

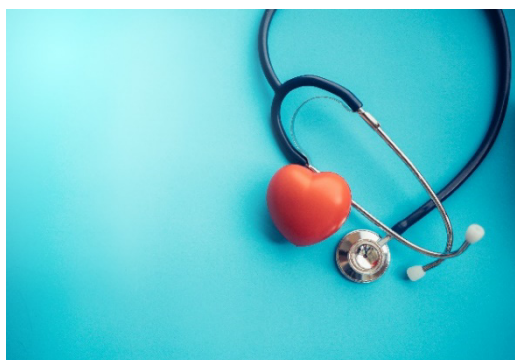
Health-related measures in the national recovery and resilience plans

SUMMARY

The Recovery and Resilience Facility (RRF) is the main element of Next Generation EU (NGEU), the EU's recovery plan, designed to help EU Member States navigate their way out of the COVID-19 crisis and towards a more resilient future. To receive financing from NGEU, each Member State had to prepare a national recovery and resilience plan (NRRP) and include in it reforms and investment addressing six policy areas, or the six pillars of the RRF. The fifth pillar, 'Health, and economic, social and institutional resilience', has a broad scope, but around half of the measures included in it are health-related.

The outbreak of the COVID-19 pandemic put an unprecedented strain on the EU's health systems and revealed a number of vulnerabilities, even in the best-performing Member States. Consequently, in 2020, in the framework of the European Semester, all Member States received country-specific recommendations (CSRs) in the area of health policy (up from around half of Member States in 2019). To address these recommendations, and their health systems' weaknesses, all the Member States have envisaged investment and reform measures adapted to their national contexts, and included them in their NRRPs. The most recent annual report from the European Commission on the RRF estimated the total healthcare-related expenditure at €43 billion for the 27 NRRPs. Despite differences, the NRRPs reveal a number of common themes. These include the need to expand healthcare infrastructure, modernise primary care, address staff shortages, and – not least – digitalise health services. Taken together, these measures are expected to make national healthcare sectors more robust and efficient. With all national plans in place and the implementation of the RRF well under way, this briefing gives an overview of the main health-related measures in the plans, with a spotlight on digital (e-health) measures.

While Member States define and deliver their national health services and medical care, the EU is contributing greatly to the joint efforts to strengthen public health policy and build a European health union. The European Parliament has consistently promoted the establishment of a coherent public health policy, including the creation of a new stand-alone European health programme.



IN THIS BRIEFING

- Background
- Health policy: EU financing
- RRF health pillar and CSRs
- NRRPs: Challenges and responses
- Stakeholder views and expert debate
- European Parliament



Background

The European Commission [estimates](#) that healthcare services are a key economic sector in the EU, accounting for 10 % of gross domestic product (GDP), 15 % of e-government expenditure and 8.3 % of the total workforce in the EU. Healthy citizens and workers are the driving force of economic growth and higher productivity. While healthcare governance in the EU is [mainly](#) a competence of the Member States, and at times of the regions, the EU has an important role in complementing national policies. The EU's main legal basis for adopting public health law and policies is Article 168 of the Treaty on the Functioning of the EU (protection of public health). As noted by the network for European Regional and Local Health Authorities, there is a [clear EU added value](#) in supporting and improving public health policies and providing quality healthcare services in the EU.

The EU has been working towards building a [European health union](#) with a several recent initiatives. These include: the Health Emergency Preparedness and Response Authority (HERA) established in 2021; the 2022 [Regulation on serious cross-border threats to health](#) and reinforced mandates for the European Medicines Agency (EMA) and the European Centre for Disease Prevention and Control (ECDC); the adoption of the [Europe's Beating Cancer plan](#) (2021); the [pharmaceutical strategy for Europe](#) (2020) and [2023 proposals](#) revising and replacing the existing general pharmaceutical legislation, completed by a Council recommendation to step up the [fight against antimicrobial resistance](#) (June 2023); a proposal for a regulation on standards of quality and safety for [substances of human origin intended for human application](#) (2022); and a comprehensive approach to [mental health](#) (June 2023). Furthermore, the EU is working to create a [European health data space](#), promoting health-data exchange, as well as supporting digital health services and research. In addition, a strategic framework such as the European pillar of social rights (EPSR),¹ aims to help address [persisting inequalities](#) in health and well-being, and ensure significant life-long health improvements. The importance of the healthcare sector is also reflected in the United Nations Sustainable Development Goals (SDGs). Both the EPSR and SDGs have been included in the European Semester, which has been [considered](#) as recognising the relevance of health and social policy to macroeconomic stability.

The COVID-19 crisis put pressure on the EU's health systems, revealing their weaknesses, but also highlighting their strong link with the economy. The EU faces a number of challenges in healthcare and public finances that it needs to address: the demographic context (an ageing and shrinking population), healthcare costs, the scarcity of workforce, and the threat of future crises. The [EPSR action plan](#) already notes that reforms and investment in health systems are required to increase their resilience and capacity to manage crises, reinforce primary health care and mental health, and improve access to quality healthcare for all. In 2020, as part of the European Semester, for the first time all Member States received country-specific recommendations (CSRs) relating to health.

