the Healthcare Reform of 2008, the share of the population excluded from paying co-payments was reduced. At the same time, the HZZO offered a voluntary complementary health insurance (CHI), which could cover these co-payments (Voncina, 2012). Complementary health insurance may be provided by HZZO or by private insurers.

The total number of insured persons by HZZO for complementary health insurance was 2,597,831 in 2015. From them, as many as 1,623,799 paid the complementary health insurance policy by themselves. For about 974,032 insured persons, the costs of complementary health insurance policy were covered from the state budget (these categories include persons with 100% disability, organ donors, blood donors, pupils and students under 26 years, as well as persons below the minimum income threshold) ([91]).

HZZO provided the complementary health insurance at a yearly loss of 23 million euro in 2012. Nevertheless, the HZZO reduced the price of complementary health insurance policy to HRK 70 (€9) for all insured persons in September 2013. With this measure, HZZO hoped to retain the majority of 2,370,000 insured persons and beat the competitors in the market. The largest private insurer in Croatia, *Osiguranje*, offered their complementary health insurance policies at a price of HRK 75, and with the opening of the market after Croatia joined the EU; additional private insurance companies have announced their interest in this segment. HZZO is currently holding around 98% of the market in complementary health insurance (Bodiroga-Vukobrat, 2013).

Private voluntary supplementary insurance plays a minor role in Croatia, with about 1.2% of the population holding a private supplementary health insurance policy ([92]).

Types of providers, referral systems and patient choice

The number of practising physicians per 100,000 inhabitants (319 in 2015) is slightly below the EU average (344 in 2015), showing an increase since 2005 (250). The number of GPs per 100,000 inhabitants (55 in 2015) is below the EU average (78 the same year), and has remained roughly stable since 2009. The number of practising nurses per 100,000 inhabitants (583 in 2015) is well below the EU average (833) despite having increased throughout the decade, from a level of 483 in 2005 ([93]).

Teaching hospitals, clinical hospital centres and state institutes of public health are state owned. Health centres, polyclinics, general and special hospitals, pharmacies, institutions for emergency medical aid, home care institutions and county institutes of public health are county-owned. In 2002, health centres started merging and number decreased from 120 in 2001 to 49 in 2014. Out of 73 hospital institutions and sanatoria, 10 special hospitals and 5 sanatoria were privately owned. By the end of 2014, there were 5,399 private practice units (doctors' offices, laboratories, private pharmacies, private physical therapy practices and home care services) registered ([94]). The majority of primary health care general practitioner (GP) offices located in health centres were since 1991 privatised, and the remaining ones were left under county ownership (Bodiroga-Vukobrat, 2013).

Treatment options, covered health services

As the main purchaser of health services, the HZZO also plays a key role in the definition of basic health services covered under statutory insurance, the establishment of performance

([91]) Source: Croatian Health Insurance Fund Annual Report for 2015, http://cdn.hzzo.hr/wp-content/uploads/2016/04/Izvjesce_o_poslovanju_hzzo_za_2015_godinu.pdf.

([92]) The 1993 Law allowed opting-out of the public insurance system and acquiring substitutive insurance with private insurers. This was abolished in 2002.

([93]) Data for density of health personnel is taken from the OECD database. As this figure includes only nurses employed in hospitals, the actual number may be underestimated.

([94]) Croatian Institute of Public Health, Croatian Health Service Yearbook 2014, http://www.hzjz.hr/wp-content/uploads/2015/05/ljetopis_2014.pdf.

standards and price setting for services covered by the HZZO (Vončina et al., 2006).

With 1.8 hospitals and 358 acute hospital beds per 100,000 inhabitants in 2015, Croatia is in line with older EU Member States and does not have excess hospital facilities like many other countries in Central and Eastern Europe. However, the Croatian hospitals have inadequate medical technology and equipment. Comparing the number of MRI scans, mammograms and CT scans per 100,000 inhabitants reveals that Croatia is in the lower ranking within the EU. In addition, regional coverage varies and regional differences persevere, since many capacities are unequally distributed and concentrated in metropolitan areas (Bodiroga-Vukobrat, 2013).

Price of healthcare services, purchasing, contracting and remuneration mechanisms

Since 2015, all hospitals and primary care providers are financed from the HZZO budget. The treatment of acute patients is paid to clinical medical institutions according to diagnostic-therapeutic groups (DTS), or according to day of clinical (hospital) treatment (DBL) for chronic diseases. Additional coverage is provided for particularly expensive medicines and certain complicated procedures. In the year 2015, 24,069 beds have been contacted, of which 12,617 are for acute care, 1,324 for long-term care, 6,357 beds for chronic diseases and 3,771 day care beds. The average monthly hospital limit in 2015 was HRK 664,907,700 (€8,981,231), which increased from HRK 576.5 million in 2014 ([95]).

In 2015, the average number of waiting days for all diagnostic procedures was 147 with 178,344 orders waiting (decreased from 166 with 189,540 orders in 2014); the average number of days for therapeutic procedures was 253 with 42,791 orders (down from 267 with 44,822 in 2014), and the average number of days for first examination was 102 with 128,847 orders (lower than 111 with 125,236 orders recorded the previous year).

In 2015, there were 76 hospital institutions and treatment centres in Croatia: 5 clinical hospital centres, 8 clinical hospitals and clinics, 20 general hospitals, 32 special hospitals and treatment centres, 1 hospice, 9 general wards and 1 out-of-hospital maternity ward.

In 2015, Croatian hospitals treated 748,159 people. The care included also hospital stays for childbirth, abortion, and hospital rehabilitation. According to individual reports on treated patients (excluding childbirth, abortions and rehabilitation), the number of patients treated in Croatian hospitals in 2015 was 589,215.

The number of beds (expressed per 100,000 population) in all hospital-type institutions in 2015 was 583. By bed structure per 100,000 inhabitants in 2015, there were 362 acute beds (154 in general hospitals and 225 in teaching hospitals). For chronic and sub-acute patients, 189 beds per 100,000 inhabitants were available.

In Croatian hospitals, in 2015 there were 6,401,804 days of hospital treatment. In other words, the hospital average length of stay was 8.6 days (against 15.4 days in 1990, but still higher than the EU average of 7.6 days in 2015) ([96]).

It is recognised that a reduction of existing inefficiencies in hospital management is required in the short-run in order to decrease the debt and arrears of hospitals. Reconsidering the model of financing of hospitals seems inevitable in the long run. To this end, the Hospital Master Plan, which is the National plan of development of clinical hospital centres, clinical hospitals and general hospitals in Republic of Croatia for 2015-2016, has come into force in March 2015 ([97]). The World Bank supported the preparation of the plan, and provided funds to hire French consultancy firm *Conseil Santé* to assist with the writing of the plan.

([95]) Network of Public Health Services (Official Gazette, No 101/12, 31/13, 113/15, 20/18). Depending on the structure, the majority of hospital expenses are spent on wages (57% in 2011).

([96]) Average length of stay in general hospitals has been reduced from 12.3 days in 1990 to 6.68 days in 2015. The average length of stay in teaching hospital centres, teaching hospitals and clinics was reduced from 12.05 to 6.86 days and in special hospitals from 34.83 to 24.83 days in the same period. Source: Croatian Institute of Public Health, Croatian Health Service Yearbook 2014, http://www.hzjz.hr/wp-content/uploads/2015/05/ljetopis_2014.pdf.

([97]) http://narodne-novine.nn.hr/clanci/sluzbeni/2015_03_26_544.html.

