EXECUTIVE SUMMARY

Sustainability and Resilience in the Belgian Health System

Muriel Levy and Lieven Annemans

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LSE Consulting
LSE Enterprise Ltd
London School of Economics and Political Science
Houghton Street, London, WC2A 2AE

(T) +44 (0)20 7106 1198
(E) consulting@lse.ac.uk
(W) lse.ac.uk/consultancy
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RECOMMENDATIONS
Domain 1: Governance
Domain 2: Financing
Domain 3: Workforce
Domain 4: Medicines and technology
Domain 5: Service delivery
Domain 6: Population health and social determinants
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ACKNOWLEDGEMENTS
INTRODUCTION

Pre-pandemic, many healthcare systems around the world were already struggling to control spending and meet the increasing demand for healthcare caused by ageing populations, a rise in chronic diseases, workforce shortages and other issues. The COVID-19 pandemic further worsened these problems and presented unique challenges for health systems. In Belgium, the virus outbreak occurred in the middle of a political crisis. Officially, the pandemic led to an estimated 33 000 deaths. The high COVID-19 related mortality during the first wave in Belgium even attracted international attention, although biases and differences in labelling COVID-19 deaths led to distorted comparisons. The response to the COVID-19 pandemic has emphasised key strengths and weaknesses of the Belgian health system and highlighted the critical importance of identifying potential solutions to improve the system's sustainability and resilience.

A health system's goal is to improve population health and to respond to the needs of the population it serves. Sustainability refers to a health system's ability to improve population health, by continually delivering the key functions of providing services, generating resources, financing and stewardship, incorporating principles of financial fairness, equity in access, responsiveness and efficiency of care, and to do so in an environmentally sustainable manner.

Resilience refers to a health system's ability to prepare for, absorb, adapt to, learn, transform and recover from crises born of short-term shocks and accumulated stresses, in order to minimise their negative impact on population health and disruption caused to health services.

As part of the Partnership for Health System Sustainability and Resilience (PHSSR), this report aims to evaluate the sustainability and resilience of the health system in Belgium in seven key domains:

- **Governance**: the wide range of steering and rule-making related functions carried out by governments and decision makers as they seek to achieve national health policy objectives
- **Financing**: how health systems generate, pool and allocate financial resources and pay for health services
- **Workforce**: how health systems plan for, train, recruit, reward, and deploy their workforce, and shape the conditions in which health professionals work
- **Medicines and technology**: how health systems make use of medicines and (information) technologies in the delivery of health services
- **Service delivery**: how health services are organised and delivered, including ambulatory and hospital care, and public health
- **Population health and social determinants**: how health systems address the social determinants of health and meet the needs and demand of the population
- **Environmental sustainability**: how health systems prevent and minimize their carbon footprint and the impacts of pollution on the population's health

A review of the available literature, including governmental reports, peer-reviewed articles, national statistics, and news articles, was performed and 23 interviews/written exchanges as well as a policy dialogue with different health system stakeholders were conducted. The full report also includes two case-studies, which offer a more nuanced and detailed understanding of specific issues relevant to the Belgian health system's sustainability and resilience, namely one on financing digital care and one on the quality of life of health professionals.

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1 These definitions of “sustainability” and “resilience” were developed by the London School of Economics as part of the Partnership for Health System Sustainability and Resilience.
Findings

Key themes for sustainability and resilience

The response to the COVID-19 pandemic has emphasised key strengths and underlying issues for the health system in Belgium. All key findings presented under resilience are related to the COVID-19 pandemic period.

DOMAIN 1: GOVERNANCE

Sustainability

Strengths

▶ Clear objectives of universality and solidarity exist
▶ Several federal institutions support health system governance (e.g. Federal Public Service Health, Food Chain Safety and Environment, Federal Public Service for Social Security)
▶ Population is on average satisfied with the health system overall
▶ New initiative for setting more evidence-based healthcare goals has been launched

Weaknesses

▼ Health competences are scattered within federal government and between federal and federated governments and the role of local/decentralised authorities is unclear
▼ Complex and rigid structures at the federal level slow down progress and blur accountability
▼ There is a lack of clear and harmonised long-term vision (e.g. until 2040) for several diseases (except for a cancer plan)
▼ A cross-sectoral approach to health (‘health in all policies’ principle) is not widely implemented
▼ Funding to support and professionalise patient organisations is deemed insufficient
▼ Co-governance between hospital directors and clinicians is insufficient