The EU adopted the Next Generation EU (NGEU) recovery instrument, unprecedented in size and in the way it is financed and implemented, in order help Member States recover from the pandemic. To benefit from funds under its main financing tool, the Recovery and Resilience Facility (RRF), Member States drafted National Recovery and Resilience Plans (NRRPs), planning action under its six policy pillars. As regards health, the fifth pillar envisages investment in health systems preparedness and crisis response capacity under the priorities identified in the RRF guidelines. Examples of measures addressing these issues can be found in all NRRPs; they aim to improve health systems and enable a shift towards digital health services. This is also in line with one of the major targets of the RRF towards the digital transition.

Health policy: EU financing

While health expenditure is mainly incurred at national level, and often accounts for a sizable share of spending in national budgets, the EU also dedicates funding to it. Since 2003, three health programmes – for the [2003-2007](#), [2008-2013](#) and [2014-2020](#) periods – have been included in the EU's multiannual financial framework (MFF), or long-term budget. EU spending for the 2021-2027

period consists of the current MFF combined with the NGEU, set up to boost funding until 2026. As a response to the pandemic and the ensuing new priorities, the [EU4Health](#) programme was adopted in 2021. With a budget of up to [€5.3 billion](#), EU4Health is the largest health programme to date ([more than 11 times bigger](#) than its [predecessor](#)). It aims to boost EU preparedness for major cross-border health threats by ensuring reserves of medical supplies, staff and surveillance of health threats, strengthening health systems, and providing more access to medicines and medical devices, among other things. Digitalising healthcare, including by supporting the creation of a European health data space, is also a priority.

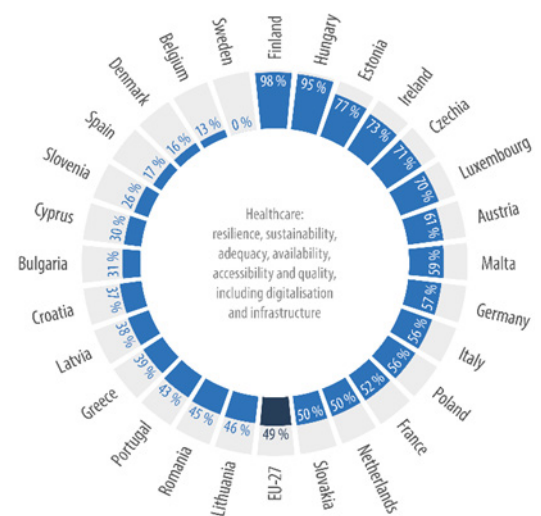
However, the EU4Health is not the only source of EU financing for health. Other programmes² also offer funds that can be invested in improving health and well-being across the EU. As [noted](#) by the Commission, health challenges are cross-cutting, and EU4Health seeks [synergies and complementarities](#) with other EU programmes, policies, instruments and actions. With over 7 000 health-related projects financed through the European Structural and Investment Funds (ESIF) in the 2014-2020 period, cohesion policy demonstrated its [crucial contribution](#) to supporting social and economic convergence around Europe and ensuring EU citizens' health. Although health was not a specific priority among the 11 thematic objectives of the 2014-2020 ESIF, the European Social Fund and the European Regional Development Fund covered health investment in improving access to healthcare, reducing health inequalities and boosting healthcare reforms for around €9 billion. In the current MFF, the European Social Fund Plus is the main financial instrument to strengthen Europe's social dimension, through the implementation of the EPSR and its action plan. It has the potential to promote health, reduce inequalities and help vulnerable groups access healthcare. Horizon Europe, the EU's major research funding programme, also includes in its scope projects relevant for health policy.

The RRF, with a budget of €723.8 billion (€338 billion in grants; €385.8 billion in loans) is one of the EU's largest-ever financial tools, put in place to help address the consequences of the pandemic. RRF funds are to be used to facilitate the green transition and digital transformation and address challenges such as those identified in the CSRs of the 2019 and 2020 European Semester cycles, to enhance economic growth potential, job creation and economic and social resilience across Member States. The RRF is relevant to health, since funds can be used to invest in health infrastructure and equipment, or to advance the digitalisation of healthcare, for example. When using RRF funds, Member States have to seek synergies with other EU funding for the same objectives, e.g. the programmes mentioned above, to avoid double funding and ensure cooperation among all relevant stakeholders.

RRF health pillar and CSRs

Article 3 of the [RRF Regulation](#) defines the scope of the instrument and its six pillars, the fifth being 'Health, and economic, social and institutional resilience, with the aim of, inter alia, increasing crisis preparedness and crisis response capacity'. Although it includes a wide range of policy areas (such as effectiveness of the public administration; long-term care; crisis preparedness; effectiveness of judicial systems; tax measures; fiscal policy and fiscal governance; fraud prevention, to mention but a few), the main policy area covered is 'Healthcare: strengthening the resilience of the public healthcare system'. As can be seen from the [breakdown of expenditure](#) supporting the pillar in the RRF Scoreboard, this area accounts for almost 50 % of the pillar on average in the EU, and ranges from almost all measures being dedicated to it under the pillar, to only a small fraction

Figure 1 – Breakdown of health pillar expenditure by policy area: 'Healthcare'



Data source: [RRF Scoreboard](#); graphic by Samy Chahri, EPRS.