The market for pharmaceutical products

Croatia spent 26% of total current health expenditure for outpatient pharmaceuticals and medical goods in 2015, almost as much as for inpatient care. In 2011, there were 16 licensed pharmaceutical manufacturers in Croatia. Domestic manufacturers held 20% of the market share by value produced and 33% by volume produced (Ministry of Health and Social Welfare, 2011). The major domestic pharmaceutical companies are Pliva, Belupo and JadranGalenskiLaboratorij.

The HZZO is a purchasing monopoly. It controls drug prices and it has enforced price reductions in the market. The access of new drugs to the market used to take two to three years. However, the 2003 Drugs Law introduced a new Agency for Drugs and Medical Products and set out a shorter, more ambitious time frame for registration (210 days for ready-prepared drugs).

The Drug Reference Price System was introduced in 1999 in an attempt to contain pharmaceutical expenditure. To further rationalise costs for drugs, the HZZO has introduced risk-sharing, pay-back and cross-product agreements with pharmaceutical companies. In addition, according to the new model, whenever both an off-patent and a generic are available, generics are preferred, unless there are specific medical indications to the contrary (Vončina, 2006).

To curb the volume of prescriptions, the HZZO has imposed annual caps on the number of prescriptions per beneficiary and limited the number of drugs per prescription, which, however were not successful as the number of prescriptions actually increased over time. The HZZO reviews prescribing practices but does not include them as part of performance indicators for payments. Overspending by individual GPs is, however, subject to financial punishment of up to 10% of monthly capitation. The punishments are enforced (Vončina, 2006).

Pharmaceuticals covered by the HZZO are classified into two lists: the positive list covered entirely by HZZO, and the supplementary list with medicines covered partly by HZZO and partly by OOP payments. Medicines are free of charge if they are on the positive list, regardless of the patient's situation (age, financial status, inpatient or outpatient setting, etc.). There is a prescription fee for all reimbursable medicines of HRK 10 (approximately €1.5) per prescription. Private health insurance schemes do not cover medicines.

Use of Health Technology Assessments and cost-benefit analysis

In accordance to the Act on Quality of Health Care and Social Welfare (Official gazette, no 124/11), the Agency for Quality and Accreditation in Health Care and Social Welfare is in charge of health technology assessment (HTA). However, the use of HTA is optional and not mandatory, a circumstance leading to HTA being rather underused and underdeveloped in Croatia. The World Bank identifies HTA and the use of protocols as a field for improvement (Bodiroga-Vukobrat, 2013).

The HZZO is playing a big role in HTA decisions and, through its "Drugs Committee" and "Medical Devices Committee", is responsible for appraisals and recommendations to the Board of the HZZO. The Board of HZZO makes then the pricing and reimbursement decisions. The HZZO can make a request to the Agency for Quality and Accreditation in Healthcare and Social Welfare – HTA Department to conduct an assessment. The Ministry of Health is involved in the HTA process, when it comes to legislation. As a member state, Croatia is also taking part in EUnetHTA and is represented in some of the work groups of the network.

eHealth, Electronic Health Record

The Croatian Government aims at improving, modernising and maintaining the existing information systems in health care. Information and eHealth strengthening is the first priority identified in the 2012-2020 National Health Care Strategy. The aim is to integrate and standardise health information, to further establish Electronic Health Records, to improve the use of statistical information to support decision-making and to introduce a reporting and warning system.

Health promotion and disease prevention policies

The Government of Croatia confirms in the National Health Care Strategy 2012-2020 the need to strengthen disease prevention. Therefore, it has committed to increase gradually the share of preventive programmes and activities in the healthcare budget. The primary focus in prevention must be on the biggest health problems of the Croatian population – chronic non-infectious diseases, malignant tumours, injuries, mental disorders and risk behaviours, including smoking, misuse of alcohol and drugs, physical inactivity and poor nutritional habits. The broad ambitions of the government would need to be translated in to concrete actions.

Recently legislated and/or planned policy reforms

The focus of reforms implemented between 2006 and 2013 was on the financial stabilisation of the health care system. The key reform, implemented between 2008 and 2011, contained a number of measures: diversification of public revenue collection mechanisms through the introduction of new mandatory and complementary health insurance contributions; increases in co-payments; and measures to resolve accumulated arrears. Other important reforms included changes in the payment mechanisms for primary and hospital care; pharmaceutical pricing and reimbursement reform; and changes to health care provision (e.g. emergency care reform).

The launch of many of these reforms was not difficult, as for many of them policy options were not publicly discussed and no comprehensive implementation plans were developed. However, as a result, many of them soon faced serious implementation problems and some were only partially implemented.

Planned reform activities for 2014–2016 were mainly directed at achieving cost–effectiveness in the hospital sector ([98]).

Based on the National Reforms Programme for 2016 adopted by the Croatian Government in April 2016, spending control, rationalisation and optimisation of costs should ensure a high level of health protection. This should be achieved through changes of the health insurance system, through a reform of emergency care, the reorganisation of the hospital network, the rationalisation and reorganisation of hospital non-medical services, a reform of primary health care, further development and implementation of the joint public procurement procedure, and through the stricter control of drug prescriptions and the informatisation of the health system ([99]).

([98]) Republic of Croatia has regulated healthcare by *Health Care Protection Act* ("Official Gazette", 150/08, 71/10, 139/10, 22/11, 84/11,, 12/12, 35/12,70/12, 82/13, 22/14, 13/17), *Compulsory Health Insurance Act* ("Official Gazette" No. 80/13, 137/13) and *Voluntary Health Insurance Act* ("Official Gazette", 85/06, 150/08, 71/10).
Health Protection Act: regulates principles and procedures of health care, rights and obligations of persons in the use of health care services, social welfare holders for population health, content and organisational forms of health activities and supervision of the performance of health care activities.
Compulsory Health Insurance Act: regulates compulsory health insurance in the Republic of Croatia, the scope of the right to health care and other rights and obligations of the insured persons, acquiring and financing terms and manners of, as well as rights and obligations of compulsory health insurance, including the rights and obligations of the contracting entities for the implementation of health care from the compulsory health insurance. Under this Act the Directive 2011/24/EC of the European Parliament and of the Council of 9 March 2011 is transposed into national legal system and the application of patients' rights in cross-border healthcare (OJ L 88, 2011).
Voluntary Health Insurance Act: regulates types, conditions and manners of implementation of voluntary health insurance (voluntary, supplementary and private health insurance).
National Strategy for the Development of Health (2012-2014) sets the direction of development of the Croatian Health Care ("Official Gazette" No. 116/12), and laws governing the conduct of certain medical procedures. All those laws include provisions of the acts of the European Union, such as Transplantation of Human Organs for the Purpose of Medical Treatment Act("Official Gazette" No. 144/12), Medically Assisted Reproduction ("Official Gazette" No. 86/12), Application of Human Tissues and Cells Act ("Official Gazette" No. 144/12).
The organisation itself, as well as conditions for carrying out certain health activities are regulated by following laws: *Medical Practice A*ct ("Official Gazette", no. 121/03 and 117/08), *Medical- Biochemical Activities Act* ("Official Gazette" No. 121/03 and 117/08), *Dentistry Act* ("Official Gazette", 121/03, 117/08, and 120/09), *Pharmacy Act* ("Official Gazette", 121/03,,35/08, and 117/08), *Nursing Act* ("Official Gazette", 121/03, 117/08, 57/11). Health care in the Republic of Croatia is also regulated by other regulations which are adopted under the basis of the specified laws.

([99]) National Reforms Programme for 2016, https://vlada.gov.hr/UserDocsImages//Sjednice/2016/17%20sjednica%20Vlade//17%20-%201a.pdf.