Resilience

Strengths

▶ The National Institute for Health and Disability Insurance (NIHDI) and the Federal Agency for Medicines and Health Products (FAMHP) showed a dynamic response to ensure continuity of care (e.g. new nomenclature, authorisations)
▶ A surge capacity plan was quite rapidly prepared and an interfederal structure “the Hospital & Transport Surge Capacity committee” was created

Weaknesses

▼ Level of coordination and cooperation between different government levels is low
▼ Political and structural fragmentation and absence of unity of command can contribute to slow decision-making and poor policy implementation
DOMAIN 2: FINANCING

Sustainability

**Strengths**

- Universal health coverage: in general, good financial accessibility and affordability of care
- Diversified revenue sources for the social security system
- Since 2014 (6th State Reform), public financing of the compulsory health insurance has become more progressive in function of income
- Innovative financing system of personal budgets for disabled individuals in Flanders
- Starting to move towards multi-year budgets

**Weaknesses**

- The current fee-for-service payment of providers is a barrier to integrated care provision and can lead to supplier-induced demand
- Lack of transparency in fees charged by clinicians
- Rigidity in nomenclature (list of services for which fees can be charged) makes adaptations difficult
- Lack of connection between expenditure and healthcare outcomes — few incentives for outcome-based and goal-oriented practices, poor accountability and mainly focused on budgetary control
- Despite improvements in appropriate care evaluation and audit, lack of expertise and competencies persists, also in terms of data intelligence
- Despite universal health coverage, out of pocket payments are too high for many patients
- Lack of flexibility in budget allocation of NIHDI, hence creating silos
- Underinvestment in prevention, partly due to prevention being the responsibility of the federated level, while its benefits apply at the federal level

Resilience

**Strengths**

- Quick allocation of new payments for supporting healthcare providers in their (tele-)activities to manage COVID-19

**Weaknesses**

- Lack of good projections related to the risk of exposure to epidemics/pandemics
- Underinvestment in mental health care, before and during the COVID-19 pandemic
DOMAINE 3: WORKFORCE

Sustainability

Strengths
- High quality of education and training of the workforce
- Planned increase in the quotas of physicians
- Incentives to attract students to become general practitioners (GPs) and nurses (in Flanders)
- Quite good autonomy of physicians in deciding how to treat their patients

Weaknesses
- Stressful working conditions, especially for nurses and long-term care workers, leading to high rates of burnout
- Overburden of administrative tasks partly linked to accreditations systems
- Shortage of GPs, long-term care workers, and high patient to active nurse ratio in hospitals
- Ageing healthcare workforce, especially GPs
- Still too much rigidity in description of professional competences and work schedules
- Corporatism of some healthcare workers, leading to even more rigidity, hyperspecialisation, and less flexibility

Resilience

Strengths
- Mobilisation of workers from other sectors to support healthcare professionals during the pandemic
- More flexibility in the allocation of medical tasks and competences across healthcare professionals during the pandemic (i.e. law of 04/11/20)

Weaknesses
- Shortage of nurses with expertise in intensive care or infection prevention and control
- Lack of information and training on infection prevention and control of care workers in nursing homes
- Experiences during the pandemic exacerbated pre-existing concerns for the physical and mental health of the workforce
**Domain 4: Medicines and Technology**

**Sustainability**

**Strengths**
- Rapid approval of clinical trials
- World-class medical and biopharmaceutical ecosystem
- Good quality of academic research in health
- Specific procedures foreseen to give early access to potentially very innovative treatments
- Long-term (but still ongoing) investment in digitalisation of the health system
- Good patient access to innovative medicines and advanced healthcare technologies, once they are on the market and reimbursed
- First step towards the creation of a health data agency and the Belgian Integrated Health Record to support the linkage of health data from different sources

**Weaknesses**
- Lack of pooling all healthcare data and of wide accessibility of these data under well-defined governance rules
- Weak interoperability of Electronic Health Records across different levels of care – lack of a good backbone
- Market access and reimbursement procedures for new medicines or health technologies are perceived as lengthy, rigid, opaque, and unpredictable
- Insufficient assessments on the value of a new treatment for society overall, often too focused on the budget dimension
- FAMHP and NIHDI are understaffed and undertrained in the domain of medicines and technologies. This represents an obstacle for adoption of new medicines and health technologies and might impact the quality of the assessment.
- Insufficient training of patients and health workers on the use of digital health and new technologies