(Figure 1). The policy area focuses on the reforms and investment needed to address structural weaknesses in health systems across the EU, and to strengthen their capacity, quality and resilience.

Link with the European Semester and CSRs

The RRF is [intrinsically linked](#) with the [European Semester process](#), the EU's annual process for economic and social policy coordination, which defines the overall objectives and challenges for future reforms. In early 2021, the European Commission issued [guidelines](#) to the Member States, to help them draft their NRRPs, according to which investment and reforms under the individual plans should [significantly address](#) the CSRs, as well as a set of commonly identified challenges (European flagships).³ One of the criteria for the Commission's assessment of the NRRPs was their alignment with the CSRs.

In 2019, just over a half of all Member States received health-related CSRs; in 2020, all countries were recommended to address shortcomings in their health systems. As noted in the Commission's [thematic analysis](#), the challenges captured by the CSRs relate in particular to: resilience of health systems; availability of critical medical products: financial capacity of the health system: shortages of health staff and working conditions; infrastructure for e-health and its roll-out; access to and availability of care (including differences between regions); transition of care from hospitals to outpatient and primary care; and overall coordination and integration of care. In a 2022 [tabular comparison and overview of implementation](#) of the CSRs for 2019, 2020, 2021 and 2022, the European Parliament's Economic Governance Support Unit (Directorate-General for Internal Policies) found that the progress was uneven: some countries (e.g. Belgium, Denmark, France and Sweden) had achieved substantial progress with their relevant investment and/or reform measures in their NRRP planned in 2022 and near years; most countries had achieved some progress, and the remaining ones, limited progress.

The RRF Regulation is complemented by a [delegated regulation](#), which introduced a set of [14 common indicators](#), to track progress on RRF implementation. The Member States are required to report on these indicators twice a year through the European Semester exercise; afterwards, the data is made publicly available on the RRF Scoreboard (also updated twice a year). Of the established 14 common indicators, two relate to pillar 5: number 7 'users of new and upgraded public digital services, products and processes', and number 12 'capacity of new or modernised health care facilities'.

NRRPs: Challenges and responses

In each assessment of the NRRPs, the Commission briefly presented the state of the national health systems. While the healthcare landscape is varied, several common challenges emerge for most Member States. **Timely and equal access to healthcare** is found to be limited in many cases. In terms of universal access to healthcare, the Swedish, Austrian, Danish, Luxembourgish and Dutch health systems offer high coverage. On the other end, the health systems of Hungary, Bulgaria and Poland are described as inefficient and offering low coverage. Ireland remains the only country in western Europe without universal access to primary care, where the high proportion of non-government health spending contributes to driving up costs and inequity. **Regional disparities** are another shared concern in a number of Member States. France's outermost regions are underserved in particular; in Finland's decentralised health system, quality varies across regions; Hungary, Italy, Romania, Czechia and Croatia also struggle with uneven provision of health services. **Long-term sustainability risks to public finances and the economy** are also highlighted as a recurring topic, with population aging putting pressure on the system in Austria, Czechia and Finland, to name but a few. Out-of-pocket payments (see [definition](#)) in the EU are among the highest in Bulgaria, Cyprus, Hungary, Latvia, Malta and Portugal. **Shortage of health staff** is a prevalent concern in most Member States. Greece has the lowest number of long-term care staff, and Austria and Portugal face similar staffing challenges. Denmark and Germany have difficulties with retaining nurses in particular. **Limited investment in the healthcare sector** has been halting performance

in several countries. While Sweden has a higher than EU average total healthcare spending as a share of GDP, chronic underfunding has been an obstacle for Poland; Portugal has a track record of recurrent bailouts of public hospitals by the government; and Latvia and Bulgaria's health systems have been under-resourced. **Low level of digitalisation**, with a few exceptions such as Denmark, is also among the issues to be tackled.

To address those and other concerns, all NRRPs [envisage](#) health-related measures, included either in a separate health component or as part of other components. The Commission has published a thematic analysis with a focus on [healthcare](#) in the RRF, which sheds light on the RRF impact in this policy area. According to the Commission's July 2022 [review report](#), reforms and investment help achieve the goals of pillar 5 with about €87 billion, while its most recent annual [report](#) on the RRF narrows down the total healthcare-related expenditure to €43 billion for the 27 NRRPs. The plans contain measures (investment and reforms) aiming to boost the healthcare sector's effectiveness, accessibility and overall resilience. The measures contribute to various health objectives, such as improving of [primary healthcare](#), transitioning from hospital to outpatient care, reorganising hospital networks, stepping up prevention, increasing the quality of diagnosing and treating patients, strengthening the healthcare workforce and modernising healthcare facilities. Some NRRPs envisage funding for prevention and well-being, as well. Examples include mental health initiatives such as a suicide prevention line in France and community centres in Belgium, where young people can find mental health services and peer support. Spain used RRF funds to strengthen health promotion and prevention through promotional campaigns and settings-based approaches. Italy invested in a number of projects to assess and improve environmental conditions, to promote health and well-being.