Joint hospital procurement

While initially the health care sector remained largely unaffected by the austerity measures implemented in response to the financial crisis, since 2012, it faced more pressure to rationalise health care costs. One of the measures considered to have the potential to achieve significant savings was the implementation of a joint hospital procurement programme for public hospitals.

Public hospitals, which previously procured all medical products and other goods individually, were directed to form joint purchasing bodies for items that account for the largest share of expenditure, such as medicines, medical devices and energy. A decentralised approach was adopted, whereby a number of hospitals were assigned to procure categories of goods for all participating hospitals. Hospitals that had previously achieved best value for money for certain procurement categories were selected to be the central purchasers. Central procurement was launched for 15 groups of goods and services in October 2012.

Despite substantial opposition from manufacturers and retailers, a number of joint procurement tenders have been successfully concluded. So far, the reform is proving to be successful in reducing prices and achieving savings, and in standardising the quality of procured goods.

'Sanation' of public hospitals

The problem of poor hospital finances has persisted over many years and in the last 15 years there were more than 10 cases where hospitals had to be financially reorganised in the short term (Bodiroga-Vukobrat, 2013). In 2012, the Act on Sanation of Public Institutions ([100]) was adopted, mainly with the aim of improving the finances of heavily indebted county-owned hospitals. It enabled temporary centralisation of the hospital management, and it was conceived as one of the measures aimed at reducing the overall public debt and improving the efficiency of the public sector (measures were also undertaken in other sectors).

In April 2013, the government adopted decisions on the financial reorganisation of nine state-owned clinical hospitals at a cost of HRK 1.9 billion (€250 million) and an additional 25 health care facilities (mostly county-owned hospitals) at a cost of HRK 1.13 billion (€150 million) (Bodiroga-Vukobrat, 2013). The measure was to be applied to all hospitals whose expenditure exceeded revenues at the end of 2013. During 2013 and 2014 total amount of debt settlement was HRK 3.5 billion (€461 million) ([101]). However, both the hospitals and the HZZO continued to generate new arrears, while at the same time both the State budget for health care and co-payments have been reduced. Problems with poor hospital management also persist due to the political designation of hospital directors and managers.

In 2017, the government allocated approximately €13.3 million to settle arears of state-owned hospitals. The amount received by each hospital was determined by the Ministry of Health, taking into account the amount of debt and how long it has been overdue and various parameters of hospital activity. The same amounts are to be allocated in 2018 and 2019. Hospitals must submit, within seven days of receiving funds, a report on the use of funds and show evidence that funds were spent on debt settlement ([102]).

Other reforms

Some of the reforms that were introduced between 2006 and 2013 were encouraged by previous experiences (for example, the introduction of a prospective case-adjusted hospital payment system, based on DRGs, was encouraged by evidence on efficiency gains reported since the implementation of the payment per therapeutic procedure (PPTP) schedule in 2005) (Bodiroga-Vukobrat, 2012), however, most of the measures had not been tested before.

The Government Programme for the 2011–2015 Mandate recognised that citizens have over the years become increasingly burdened with health care financing and the focus has been shifted to patient-oriented health policy, maintaining solidarity between the healthy and the ill, the rich

([100]) The word "sanation" in the context of the Croatian health care system means restoring a sound financial position and improving management.

([101]) Source: https://vlada.gov.hr/UserDocsImages/Sjednice/2016/272%20sjednica%20Vlade/272%20-%201.pdf.

([102]) Source: https://vlada.gov.hr/UserDocsImages//Sjednice/2017/12%20prosinac/73%20sjednica%20VRH//73%20-%2013.pdf.

and the poor, and the young and the elderly. This was to be achieved through a number of measures, such as the reorganisation of emergency medical care, primary health care and hospitals; education of human resources; more emphasis on preventive measures; and the shortening of waiting lists.

The large number of changes that have been introduced and the speed of their implementation have resulted in insufficient preparation of some measures, delays and problems with implementation. Nevertheless, several reforms (the pharmaceutical pricing and reimbursement reform; the 2013 payment mechanisms reform; and also the EMS reform) seem to have been successfully implemented.

According to the Hospital Master Plan, in 2015 reorganisation of hospitals was initiated. In the last quarter of 2015, the Network of Public Health Services was changed which implied a reclassification of hospitals beds from acute beds to palliative, chronic, prolonged and day-care beds. The full implementation of the Master Plan, including the reshaping of the hospital network, has started by the end of 2016 ([103]).

As part of the 2017 National Reform Programme, adopted by the Government ([104]), is the continuation of reform activities directed at the reduction of healthcare debts and sustainability of the healthcare system was established. The reform activities continue to focus on establishing a functional integration of hospitals, increased efficiency and quality of healthcare services, development and implementation of human resource management policy in healthcare, rationalisation and reorganisation of non-healthcare services in hospitals, further enforcement of strict controls of prescribing medicines, unified public procurement and computerisation of the system, improving primary health care and palliative care, and increasing the number of complementary health insurance users.

([103]) Source: Convergence Program of Republic of Croatia for 2016-2019, https://vlada.gov.hr/UserDocsImages//Sjednice/2016/17%20sjednica%20Vlade//17%20-%201b.pdf.

([104]) Resolution, Class No. 022-03 / 17-07 / 47, Reg. No. 50301-25 / 05-17-3 dated April 27, 2017.

Challenges

A range of reforms have been implemented in recent years – or are still in the state of gradual implementation. They imply substantial structural changes, with a focus on controlling the growth of health expenditure and improving efficiency and quality. The main challenges for the Croatian health care system are as follows:

- To continue increasing the efficiency of health care spending in order to adequately respond to the increasing health care expenditure over the coming decades. To this end, to strengthen the existing public procurement system.

- To improve the basis for more sustainable and efficient financing of health care (e.g. considering additional sources of general budget funds), aiming at a better balance between resources and spending, and diminishing the reliance on retroactive government transfers to cover deficits by health care providers and of regressive financing.

- To increase efficiency in hospital productivity by adjusting the way providers are remunerated, including staff wages, thereby containing the issue of deficits and arrears, the elimination of which is lagging behind. To this end, to further the efforts in the introduction of activity-based systems as a driver of cost-efficiency.

- To explore how current financing schemes could be adjusted to a mix of capitation-based reimbursement and of activity/quality linked incentives, to increase efficiency and quality in the delivery of services at all levels of care (primary and specialist care) and notably to encourage more health promotion and disease prevention activities (e.g. vaccination).

- To optimise the configuration of the hospital system (including capacity, staff and service mix) to tackle existing regional differences and obstacles to access to services. To design and implement a policy of human resources management based on improved training and on achieving a skill mix consistent with a primary-care based system.

- To improve data collection, especially in some crucial areas such as resources and care utilisation; to improve the patient information system promoting the development and utilisation of e-health tools as envisaged by the 2012 National Health Care Strategy, which can help ensuring effective referral systems from primary to specialist care and improving care coordination between types of care.

- To consider additional measures to improve the rational prescribing and usage of medicines, such as information and education campaigns, the monitoring of prescription of medicines and a more explicit policy on incentivising the uptake of generics. The policies could help improving population health, reducing the high level of out-of-pocket payments and improving access to cost-effective new medicines by generating savings to the public payer.

- To gradually increase the use of cost-effectiveness information in determining the basket of goods and the extent of cost-sharing, increasing the use of HTA currently underused and underdeveloped, possibly making it a compulsory step and strengthening the role of the Agency for Quality and Accreditation in Health Care and Social Welfare.

- To further enhance health promotion and disease prevention activities, promoting healthy life styles and disease screening given the most recent pattern of risk factors (such as, for instance alcohol consumption).