**Resilience**

**Strengths**
- Strong support for remote patient monitoring solutions during the pandemic which enabled patient care continuity and – if organized in a hybrid way (with in-person contacts as the norm) – may have longer-term impact in reinforcing patient-centered care

**Weaknesses**
- Insufficient pre-existing stockpiles of personal protective equipment
- Slow and complex access to accurate health data for research on pandemic approach
- High dependency on the global economy for medical supplies
**DOMAIN 5: SERVICE DELIVERY**

**Strengths**
- Freedom for patients to choose healthcare facilities and individual providers
- In general, good quality of care and healthcare infrastructures
- Several initiatives at the federal and regional level to ensure the quality of care in healthcare facilities
- Proximity of and rapid access to care with quite short waiting times for a consultation or operation (excluding some disciplines)
- Launch of mental health care reform process
- Accelerated development of integrated primary care in Flanders and Brussels (starting)
- Loco-regional hospital networks to facilitate collaboration and building expertise (ongoing)

**Weaknesses**
- Overconsumption and unnecessary treatments and examinations
- Large variations in quality and services provided by medical practices
- Perceived lack of authentic connections between patients and healthcare providers – risk for dehumanization of healthcare
- Main focus is on treating symptoms with a lack of attention to patients’ life goals and holistic approaches
- Weak transparency on the quality of care and lack of real-time monitoring of quality indicators
- Inefficient allocation of resources across secondary and tertiary care (‘hospital-centrism’) and duplication of expertise across hospitals
- Limited implementation of a system’s approach per disease to only a few specific diseases (e.g. diabetes)
- Difficulties for patients to find their way in the health system
- Healthcare inequalities, expressed as differences in unmet medical needs between high- and low-income groups, are larger than the EU-27 average

**Resilience**

**Strengths**
- Rather large hospital bed capacity
- Rapid increase in intensive care unit (ICU) bed capacity in the first wave and measures of geographic redistribution prevented the saturation of hospitals

**Weaknesses**
- Poor coordination between some nursing homes and hospitals during the first wave of the pandemic
- Cancellation of or delay in essential healthcare (consultations, examinations, procedures...); stopping of screening programmes for breast, cervical and colon cancer during the first wave of the pandemic
- General physicians inadequately involved in prevention and treatment of patients to keep them out of hospital
DOMAIN 6: POPULATION HEALTH AND SOCIAL DETERMINANTS

Sustainability

Strengths

↑ Some strategies to address social determinants of health
↑ Different organisations involved in health promotion
↑ Increased involvement of patient organisations in health literacy
↑ Compulsory physical activity in schools

Weaknesses

↓ Insufficient investment in prevention and health promotion compared to many other countries
↓ There is no real leadership across organisations involved in health promotion
↓ Levels of health literacy are low
↓ Levels of physical activity and healthy nutrition are low
↓ Scattering of actors involved in prevention and health promotion
↓ Lack of awareness and training on community health in the curriculum of doctors
↓ Poor situation of mental health and access to mental health services

Resilience

Weaknesses

↓ Patient involvement and patients’ rights to information and decision to care decreased during the COVID-19 pandemic
↓ Physical activity was insufficiently promoted and even discouraged
↓ Increased prevalence of anxiety, likely reinforced by media communication
↓ No real leadership across organisations involved in health promotion

DOMAIN 7: ENVIRONMENTAL SUSTAINABILITY

Sustainability

Strengths

↑ Commitment to a climate resilient health system, a sustainable low carbon health system and a Net Zero commitment by 2050
↑ Healthcare facilities in Flanders agreed to 13 climate commitments
↑ A range of surveillance systems of environmental risk factors exist
Weaknesses

- Fragmentation of energy and environmental competences between the federal and federated entities and lack of an independent co-ordinating body hamper the development of a shared long-term climate vision and implementation of coherent policies
- Lack of concrete actions to reach COP26 commitments
- Short-term thinking in the use of single use medical and non-medical items in hospitals
- Lack of knowledge by health authorities and health system actors on environmental sustainability
- Lack of evaluation of the efficiency of the health system’s current investments in environmental sustainability