Country examples

[Austria](#)'s plan includes an [enhancing and funding primary healthcare](#) reform and investment project that aims to make careers in the primary care sector more attractive through the development of the Austrian Primary Healthcare Platform, an information and communication hub. Following its launch in September 2022, the platform will allow for communication, training, and events to increase social innovation and capacity building. An investment also seeks to establish new primary healthcare units (including centres and networks), as well as allocating funds for existing ones. The overall goal is to fund 170 primary healthcare projects by 2026, including 60 new healthcare units. The [community nursing](#) project involves employing qualified nurses to provide targeted care close to and at home, particularly for vulnerable groups. To facilitate home visits, the purchase of 90 electric cars and 35 electric bicycles has been financed.

About half of the [Belgian](#) NRRP's components relate directly to the fifth pillar, covering it extensively. The plan envisages measures for the health and social systems of the Flanders and Wallonia regions, which differ substantially from one another, as noted in a November 2021 EuroHealthNet [report](#). A key measure in the Belgian plan concerns an investment in e-health services and health data of the federal state, which includes the extension of e-prescription capabilities and the improvement of the quality of prescriptions, as well as the operationalisation of tele-consultancy.

[Bulgaria](#)'s plan envisages [measures](#) such as setting up outpatient care units with a focus on remote areas where no healthcare facilities can be found within a reasonable distance, addressing shortages of healthcare professionals and their geographical distribution, improving the provision of telemedicine services, and establishing an air ambulance system.

[Croatia](#) dedicates most measures to the digital shift in providing health services. Apart from this, the focus is on supporting the health sector's long-term financial sustainability by assuring joint procurement purchasing for national health facilities; purchasing new medical equipment; increasing the number of physicians, nurses and other health professionals; and introducing a new care model for patients. Croatia has [adopted](#) its 2021-2027 national health development plan, which maps the long-term needs in the health and social sectors.

In its NRRP, [Cyprus](#) aims to address the challenge of ensuring universal access to high-quality healthcare and civil protection's overall emergency preparedness and response. Digitalisation is also a central element of the health system enhancements, including the deployment of generic cross-border e-health services in Cyprus. This is expected help develop the core of electronic health records based on a common European exchange format, to allow secure citizen access to and exchange of health data across the EU. The plan also envisions the enhancement of a hospital dedicated to children's healthcare.

[Czechia](#)'s plan envisages infrastructure investment in the hospital network, in order to reduce the regional disparities and improve access to quality healthcare. The plan includes building a centre for cardiovascular and transplant medicine, and setting up the Czech Oncology Institute and the Centre for Cancer Prevention and Infrastructure for Innovative and Supportive Care at the Masaryk Oncology Institute under component 6.2. Czechia's [new](#) 2022-2030 national oncological programme sets out the scope of and quality screening programmes for cancer prevention. Reforms of the medical and care training system are designed to improve staff retention.

[Denmark](#) envisages monitoring and ensuring adequate [stocks of critical medicines](#) in the [secondary healthcare](#) sector, in order to anticipate medicine needs and ensure the right levels of storage capacity for critical medicines. It has also planned to develop new digital solutions in the healthcare sector.

[Estonia](#) already [adopted](#) some reforms to improve access to long-term care and healthcare. In its [amended plan](#), it removed a large investment in the construction of the Northern Estonia Medical Campus in Tallinn. Instead, the Estonian RRF would [support](#), with €72 million, the construction of [TERVIKUM](#), a new, modern health centre in the city of Viljandi, to be operational by the end of December 2025. Furthermore, measures strengthening primary care include extending the list of medical specialisations accessible through e-consultation and incentivising health professionals to work in remote areas.

[Finland](#)'s NRRP includes measures to complement a recent social and healthcare system reform that aimed to improve cost efficiency and equal access to services. In Finland, access to health services is linked to the job: for those employed, the employer covers most of the costs for occupational healthcare; for the unemployed, access is hampered by longer waiting lists. Investments under pillar 4 seek to reduce the pandemic-caused backlog of health and long-term care treatments; strengthen prevention and early identification of health problems; and introduce digital innovations in healthcare. Finland has already [acted on](#) reorganising healthcare and social services at regional level by setting up of 22 well-being services counties. In January 2023, it passed a law on the [seven-day care guarantee](#), which mandates access to non-urgent care within seven days of assessing the need for it.

[France](#)'s plan includes investment in the health sector across the territory, including measures to renovate hospitals and healthcare facilities, build new outpatient facilities, modernise medical infrastructure and equipment, and step up the digitalisation of the health system. The latter will receive €2 billion. In addition, the French plan funds renovation of medico-social establishments, in particular those for dependent elderly persons, over the 2021-2025 period, to increase their accommodation and care capacity in anticipation of future demographic changes.