- Implementing the Health Care Strategy (2012-2020), with a view of increasing ownership of the strategy by all stakeholders of the health system.

Table 2.4.1: **Statistical Annex – Croatia**

General context												EU- latest national data			
GDP	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2009**	**2011**	**2013**	**2015**
GDP, in billion Euro, current prices	37	40	44	48	45	45	45	44	43	43	44	12,451	13,213	13,559	14,447
GDP per capita PPS (thousands)	15.4	16.4	17.4	17.0	15.3	15.1	15.4	15.5	15.4	15.6	16.5	26.8	28.1	28.0	29.6
Real GDP growth (% year-on-year) per capita	4.1	4.8	5.1	2.1	-7.3	-1.2	-0.1	-1.8	-0.4	0.3	3.3	-4.7	1.5	0.1	2.0
Real total health expenditure growth (% year-on-year) per capita	:	5.7	11.7	5.0	-1.9	-1.4	-15.3	-2.5	7.9	0.5	0.9	3.7	0.2	0.2	4.1

Expenditure on health*	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2009**	**2011**	**2013**	**2015**
Total as % of GDP	7.4	7.4	7.9	8.1	8.6	8.6	7.3	7.2	7.8	7.8	7.7	10.2	10.1	10.1	10.2
Total current as % of GDP	6.9	7.0	7.4	7.7	8.2	8.3	7.8	7.8	7.3	7.5	7.4	9.3	9.4	9.9	9.9
Total capital investment as % of GDP	0.5	0.5	0.5	0.4	0.4	0.3	-0.5	-0.6	0.5	0.4	0.3	0.9	0.6	0.2	0.3
Total per capita PPS	899	998	1,159	1,307	1,296	1,293	1,092	1,070	1,150	1,144	1,151	2,745	2,895	2,975	3,305
Public total as % of GDP	6.4	6.5	7.0	6.9	7.4	7.4	5.9	6.0	6.1	6.2	6.0	8.0	7.8	7.8	8.0
Public current as % of GDP	5.9	6.0	6.5	6.5	7.0	7.1	5.5	5.6	5.9	5.8	5.7	7.7	7.6	7.6	7.8
Public total per capita PPS	778	871	1,021	1,114	1,118	1,120	883	881	903	900	895	2,153	2,263	2,324	2,609
Public capital investment as % of GDP	0.48	0.49	0.47	0.43	0.42	0.34	0.36	0.35	0.29	0.36	0.30	0.2	0.2	0.2	0.2
Public as % total expenditure on health	86.6	87.2	88.1	85.2	86.3	86.6	80.8	82.4	78.5	78.7	77.7	78.1	77.5	79.4	78.4
Public expenditure on health in % of total government expenditure	14.0	14.2	14.6	13.4	12.8	13.0	13.6	13.6	13.2	13.3	13.4	14.8	14.8	15.2	15.0
Proportion of the population covered by public or primary private health insurance	:	:	:	:	:	:	100.0	100.0	:	:	100.0	99.6	99.1	98.9	98.0
Out-of-pocket expenditure on health as % of total current expenditure on health	13.4	13.4	12.5	14.5	13.7	13.8	13.4	12.8	12.1	15.0	15.2	14.6	14.9	15.9	15.9

Note: *Including also expenditure on medical long-term care component, as reported in standard internation databases, such as in the System of Health Accounts. Total expenditure includes current expenditure plus capital investment.

Population and health status	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2009**	**2011**	**2013**	**2015**
Population, current (millions)	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2	502.1	503.0	505.2	508.5
Life expectancy at birth for females	78.8	79.3	79.2	79.7	79.7	79.9	80.4	80.6	81.0	81.0	80.5	82.6	83.1	83.3	83.3
Life expectancy at birth for males	71.7	72.4	72.2	72.3	72.8	73.4	73.8	73.9	74.5	74.7	74.4	76.6	77.3	77.7	77.9
Healthy life years at birth females	:	:	:	:	:	60.4	61.7	64.2	60.4	60.0	56.8	62.0	62.1	61.5	63.3
Healthy life years at birth males	:	:	:	:	:	57.4	59.8	61.9	57.6	58.6	55.3	61.3	61.7	61.4	62.6
Amenable mortality rates per 100 000 inhabitants*	149	142	144	136	132	125	226	216	206	207	216	64	138	131	127
Infant mortality rate per 1 000 live births	5.7	5.2	5.6	4.5	5.3	4.4	4.7	3.6	4.1	5.0	4.1	4.2	3.9	3.7	3.6

Notes: Amenable mortality rates break in series in 2011.

System characteristics												EU- latest national data			
Composition of total current expenditure as % of GDP	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2009**	**2011**	**2013**	**2015**
Inpatient curative and rehabilitative care	:	:	:	:	:	:	2.0	1.9	1.6	1.6	1.7	2.7	2.6	2.7	2.7
Day cases curative and rehabilitative care	:	:	:	:	:	:	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3
Out-patient curative and rehabilitative care	:	:	:	:	:	:	1.7	1.7	1.7	1.9	1.9	2.5	2.5	2.4	2.4
Pharmaceuticals and other medical non-durables	:	:	:	:	:	:	:	2.0	2.4	2.2	1.9	1.2	1.2	1.5	1.4
Therapeutic appliances and other medical durables	:	:	:	:	:	:	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.4	0.4
Prevention and public health services	:	:	:	:	:	:	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3
Health administration and health insurance	:	:	:	:	:	:	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4
Composition of public current expenditure as % of GDP															
Inpatient curative and rehabilitative care	:	:	:	:	:	:	1.8	1.7	1.5	1.5	1.5	2.6	2.5	2.5	2.5
Day cases curative and rehabilitative care	:	:	:	:	:	:	0.2	0.2	0.2	0.3	0.3	0.1	0.2	0.3	0.3
Out-patient curative and rehabilitative care	:	:	:	:	:	:	1.3	1.4	1.4	1.4	1.4	1.8	1.8	1.7	1.8
Pharmaceuticals and other medical non-durables	:	:	:	:	:	:	1.3	1.3	1.6	1.4	1.1	0.9	0.9	1.0	1.0
Therapeutic appliances and other medical durables	:	:	:	:	:	:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Prevention and public health services	:	:	:	:	:	:	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Health administration and health insurance	:	:	:	:	:	:	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3

Source: EUROSTAT, OECD and WHO.

Table 2.4.2: **Statistical Annex - continued – Croatia**

Composition of total as % of total current health expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data 2009	2011	2013	2015
Inpatient curative and rehabilitative care	:	:	:	:	:	:	25.1%	24.0%	21.5%	21.5%	23.1%	29.1%	27.9%	27.1%	27.0%
Day cases curative and rehabilitative care	:	:	:	:	:	:	2.4%	2.4%	3.3%	4.0%	4.5%	1.7%	1.7%	3.0%	3.1%
Out-patient curative and rehabilitative care	:	:	:	:	:	:	22.1%	21.9%	23.3%	25.1%	25.5%	26.8%	26.3%	23.7%	24.0%
Pharmaceuticals and other medical non-durables	:	:	:	:	:	:	:	26.2%	32.6%	29.4%	26.1%	13.1%	12.8%	14.7%	14.6%
Therapeutic appliances and other medical durables	:	:	:	:	:	:	2.1%	1.9%	1.9%	2.5%	2.6%	3.6%	3.6%	4.1%	4.1%
Prevention and public health services	:	:	:	:	:	:	1.8%	2.1%	2.3%	2.5%	2.8%	2.8%	2.5%	3.0%	3.1%
Health administration and health insurance	:	:	:	:	:	:	2.3%	2.6%	2.9%	2.4%	2.7%	4.5%	4.3%	3.9%	3.8%
Composition of public as % of public current health expenditure															
Inpatient curative and rehabilitative care	:	:	:	:	:	:	32.2%	30.7%	24.7%	25.3%	27.2%	33.9%	33.6%	32.1%	31.9%
Day cases curative and rehabilitative care	:	:	:	:	:	:	3.3%	3.2%	3.9%	5.0%	5.5%	1.9%	2.0%	3.4%	3.5%
Out-patient curative and rehabilitative care	:	:	:	:	:	:	24.1%	24.1%	23.4%	24.7%	25.3%	22.9%	23.5%	22.2%	22.5%
Pharmaceuticals and other medical non-durables	:	:	:	:	:	:	22.6%	22.9%	27.3%	24.1%	19.6%	11.8%	11.9%	12.6%	12.7%
Therapeutic appliances and other medical durables	:	:	:	:	:	:	1.3%	1.3%	1.2%	1.2%	1.2%	1.8%	1.9%	2.0%	2.1%
Prevention and public health services	:	:	:	:	:	:	2.4%	2.7%	2.7%	3.1%	3.4%	2.9%	2.5%	3.2%	3.2%
Health administration and health insurance	:	:	:	:	:	:	2.9%	3.2%	2.6%	2.6%	2.8%	4.1%	4.0%	3.6%	3.4%

Expenditure drivers (technology, life style)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU- latest national data 2009	2011	2013	2015
MRI units per 100 000 inhabitants	:	:	:	0.70	:	0.72	:	0.98	1.06	1.04	1.12	1.0	1.4	1.5	1.9
Angiography units per 100 000 inhabitants	:	:	:	0.5	:	0.6	:	0.6	0.7	0.8	1.6	0.9	0.9	0.9	1.0
CTS per 100 000 inhabitants	:	:	:	1.4	:	1.6	:	1.6	1.6	1.5	1.5	2.1	1.9	2.1	2.3
PET scanners per 100 000 inhabitants	:	:	:	0.1	:	0.1	:	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Proportion of the population that is obese	:	:	:	:	:	:	:	:	:	18.0	:	15.0	15.1	15.5	15.4
Proportion of the population that is a regular smoker	:	:	:	:	:	:	:	:	:	24.5	:	23.2	22.3	21.8	20.9
Alcohol consumption litres per capita	11.6	11.8	12.6	12.1	12.2	12.1	12.2	11.5	12.4	12.1	:	10.4	10.3	10.1	10.2

Providers	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Practising physicians per 100 000 inhabitants	250	253	266	266	267	278	284	299	303	314	319	324	330	338	344
Practising nurses per 100 000 inhabitants	483	492	503	522	511	531	542	568	583	580	583	837	835	825	833
General practitioners per 100 000 inhabitants	:	:	:	:	55	50	51	53	54	57	55	77	78	78	78
Acute hospital beds per 100 000 inhabitants	690	617	608	559	553	546	535	528	523	524	518	416	408	407	402

Outputs	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2009	2011	2013	2015
Doctors consultations per capita	6.9	6.4	6.4	6.0	6.4	6.1	6.0	6.9	6.1	6.3	6.8	6.2	6.2	6.2	6.3
Hospital inpatient discharges per 100 inhabitants	15	16	16	16	16	15	15	15	15	15	15	17	16	16	16
Day cases discharges per 100 000 inhabitants	298	332	319	1,863	3,076	4,538	5,487	6,704	7,949	9,494	12,399	6,362	6,584	7,143	7,635
Acute care bed occupancy rates	88.0	87.0	85.6	84.9	83.1	75.2	76.7	77.3	73.7	71.7	76.3	77.1	76.4	76.5	76.8
Hospital average length of stay	7.8	7.6	9.9	9.6	9.7	9.5	9.3	9.1	8.9	8.8	8.6	8.0	7.8	7.7	7.6
Day cases as % of all hospital discharges	1.9	2.0	1.9	10.5	16.4	23.5	26.4	31.0	34.5	38.6	45.0	28.0	29.1	30.9	32.3

Population and Expenditure projections

Projected public expenditure on healthcare as % of GDP*	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in pps. Croatia	EU
AWG reference scenario	5.2	5.4	5.4	5.5	5.6	5.7	5.8	5.8	5.9	5.9	5.9	5.9	0.7	0.9
AWG risk scenario	5.2	5.5	5.6	5.8	6.0	6.2	6.4	6.5	6.6	6.7	6.7	6.7	1.5	1.6

Note: *Excluding expenditure on medical long-term care component.

Population projections	2016	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	Change 2016-2070, in % Croatia	EU
Population projections until 2070 (millions)	4.2	4.1	4.0	4.0	3.9	3.8	3.7	3.7	3.6	3.5	3.5	3.4	-18.8	2.0

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).

Croatia

Long-term care systems

3.4. CROATIA

General context: expenditure, fiscal sustainability and demographic trends

In 2015, GDP per capita was with 16,500 PPS well below the EU average of 29,600 PPS. Croatia has a population of almost 4.2 million inhabitants, which is roughly 0.8% of the EU population. In the absence of any sizeable immigration and a decline in fertility, the population of Croatia is steadily decreasing. In the period from 2016 to 2070 a decrease of 19% can be expected, based on the population forecast of Eurostat, leading to a population of 3.4 million in 2070.

Based on the Ageing Report 2018, total public expenditure on long-term care (health and social part) ([450]) is with 0.9% of GDP in 2015 under the EU average in the same year (1.2%).

Health status

Life expectancy at birth was, in 2015, 80.5 years for women and 74.4years for men and is, although having increased during the past decade, below the EU average (83.3 and 77.9 years for women and men respectively in 2015). Similarly, the healthy life years at birth for both sexes are with 56.8 years (women) and 55.3 years (men) lower than the EU-average (63.3 and 62.6 respectively). On the other hand, the percentage of the Croatian population having a long-standing illness or health problem is at the same level as in the Union as a whole (34.2%). The percentage of the population indicating a self-perceived severe limitation in its daily activities is at 11.0% compared to the EU-average of (8.1%).

Dependency trends

The number of people depending on others to carry out activities of daily living is projected to increase over the coming 50 years. From 310 thousand residents living with strong limitations due to health problems in 2016, an increase of 10% is envisaged until 2070 to around 340 thousand. That is less steep an increase than in the EU as a whole (25%). Also as a share of the population, the dependents are becoming a bigger group, from 7.4% to 10.1%. This is above the EU average increase at a projected 35% (EU: 21%).

Expenditure projections and fiscal sustainability

With the demographic changes, the projected public expenditure on long-term care as a percentage of GDP is likely increasing. In the AWG reference scenario, public long-term expenditure is driven by the combination of changes in the population structure and a moderately positive evolution of the health (non-disability) status. The joint impact of those factors is a small projected increase in spending of about 0.3 pps of GDP (38%) by 2070, well below the EU average of 73% ([451]). The "AWG risk scenario", which in comparison to the "AWG reference scenario" captures the impact of additional cost drivers to demography and health status, i.e. the possible effect of a cost and coverage convergence, projects an increase in spending of 1.1 pps (127%) of GDP by 2070, markedly lower than the EU average of 170%. Overall, projected long-term care expenditure increase is expected to add to budgetary pressure. Medium fiscal sustainability risks appear over the long run, mitigated by the projected decrease in age-related spending driven by pensions ([452]).