The focus of [Germany](#)'s plan is largely on digitalisation: it includes a reform to modernise the public health offices, in particular by increasing their level of digitalisation and the interoperability of IT systems to connect public health offices with other actors in the public healthcare system. A €3 billion investment to future-proof hospitals is envisaged, to enable them to invest in their modernisation, including through digitalisation.

The [Greek](#) NRRP aims to address the health system's several structural problems. Main elements include redesigning the health system through organisational reforms, optimising financial resources, reforming the primary health system, and reorienting health services. The plan also

includes a measure aimed at public health and prevention, for instance promoting physical exercise and healthy eating, and supporting early detection of diseases through screening.

The [Hungarian](#) plan's health component includes a reform intended to eradicate the practice of informal gratuity payments in the healthcare sector, and four investments. The investment in 'healthcare in the 21st century' aims to strengthen in-patient care and the related infrastructure. A second investment seeks greater use of information and communication technologies for increased efficiency, and a third focuses on organising telemedicine services and emergency care for people over 65. Improving access to primary healthcare services for as many citizens as possible is planned under a fourth investment.

Compared with the rest of the EU, the Irish healthcare system is relatively expensive, with no universal access to primary care. Ireland's own [Sláintecare](#) reform aims to address this, and the [Irish](#) NRRP's related reforms are all actions in support of Sláintecare's overarching goal of delivering universal, single-tier healthcare where patients are treated in public hospitals based on clinical needs rather than ability to pay. Ireland has [already implemented](#) a new 'public-only' employment contract for hospital consultants, a measure intended to alleviate shortages of doctors in public hospitals.

[Italy](#)'s NRRP envisages a reform that focuses on reorganising the network of Scientific Hospitalisation and Care Institutes (IRCCS) by updating the rules in national regulations to review the network's legal regime. [Two main projects](#) are financed under the health pillar: a €4 billion-project for the modernisation of hospital technology and digitalisation, and another €4 billion one for home care and telemedicine. Italy also invests in hospital infrastructure, as well as focusing on proximity in health services by funding telemedicine, local health services and care at home. The 2022 reform of territorial healthcare sets up new proximity healthcare structures (including community health houses, community hospitals and coordination centres), which are [expected](#) to become operational gradually by 2026.

The [Latvian](#) plan dedicates 10 % of the total allocation to health. Its three broad reforms focus on the development of new models for the delivery of effective integrated health services at all levels of healthcare; improving human resources management and upskilling in the sector through a dedicated strategy; and establishing a service laboratory system for testing and evaluating different service models. Most investments target the improvement of infrastructure of three university hospitals in Riga, seven regional hospitals and 40 ambulatory care institutions. Latvia will also participate in the cross-border '[Genome of Europe](#)' project intended to establish a resource for European reference data for healthcare research and innovation.

[Lithuania](#) envisages creating a centre for innovative advanced therapies, establishing a health professionals' competence platform to help monitor and match the supply and demand for health professionals, setting up 10 day-care centres across the country, providing equipment and vehicles and creating 90 mobile teams to help develop outpatient services, accompanied by a reform of the long-term care framework. Investments in five infectious disease clusters, seven regional emergency, reanimation and intensive-care divisions, and in tools to provide healthcare services electronically are expected to improve overall territorial healthcare coverage.

[Luxembourg](#)'s NRRP envisages carrying out a consultative reform process ('Gesondheetsdësch') in order to deliver a work programme and an implementation roadmap leading to a more resilient health sector. A related reform seeks to address shortages of health professionals by reforming the regulation of medical professions and job profiles in healthcare. A single digital register of healthcare professionals would be set up to help identify shortages and skills mismatches.

[Malta](#)'s plan's component 4, 'Strengthening the resilience of the health system', has two reforms and two investments with a total cost of €49.9 million. One of the reforms seeks improve staff management and address obstacles to hiring and retaining foreign healthcare workers; it also includes prevention measures relating to child health. The second reform addresses regulatory

barriers to investment in setting up a Blood, Tissue and Cell Centre within close proximity of the main hospital in Malta.

The NRRP of the [Netherlands](#) includes investment to reduce staff shortages in the care sector in times of a health crisis and increase the intensive-care capacity during the COVID-19 pandemic. Further measures are planned to enable remote healthcare through e-services, and to strengthen data exchange between health institutions and for research.

The [Polish](#) NRRP provides for multidimensional measures aiming to reform the hospital sector and support it with investment in order to rationalise the healthcare pyramid (including primary, ambulatory and hospital care); accelerate the digital transformation of health; create supporting conditions for increasing the number of medical staff; support the development of research in the medical sciences and health sciences; and create an enabling environment for the development of medicine production in Poland.

Among [Portugal's](#) key structural reforms is its primary healthcare reform, which intends to modernise the entire health system, including promotion of health and healthy lifestyles, integrated management of disease, investment in the qualification and modernisation of primary healthcare facilities and strengthening proximity healthcare responses. The investment in modernising the computer systems of the National Health Service (NHS) and increasing the digitalisation of medical records is the Portuguese NRRP's biggest strategic health-related [investment](#). Portugal already [achieved](#) a number of measures, such as introducing a new management contract template for public managers of state-owned enterprises in the health system, to increase accountability and promote performance-based management practices, and approving the Mental Health decree-law, thus strengthening NHS's capacity in the field.