System Characteristics

Long-term care is organised on the principle of social assistance and financed mainly from the state budget (96%), while the remainder comes from beneficiaries' participation in payment of costs of care outside one's own family. Local and regional self-governing units participate in the financing of the system and organisation of social welfare services within the scope of their competences.

The acting Social Welfare Act (Official Gazette of the Republic of Croatia, 157/13, 152/14, 99/15, 52/16, 16/17, 130/17) is the result of a comprehensive social welfare reform, which includes the reform of cash benefits, the system of social services, the mode of their financing and the

([450]) Long-term care benefits can be disaggregated into health related long-term care (including both nursing care and personal care services) and social long-term care (relating primarily to assistance with IADL tasks).

([451]) The 2018 Ageing Report, https://ec.europa.eu/info/sites/info/files/economy-finance/ip079_en.pdf.

([452]) European Commission, Fiscal Sustainability Report (2018), https://ec.europa.eu/info/sites/info/files/economy-finance/ip094_en_vol_2.pdf.

system of public social welfare centres. The primary objective was to simplify the system and provide better and more efficient access to services and benefits, establish clearer division between cash benefits and social services and rationalise the network of social services centres. Previous 15 cash benefits with different criteria and conditions for obtaining were reduced to 10 better targeted and defined ones ([453]).

There is no specific national-level data available on long-term care expenses in Croatia. In 2009 expenses for financing of the social welfare system amounted to 0.89% of GDP (Bodiroga-Vukobrat, 2012). The share of beneficiaries of permanent social assistance in total population in 2010 stood at 2.3%, which is an increase of 0.2% as opposed to 2009 (2.1%).

The Ministry of Demographics, Family, Youth and Social Policy is in the lead as far as social welfare (including long-term care) is concerned. Social services are carried out by public institutions: Social Welfare Centres established by the State, institutions for elderly and disabled and people who suffer from severe illnesses, institutions for those with a physical, mental or sensory impairment, care homes for people suffer from mental illness and homes for children and youth with disabilities and behavioural disorders. Social Welfare Centres also decide upon monetary social assistance (European Commission 2013).

Types of care

Social welfare beneficiaries are entitled to (choose freely between) cash benefits, benefits in-kind and social services, as established by law.

There are currently eleven types of cash benefits according to the Social Welfare Act (Article 25), some of which are related to LTC: the guaranteed minimum benefit, the compensation for the cost of housing, the right on firewood costs, the allowance for the personal needs of users of accommodation, the one-off cash allowances, the fees related to education, the personal disability allowance, the allowance for assistance and care, the parent caregiver or caregiver allowance, the unemployment allowance and the benefit for endangered buyer of energy sources. The personal disability allowance is granted to persons with grave disability or other severe and permanent changes in health status, for the purpose of satisfying necessities of life for involvement in the daily life of the community.

Large cities and cities which are the seats of counties are obliged to provide other types of material support and assistance, including the stimulation of volunteering and work of civil society organisation. Elderly people mostly rely on the guaranteed minimum benefit, the compensation for the cost of housing, the right on firewood costs, the allowance for the personal needs of users of accommodation, the one-off cash allowances, the personal disability allowance, the allowance for assistance and care and the in-home assistance. The in-home assistance is awarded to persons with secured housing and other living conditions, but who are, due to old age, disability or other grave health conditions unable to take care of their personal needs alone or with help from their families. The condition for receiving this means-tested social service is that the assistance cannot be obtained from parents, spouse or children, nor based on life maintenance and support agreements or other regulations.

There are nine categories of social services, which are basically social benefits in-kind. In-home assistance is an example of a social service. It implies the provision of different practical forms of help, prescribed in bylaws (typically includes delivery of meals, housework, assistance with personal hygiene and satisfying other everyday needs).

The LTC users are most often elderly and people with disabilities. Long-term care is carried out both through institutional and non-institutional forms of care. Long-term accommodation is granted to users who need over a long period of time intensive care and other life needs. There also exists a range of institutionalised forms of care, e.g. permanent or temporary accommodation or even daily or shorter stays in care centres.

([453]) Among ten cash benefits with different criteria and conditions for obtaining, which are better targeted and defined than previous ones, the most innovative is the guaranteed minimum benefit (GMB). GMB consolidates 4 previous supplementary cash benefits, ensuring that persons have enough funds to satisfy their basic monthly personal needs, while also stimulates the activation of those capable of working. Deinstitutionalisation and the role of private providers of social services are emphasised.

In 2016, there were 294 institutional LTC providers, governmental and non-governmental LTC homes and other legal providers (legal persons) for stay in and accommodation of adults and the elderly (196 for the elderly and infirm/ seriously sick people, 67 for disabled children and adults with physical, intellectual or sensory impairments and 31 for mentally ill adults) ([454]).

Eligibility criteria and user choices: dependency, care needs, income

Reliance on long-term care is certified by the social welfare centres, established through special regulations. Degree of physical and mental impairment, duration of reliance on care, degree of (full or partial) incapacity for independent living, urgency and scope of assistance and care, screening of income and assets are among the indicators being assessed.

As a rule, the Social Welfare Centre has to verify occasionally or at least once a year, if the conditions for social assistance are still met. It is also a duty of the recipient to report all relevant changes within eight days ([455]).

There are exceptions when means test does not apply, such as serious mental or physical impairment, blindness and/or deafness (if blind/deaf persons have trained to care for themselves, when determining if persons have the right to receive the allowance for assistance and care in full amount, as well as blindness and/or deafness (if blind/deaf persons have trained to care for themselves), or the fact that a person is totally deprived of legal capacity, when determining if persons have the right to receive the allowance for assistance and care in reduced amount.

Means-testing is applied, meaning that a person is only eligible for this kind of assistance if his/her average income in the three months preceding the application does not exceed 200% of the base amount (per family member) or 250% of the base amount (single persons) (Article 57 (2) Social Welfare Act). The base amount is defined by Social Welfare Act, Article 27, paragraph 2, and in 2015 it was 500 HRK (about €66).

In 2010, the total of HRK 58.1 million (about €7.5 million) was utilised for the implementation of social services of generational solidarity (day care services and in-home assistance), as well as the improvement of work quality. 75% was financed from the State budget of the Republic of Croatia, while the rest of the financing (25%) was born by the local and regional self-government units.

Role of private sector, private insurance and out of pocket co-payments

In Croatia, more than two thirds of institutional homes for the elderly are privately owned (see footnote 7).

Long-term care is financed from the state budget and partly from the budgets of regional communities (also the city of Zagreb) and local communities. Social services might be co-financed by the beneficiaries and their family members (European Commission, 2013).

Prevention and rehabilitation measures

National and county Centres for gerontology operate at the county institutes of public health. Apart from Centres of Gerontology, there are Gerontology Centres as multifunctional centres of immediate and integral multidisciplinary care for elderly people in the local community. A total of 79 Gerontology Centres for community care of elderly people operate in Croatia, 12 thereof in Zagreb, where most elderly people live (Ministry of Health).

Formal/informal caregiving

The aim of the Foster Families Act (Official Gazette, 90/11, 78/12) is deinstitutionalisation and increase of the number of foster families, their professionalisation and specialisation for taking care of certain categories of beneficiaries. Foster care is defined as a non-institutional type of care for children and adults out of their families. Types

([454]) Governmental and non-governmental LTC homes, county LTC homes and other legal providers (legal persons) of LTC - total (1.+ 2.+ 3.) includes 294 providers and serves 30.339 users, of which 22.695 are LTC users (i.e. long-term accommodation or organised housing users).. Source: Ministry of Demographics, Family, Youth and Social Policy, Report for 2016.

([455]) Previous supplementary cash benefits, ensuring that persons have enough funds to satisfy their basic monthly personal needs, while also stimulates the activation of those capable of working. Deinstitutionalisation and the role of private providers of social services are emphasised.

of foster care are defined according to beneficiaries (traditional, specialised, urgent and temporary) as well as the status of foster care (kinship, professional). Foster families for adults, are taking care mainly for elderly and frail persons, persons with disability and mentally ill adults. Foster care is provided only upon referral from the competent Social Welfare Centre.

The scale of family care in Croatia is above the EU27 average. Around 17% of the respondents aged 35-49 report having to care for elderly relatives at least several times a week. The age cohort 50-64 apparently bears the greatest load when it comes to taking care of elderly: 24% female respondents and 13% male respondents of that age group are involved in those activities, which places Croatia among the top three countries in Europe (after Italy and Estonia) (Bodiroga-Vukobrat, 2012).

In addition to religious communities and non-governmental organisations, the role of the civil sector's associations in the long-term care arrangements is important in Croatia. There are various pensioners' associations organised at national, regional and local levels. For example, one of the oldest civil society organisations in Croatia is the National Pensioners' Convention of Croatia (*Cro. Matica umirovljenika Hrvatske*) with around 270,000 members, 300 associations and 800 branches and clubs at the local level. The association and its members, organise the purchase of winter foodstuffs, meat, fruits and vegetables, as well as heating fuel at preferential prices with payment by instalments, while its volunteers visit the sick and infirm, and socialise in clubs, branches and associations.

Recently legislated and/or planned policy reforms

During 2013 a new Act on Social Welfare was created and it was put into force on January 1 2014. This Act established prerequisites for enhancing efficiency, transparency, IT and expertise base in the system of social welfare and as well raises the community awareness of social rights. It contains new criteria for social benefits and services in order to promote the integration of those who suffer social exclusion. Setting standards for quality in social services lays foundations for deinstitutionalisation and developing new extra-institutional services, it offers wider choice and services improvement within the process of social integration; it enables creation of comprehensive social beneficiaries base. As for the cash benefits, they are better defined in the context of persons at great risk of poverty and social exclusion. The new Act introduced guaranteed minimum benefit, which is a new type of cash benefit merged from four previous social cash benefits which were under jurisdiction of three different Ministries. The state decides on the height of this allowance on an annual basis.

The new Act on Social Welfare enabled transparent and fair system of "social services contracting" which means that all service providers within the network will form the service price on basis of a single calculation methodology and this procedure will be prescribed in a separate bylaw. Final service price will also depend on the service provider's harmonisation with directives for service providing within the network, taking into account his/her professional resources, location and harmonisation with minimum quality standards.

Introducing guaranteed minimum benefit into social welfare system represents the beginning of merging various benefits and services and is a step forward to establishing a centre in charge of all cash benefits, a kind of „one stop shop". This centre would consequently take charge of all existing cash benefits, which are currently under jurisdiction of various state institutes and offices. Further informatisation of the social welfare system and establishing network with other systems with the scope of data exchange will result with lowering administration costs as well as simplifying the whole process.

Law on Unique Expertise Body (Official Gazette, 85/14, 95/15) presumes founding of the single expertise body meaning that expertise would be done in one place, which would shorten the existing administrative procedures. According to the past regulations every service claimer has to be examined every single time when he/she is claiming for benefits in various systems. Besides generating unnecessary expenses this procedure is quite tiring for the benefit claimer.

According to the new Law on Unique Expertise Body, an individual benefit claimer can obtain his/her rights in various systems based on one document and the expertise given from the single expertise body (pension insurance, professional rehabilitation and employment of persons with disability, various types of maternity and parental allowances, allowances for civil and military war victims). This body should function as an independent working unit within the Institute for expertise, professional rehabilitation and employment of persons with disability, with branch offices all around the country (local and regional). The expertise procedure would be based on a single methodology for determining the disability level/residual functional and working capacity. Since January 1, 2015 responsible for this is the Institute for expert evaluation, professional rehabilitation and employment of disabled people.

Besides the above mentioned laws, this is partly regulated by the Family Law (Official Gazette,103/15) according to which parents have obligation to maintain an adult child who has severe and permanent illness and disability and is not able to live/work independently, children have obligation to maintain their disabled and without living resources parents, and grandchildren have obligation to maintain their disabled and without living resources grandparents (if grandparents maintained grandchildren).

The social welfare system provides assistance to individuals at risk of poverty or social exclusion as well as those living in non-adequate personal or family environment. It includes prevention, promoting changes, assisting individuals, families or groups in their everyday needs as well as enhancing their social inclusion. The concept for fulfilling these conditions is defined by the Ministry of Social Policy and Youth Strategic plan 2015-2017, which sets three goals to be achieved in the upcoming period:

Goal 1. Develop comprehensive approach to various user groups by improving the legislative frame and upgrading service providers efficiency:

– provide equal access to the social services network for all users and providers alike, and effective access to cash benefits for disabled people;
– improve and develop a strategic and legislative framework focussed on elderly, people with addiction problems, asylum seekers, victims of trafficking and homeless;
– increase the efficiency of the social welfare centres;
– improve legal regulations and implement regulations to ensure more effective protection of the individual rights of citizens;
– implement and monitor the process of transformation and de-institutionalisation of social welfare homes founded by the Republic of Croatia;
– increase service quality by improving the infrastructure of homes founded by the Republic of Croatia;
– as stated above, the goal is to improve the system through more efficient legislative frame and developing various social programmes which will, consequently, guarantee system improvements especially in the context of groups at social risk.

Goal 2. Enhance the process of social inclusion for various user groups:

– develop volunteerism and systems of measurement and evaluate volunteer contributions;
– increase availability and quality of social services with the regional uniformity;
– improve quality of professional work providers;
– increase level of social inclusion of people with disabilities;
– develop services that contribute to the inclusion of the elderly, people with addiction problems, asylum seekers, victims of trafficking and the homeless in the community life.

The idea of volunteering development is present in several national documents such as: Croatian Government programme for the period 2011-2015,

Law on Youth, Law on Youth Advisory Boards, Law on Agency for Mobility and EU Programmes, National Youth Programme 2014-2017 and Strategy of Social Care for Older People 2014-2016. Volunteering is presented as an activity to be enhanced and promoted with the goal of improving life quality both for service users and volunteers and enhancing social inclusion of marginalised social groups. Promoting more active engagement of local and regional self-government in social care system by enhancing the work of NGO's and humanitarian aid organisations and assuring them financial assistance contributes to extra institutional service development. This type of service development is planned as well in the Transformation and deinstitutionalisation plan of social care homes and other legal entities who practice social welfare activities in Republic of Croatia 2011-2016 (2018).

Goal 3. Improve care for vulnerable groups by setting more efficient coordination in enforcement of national and international strategic documents:

– ensure conditions for the implementation of EU policies, VE and other international initiatives in accordance with the competence;

– ensure conditions for use of EU funds;

– strengthen workforce and capacity of the respective Croatian social welfare authorities;

– improve care of disabled people by establishing more effective coordination, monitoring and evaluation of the implementation of the National Strategy for Equalisation of Opportunities for Disabled People 2007 to 2015 and the Convention on the Rights of Disabled People.

The Ministry of Social Policy and Youth conducts expert activities related to EU, Council of Europe and UN membership obligations as well as other international and regional initiatives in the field of social policy and social inclusion and it is obliged to submit reports to these organisations. The Ministry also informs various user groups on the possibilities offered in EU funds. Furthermore, it develops bilateral and multilateral cooperation with organisations/institutions acting in the field of social welfare by organising and participating in international and regional events.