The [Romanian](#) NRRP envisages measures to improve the performance of healthcare providers, achieve more effective management of health infrastructure projects by [establishing](#) a dedicated Agency for the Development of Health Infrastructure, and professionalise healthcare management as well as human resource management in healthcare. It also envisages strengthening anti-corruption measures in the health system.

[Slovakia's](#) NRRP includes three components that deal with the modernisation of the health, mental health, and social and long-term care systems. Taken together, these account for 23 % of the plan's total estimated cost. Slovakia has [already passed](#) a reform on optimising the hospital network and a reform on preparing health investment projects, as well as a law on establishing the network of general care providers and on introducing zoning to address regional disparities.

The health reforms in [Slovenia's](#) NRRP aim to provide the definition of statutory health insurance rights, restructure the complementary health insurance system, reform the remuneration system for health professions, and provide sustainable financing of the system. The NRRP envisages targeted primary care investment mainly in training of healthcare staff, and a key investment in improving the infrastructure and treatment of infectious and communicable diseases.

The [Spanish](#) NRRP includes a reform aiming to establish a general and integrated framework for the provision of public health. The plan also envisages actions to ensure a more efficient consumption of medicines and medical devices through legislative reforms. The capacities of the health system will be strengthened through investment in equipment and the professional skills of its workforce, and by reducing temporary employment in the sector. A reform to ensure the deployment of professionals in certain under-served geographical areas is also envisioned. One of the measures already adopted is the approval of an investment plan to renew obsolete hospital equipment with new high-tech medical devices ([Plan INVEAT](#)).

[Sweden's](#) NRRP includes, in particular, a reform to encourage municipalities to offer vocational training in healthcare and social care in combination with Swedish-language training. The aim is to speed up and facilitate people's transition into employment and thus help increase the supply of properly trained staff in the Swedish health and social sector. Shortage of healthcare staff was one

of the weaknesses highlighted during the pandemic. Part of the broad plan to upgrade the health system is [introducing](#) a protected title for assistant nurses, to make this profession more attractive for job seekers.

Digital transition in healthcare

While numerous measures focus on building or upgrading health infrastructure, a significant number of investments across the NRRPs are dedicated to the digital transition in healthcare (e-health). These measures also help achieve the RRF's target of allocating at least 20 % of total funds to the [digital transition](#) and to the proposed creation of a European health data space, which aims to offer e-health services to citizens anywhere in the EU.⁴ The underlying objective is to contribute to effective, accessible and resilient health systems. On the one hand, digitalisation can improve the quality of health and social services, make cross-sector communication between health professionals and between health professionals and citizens easier and more efficient, and reduce the gap between urban and rural areas. On the other, these new services might give rise to inequalities, unless adequate digital education for marginalised groups, for example, is envisaged to ensure equal access for them.

Box: Examples of NRRP measures targeting health sector digitalisation

Austria's [electronic mother–child passport](#) aims to give pregnant and breastfeeding women and their children better access to health services through the development of an electronic documentation and communication platform with simplified access to test results (also for healthcare practitioners). The project, which is designed to target marginalised and vulnerable groups, is available for everyone; access is to be made easy, to allow socially disadvantaged families and less educated women with limited German-language skills to use the mother–child passport as a key preventive tool. The project is worth [€10 million](#).

Croatia intends to invest [€1.4 million](#) in a system for monitoring shortages of medicinal products based on 'blockchain' technology. The measure envisages developing a software to monitor 100 % of medicines in Croatia, and an integrated model for anticipating and preventing medicine shortages. To protect individual users, the blockchain technology will be used to provide transparency on the data released to the public, while protecting data considered anonymous or possibly accessible to the government.

Cyprus plans to deploy generic [cross-border e-health services](#), to become part of a secure peer-to-peer e-health network in the EU. The measure would allow the exchange of patient health information, in particular patient summaries and e-prescriptions. It consists of putting in operation a cross-border data exchange between Cyprus and EU Member States with operational national contact points for e-health, such as e-prescriptions, e-dispensations, patient summaries, and additional data sets (e.g. discharge forms, laboratory results and imaging), as agreed with the eHealth Digital Service Infrastructure (eHDSI). The analysis, design and development phase of the IT system are due to be completed by the end of 2023. Cross-border data exchange is to be fully operational by mid-2025. The project targets European citizens travelling between Member States and receiving cross-border medical care, and also the EU health sector and its workforce (doctors and pharmacists).

Denmark is working to expand [online consultations for health anxiety](#) triggered by the COVID-19 pandemic, and further develop the [Kontakt Læge](#) ('Contact Doctor') app. The objective of the measure is for the Ministry of Health to develop and promote new digital solutions, including the use of digital technologies and video consultations, in order to make the healthcare system better connected in the wake of the pandemic. Denmark has already completed milestone 2 and target 3 linked to its [first payment](#). Milestone 2, the first step in implementing the investment, concerned the drafting of an evaluation report on telemedicine solutions for pandemic-related health anxiety, to further develop and increase the use of telemedicine and patient involvement. Target 3 concerns the development and operationalisation of the Kontakt Læge app on a second mobile device platform. The goal is to expand the use of video telemedicine consultations to other mobile device platforms and make the application available for iOS and Android devices. The work is carried out by the Danish Ministry of Health in collaboration with MedCom, a non-profit organisation financed and owned by the Ministry, Danish Regions and Local Government Denmark, to facilitate cooperation between authorities, organisations and businesses linked to the Danish healthcare sector.