Challenges

Croatia has a relatively fragmented system of LTC, a feature that often leads to inefficiencies. At present, Croatia has not developed a comprehensive strategy and long-term care is spread across health and social-welfare systems.

The main challenges of the system appear to be:

- **Improving the governance framework and administrative efficiency:** to establish a coherent and integrated legal and governance framework for a clear delineation of responsibilities of state authorities concerning the provision of long-term care services; to strategically integrate medical and social services via such a legal framework; to use care planning processes, based on individualised need assessments, involving health and care providers and linking need assessment to resource allocation.

- **Improving financing arrangements:** to determine the extent of user cost-sharing on LTC benefits; to include assets in the means-test used to determine individual cost-sharing (or entitlement to public support) for B&L costs better reflects the distribution of economic welfare among individuals.

- **Providing adequate levels of care to those in need of care:** to adapt and improve LTC coverage schemes, setting the need-level triggering entitlement to coverage; the depth of coverage, that is, setting the extent of user cost-sharing on LTC benefits.

- **Encouraging home care:** to develop alternatives to institutional care by e.g. developing new legislative frameworks encouraging home care and regulation controlling admissions to institutional care or the establishment of additional payments, cash benefits or financial incentives to encourage home care; to monitor and evaluate alternative services, including incentives for use of alternative settings.

- **Ensuring availability of formal carers:** to determine current and future needs for qualified human resources and facilities for long-term care.

- **Supporting family carers:** to establish policies for supporting informal carers, such as through flexible working conditions, respite care, carer's allowances replacing lost wages or covering expenses incurred due to caring, cash benefits paid to the care recipients, while ensuring that incentives for employment of carers are not diminished and women are not encouraged to withdraw from the labour market for caring reasons.

- **To facilitate appropriate utilisation across health and long-term care:** to arrange for adequate supply of services and support outside hospitals, changing payment systems and financial incentives to discourage acute care use for LTC; to steer LTC users towards appropriate settings.

- **Improving value for money:** to invest in ICT as an important source of information, care management and coordination**.**

- **Prevention:** to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.

Table 3.4.1: **Statistical Annex – Croatia**

GENERAL CONTEXT

GDP and Population	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
GDP, in billion euro, current prices	37	40	44	48	45	45	45	44	43	43	44	12,451	13,213	13,559	14,447
GDP per capita, PPS	15.4	16.4	17.4	17.0	15.3	15.1	15.4	15.5	15.4	15.6	16.5	26.8	28.1	28.0	29.6
Population, in millions	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2	502	503	505	509
Public expenditure on long-term care (health)															
As % of GDP	:	:	:	:	:	:	0.0	0.1	0.2	0.2	0.2	1.1	1.2	1.2	1.2
Per capita PPS	:	:	:	:	:	:	:	:	24.0	27.8	31.7	264.1	283.2	352.1	373.6
As % of total government expenditure	:	:	:	:	:	:	0.1	0.1	0.3	0.4	0.4	1.6	1.8	2.5	2.5
Note: Based on OECD, Eurostat - System of Health Accounts															
Health status															
Life expectancy at birth for females	78.8	79.3	79.2	79.7	79.7	79.9	80.4	80.6	81.0	81.0	80.5	82.6	83.1	83.3	83.3
Life expectancy at birth for males	71.7	72.4	72.2	72.3	72.8	73.4	73.8	73.9	74.5	74.7	74.4	76.6	77.3	77.7	77.9
Healthy life years at birth for females	:	:	:	:	:	60.4	61.7	64.2	60.4	60.0	56.8	62.0	62.1	61.5	63.3
Healthy life years at birth for males	:	:	:	:	:	57.4	59.8	61.9	57.6	58.6	55.3	61.3	61.7	61.4	62.6
People having a long-standing illness or health problem, in % of pop.	:	:	:	:	:	36.5	36.8	29.2	31.0	30.9	34.2	31.3	31.7	32.5	34.2
People having self-perceived severe limitations in daily activities (% of pop.)	:	:	:	:	:	11.4	7.7	5.3	8.0	7.6	11.0	8.3	8.3	8.7	8.1

SYSTEM CHARACTERISTICS

Coverage (Based on data from Ageing Reports)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	EU 2009	EU 2011	EU 2013	EU 2015
Number of people receiving care in an institution, in thousands	:	:	:	:	:	:	:	:	16	16	16	3,433	3,851	4,183	4,313
Number of people receiving care at home, in thousands	:	:	:	:	:	:	:	:	17	17	17	6,442	7,444	6,700	6,905
% of pop. receiving formal LTC in-kind	:	:	:	:	:	:	:	:	0.8	0.8	0.8	2.0	2.2	2.2	2.2
Note: Break in series in 2010 and 2013 due to methodological changes in estimating number of care recipients															
Providers															
Number of informal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Number of formal carers, in thousands	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Source: EUROSTAT, OECD and WHO.

Table 3.4.2: **Statistical Annex - continued – Croatia**

PROJECTIONS

Population	2016	2020	2030	2040	2050	2060	2070	MS Change 2016-2070	EU Change 2016-2070
Population projection in millions	4.2	4.1	3.9	3.8	3.7	3.5	3.4	-19%	2%
Dependency									
Number of dependents in millions	0.31	0.31	0.33	0.35	0.35	0.35	0.34	10%	25%
Share of dependents, in %	7.4	7.7	8.4	9.2	9.5	9.8	10.1	35%	21%
Projected public expenditure on LTC as % of GDP									
AWG reference scenario	0.9	0.9	1.0	1.1	1.1	1.2	1.2	38%	73%
AWG risk scenario	0.9	0.9	1.0	1.2	1.4	1.6	2.0	127%	170%
Coverage									
Number of people receiving care in an institution	21,020	22,079	22,719	26,283	26,776	26,317	27,298	30%	72%
Number of people receiving care at home	22,322	23,367	24,056	27,562	27,987	27,471	28,360	27%	86%
Number of people receiving cash benefits	112,385	113,972	118,127	123,342	120,980	117,447	115,265	3%	52%
% of pop. receiving formal LTC in-kind and/or cash benefits	3.7	3.9	4.2	4.6	4.8	4.9	5.0	35%	61%
% of dependents receiving formal LTC in-kind and/or cash benefits	50.2	50.7	49.5	50.8	50.4	49.6	50.0	0%	33%
Composition of public expenditure and unit costs									
Public spending on formal LTC in-kind (% of tot. publ. spending LTC)	50.0	50.8	51.0	52.8	53.9	54.8	56.9	14%	5%
Public spending on LTC related cash benefits (% of tot. publ. spending LTC)	50.0	49.2	49.0	47.2	46.1	45.2	43.1	-14%	-27%
Public spending on institutional care (% of tot. publ. spending LTC in-kind)	94.7	94.8	94.8	94.9	95.0	95.0	95.0	0%	0%
Public spending on home care (% of tot. publ. spending LTC in-kind)	5.3	5.2	5.2	5.1	5.0	5.0	5.0	-5%	-1%
Unit costs of institutional care per recipient, as % of GDP per capita	83.1	82.7	84.4	80.3	79.9	81.5	81.9	-1%	10%
Unit costs of home care per recipient, as % of GDP per capita	4.3	4.3	4.4	4.1	4.1	4.1	4.1	-5%	1%
Unit costs of cash benefits per recipient, as % of GDP per capita	16.4	16.4	16.4	16.1	15.9	15.9	15.5	-6%	-14%

Source: EUROSTAT, OECD, WHO and European Commission (DG ECFIN)-EPC (AWG) 2018 Ageing Report projections (2016-2070).