Germany plans to [invest](#) €3 billion in the digitalisation of hospitals; this is the largest measure of its health component but also among the NRRP's [top ten](#) investment projects. The objective is to enable hospitals to invest in their modernisation, including through digitalisation, within a short timeframe. The measure consists of establishing a fund, from which hospitals may receive financial support for a number of modernisation projects, for instance to improve their digital infrastructure, emergency capacities, telemedicine, robotics, or IT and cybersecurity. The project is due to be completed by 31 August 2026.

Ireland's NRRP includes a series of e-health investments expected to increase the healthcare system's cost-effectiveness by introducing more efficient financial and procurement processes, and to improve accessibility to care services by delivering ICT infrastructure to community health locations. Ireland [completed](#) the configuration of an integrated financial management system to support effective management of the health service. In addition, contracts for building an e-pharmacy system and a shared government data centre were awarded. The new e-pharmacy [system](#) is designed to provide better visibility of medication usage and costs, and possibly enable the use of e-prescription tools in hospitals.

In **Romania**, the development of a new health insurance IT platform aims to enable central, regional and local health institutions to manage health data digitally, connecting over 25 000 healthcare providers. This investment is aimed at reducing working time for healthcare providers, the National Health Insurance House and Health Insurance House employees, while ensuring cybersecurity of the health insurance IT platform (PIA). The investment also seeks to foster the integration of health institutions through digital infrastructure, easing access to data for the Ministry of Health and other stakeholders (such as public health directorates), reducing fragmentation, and increasing health data quality. Moreover, the investment aims to increase access of rural and small urban areas and vulnerable groups to specialised consultations, while reducing waiting time by using telemedicine. 25 000 healthcare providers (hospitals, outpatient specialists, ambulatory care facilities, laboratories, family doctors, pharmacies, medical-device providers, home-care services) are to be connected to the new PIA platform by its completion in September 2025.

Spain plans to create a 'health data lake' – a [data centre](#) for the health sector that would gather information from different information systems, including regional ones, to allow mass data analysis in real-time aimed at support and improvement of diagnostics and treatment; identification of risk factors; trend analysis; identification of patterns; prediction of health risk situations and programming of resources to deal with them, including using artificial intelligence algorithms; new scalable system architectures; and new tools for processing and identifying models. Implementation is planned for the end of 2023. Both the Ministry of Health and the Secretary of State for Digitalisation and Economic Affairs are in charge of the initiative, which is valued at [€100 million](#).

Stakeholder views and expert debate

EuroHealthNet, a not-for-profit partnership of organisations, institutes and authorities working on public health, explored in a November 2021 [assessment report](#) whether the EU and its Member States are seizing the opportunity to apply the recovery-oriented funds in order to 'build back' in ways that systematically, structurally, and sustainably strengthen health, equity and well-being. Overall, the national health experts interviewed welcomed the implementation of such a large financial tool to boost recovery, while saying that there was room for improvement. Firstly, the report notes that, while health resilience is 'a multi-system and multi-sector challenge requiring intersectoral and inter-system collaboration for health', most Member States have invested mostly into 'curative' infrastructure rather than in health promotion and preventive measures. Experts were therefore concerned about the lack of understanding reflected in the NRRPs of the role public health, health promotion and preventative measures can play in mitigating the effects of ongoing and future crises. Most plans, with some exceptions, did not include enough measures to address psychosocial health, for example, despite its importance to recovery efforts. The report does acknowledge that the RRF offers concrete opportunities to finance innovative digital solutions, helping to build more resilient health systems. However, they are not being used at a scale necessary to reduce inequalities and strengthen public health.

Secondly, the report highlights that experiences differ between national, regional and local actors. The plans had to be developed within a very short time frame, and it seems consultation processes put in place early on did not reach many actors, despite the importance of involving a wide range

of stakeholders. The national level – Ministries of Health and National Public Health Institutes, for example – reported being directly involved in the design of one or more activities to be funded under their respective NRRPs. Conversely, regional and local institutions described the process of developing the NRRPs as very centralised. Where experts from the regional or local level had been involved, they indicated having been given very little time to discuss and to provide constructive feedback. Experts noted low transparency and a lack of incentives for engagement of the relevant authorities working at sub-national levels that have a keen understanding on realities 'on the ground'. Improving communication and cooperation across sectors (health, social, environment, digital), levels (EU, national, regional, local) and stakeholders (public bodies, civil society, businesses) is only one of the recommendations included in the report. A 2023 [qualitative analysis](#) on the sustainability of the interventions on healthcare of the Italian NRRP notes in its conclusion that the need to develop a programme of such a scale in a very short time led to the 'lack of a deep analysis and constructive dialogue with regional realities'.

In a further [analysis](#) from December 2022, EuroHealthNet looks into findings from eight Member States' NRRPs, based on interviews with public health experts. Despite showing potential to advance public health policies and practice in various Member States, the long-term sustainability of the health-related investment in the NRRPs largely depends on the governments' commitment to keep health – including health improvement – high on their agendas. According to the analysis, there is a threat that current crises and pressing challenges may deflect attention from these issues, or dilute their importance. Drawing on insights from eight countries, the analysis calls for sustainable investment in a range of initiatives as part of broader health, resilience and reform strategies, and better and more transparent communication among policymakers, professionals and the public on how RRF funds are being spent. Greater transparency around the funding's use would help all stakeholders develop a clearer understanding of what is being funded under what programmes, and where synergies can be found.

In a July 2021 [press release](#), COCIR – the European trade association representing the medical imaging, radiotherapy, health ICT and electromedical industries – and the European Regional and Local Health Authorities (EUREGHA) network that the RRF is 'the right tool to mobilise funding towards the modernisation and reforms of national healthcare systems and infrastructures'. On the one hand, it would enable preparedness for future crises, and on the other, address the backlog of missed interventions and procedures during the pandemic. The EUREGHA Chair has drawn attention to the word 'resilience' and to the importance of moving forward digital health and digital transformation processes. He pointed out that the creation of the European health data space is part of an ambitious vision, and the RRF is 'the key enabler to implement this vision' and ensure the transformation of the European health system.

European Parliament

The European Parliament's Committee on the Environment, Public Health and Food Safety (ENVI) is Parliament's main actor on health matters. In February 2023, Parliament approved the setting up of a Subcommittee on Public Health (SANT). Parliament has consistently promoted the establishment of a [coherent public health policy](#) through numerous opinions, studies, debates, written declarations and own-initiative reports on a wide range of issues. In a May 2020 [resolution](#) on the new MFF, own resources and the recovery instrument, Parliament insisted on the creation of a new stand-alone European health programme. A strong [advocate of a robust MFF](#) for the 2021-2027 period, Parliament not only promoted the creation of the recovery instrument but also managed to secure several reinforcements in its negotiations with the Council on the new MFF, including a top-up for the [EU4Health programme](#).

Parliament plays a pivotal role in scrutinising implementation of the RRF and in ensuring a high level of transparency and accountability. It [monitors](#) the implementation of national plans and verifies that the RRF delivers results through regular [dialogues](#) with and written questions to the European Commission, contracting external studies and producing internal research papers. Parliament can

express its views on RRF implementation via [resolutions](#), which the Commission should take into account. In its [2022 resolution](#) on the implementation of the RRF, Parliament underlined the importance of reforms and investment in health, and, in line with some of the stakeholders' observations above, expressed concern that measures tackling mental health were insufficient, as were measures to tackle other long-standing public health challenges. Parliament also holds the Commission politically accountable for the implementation of the RRF's grants through the [discharge procedure](#), with the [2021 exercise](#) being the first one to cover the RRF.

MAIN REFERENCES

[EU4Health programme](#), EPRS, European Parliament, 2021.

[European recovery instrument](#), EPRS infographic.

[National Recovery and Resilience Plans: Latest state of play](#), EPRS blog, July 2023.

[Recovery and Resilience Facility](#), European Parliament website.

ENDNOTES

- ¹ The EPRS's social dimension has become an integral part of the European Semester cycle. It represents a [\(non-binding\) commitment](#) within Member States to address social challenges in their national systems and guarantee a minimum set of social rights for all people living in the EU. It consists of [20 principles](#), of which Principle 16 'Healthcare' aims to ensure everyone has the right to timely access to good quality healthcare.
- ² A 2021 [EuroHealthNet briefing](#) gives an overview of the funds and relevant programmes of the new MFF that offer opportunities for health-related investment. Another source is the 2019 edition of the Commission's Health for the EU [publication](#).
- ³ The digital measures in the plans contribute to the 'Modernise' EU flagship initiative laid down in the Commission's [annual sustainable growth strategy](#), as specifically noted in the assessment of the Maltese plan.
- ⁴ An [event](#) entitled 'eHealth services & infrastructure: Building a resilient and innovative public health ecosystem', part of a series launched by Hewlett Packard Enterprise and Forum Europe, looks at how RRF investment in both e-health services and digital infrastructure will play a significant role in materialising the data space.

DISCLAIMER AND COPYRIGHT

This document is prepared for, and addressed to, the Members and staff of the European Parliament as background material to assist them in their parliamentary work. The content of the document is the sole responsibility of its author(s) and any opinions expressed herein should not be taken to represent an official position of the Parliament.

Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the European Parliament is given prior notice and sent a copy.

© European Union, 2023.

Photo credits: © natara / Adobe Stock.

eprs@ep.europa.eu (contact)

www.eprs.ep.parl.union.eu (intranet)

www.europarl.europa.eu/thinktank (internet)

<http://epthinktank.eu> (blog)