Resilience

Strengths

- Emergency response during floods in 2021 to restart primary health care and ensure continuity of treatments for chronic patients based on solidarity

Weaknesses

- Some confusion on the management of waste from COVID-19 patients

In summary, Belgium’s health system has several strengths, including clear objectives of universality and solidarity, and is supported by several federal institutions. The Belgian population reports being generally satisfied with the health system and the quality of care provided. Belgium offers universal health coverage to its population and the revenue sources for the social security system are diversified, with an increasingly progressive financing of the compulsory health insurance. The education and training provided to the healthcare workforce is of good quality, so is academic research in health and the medical and biopharmaceutical ecosystem. Patients have good access to innovative medicines and advanced health technologies once they are on the market and are reimbursed. Care is quite easily accessible in Belgium due to its proximity, relatively short waiting times (although this appears to be changing), and freedom to choose any healthcare provider. Belgium has recently committed to the COP26 health programme, including a climate resilient health system, and a sustainable low carbon health system.

The health system developed innovative responses to the COVID-19 pandemic, by mobilising workers outside of the healthcare sector, implementing greater task shifting (‘skill mix’), quickly allocating new payments to support healthcare providers, supporting remote patient monitoring solutions, and rapidly increasing ICU bed capacity.

However, the Belgian health system also has important weaknesses which were highlighted by the COVID-19 pandemic. The very complex political structure and the scattering of health competences between federal and federated governments lead to suboptimal levels of coordination and cooperation between different government levels, slowing down decision-making and policy implementation, especially during crises. This political fragmentation also contributes to difficulties for patients to navigate the health system and the historical underinvestments in prevention. Currently, the focus of health policy makers is more on healthcare governance, organisation and financing, and too little on public health. Moreover, complex and rigid governance structures exist, such as for the reimbursement of new medicines or health technologies.
The payment system for healthcare professionals, which is to a large extent fee-for-service, represents a barrier for the implementation of an integrated health care system approach and potentially drives unnecessary use of treatments and examinations. Resources are not efficiently allocated across different levels of care and expertise is still duplicated across hospitals. The lack of flexibility in the health insurance budget allocation and nomenclature leads to ‘silo-thinking’ and therefore also prevents further integration of care. Shortages of healthcare workforce (especially GPs and nurses at the bedside) as well as concerns about the wellbeing of the healthcare workforce have been exacerbated during the recent crisis. Health workers are often overburdened with administrative tasks and task-shifting possibilities remain sparse. Moreover, patient care faces the risk of becoming less human and too much focused on data and reporting. Currently no system to pool and link all healthcare data exists and the interoperability of Electronic Health Records across different lines of care remains weak. The COVID-19 crisis has highlighted the high dependency of Belgium on the global economy for medical supplies. Belgium lacks a strong prevention and health promotion culture, which is partly linked to insufficient investments and training in community health and holistic approaches in the curriculum of healthcare professionals. During the pandemic, the importance of a healthy lifestyle was insufficiently promoted. Finally, the country also lacks a federal-level strategy and incentives to reduce the environmental impact of the health system in terms of waste, emissions and resource consumption.

To address some of these challenges, several reforms aimed at improving the health system’s sustainability are already ongoing, such as formulating outcome-focused healthcare goals and multi-year budgets, incentives to strengthen primary care and increase the number of GPs, accelerated investment in the digitalisation of the health system, reforms of the financing of hospitals and the creation of loco-regional hospital networks and primary health care zones to facilitate collaboration and expertise building.
Based on the findings of the report, the stakeholder interviews and policy dialogue, recommendations for increasing the sustainability and resilience of the Belgian health system were formulated for each domain. We make 70 recommendations across the seven domains which are shown below. A prioritisation exercise of these recommendations for implementation should take place in close consultation with the different health system stakeholders.

**DOMAIN 1: GOVERNANCE**

**Sustainability**

1A Simplify and harmonise the overall structures, and seek more synergies between Sciensano, the Health Care Knowledge Centre (KCE), and the Superior Health Council at the federal level.

1B Define long-term healthcare plans which are based on demographic and epidemiological trends, focus on a broad array of diseases, multimorbidity and associated health and care needs.

1C Increase the transparency and people-centredness of the health policy making processes by inviting all stakeholders to contribute at the central and regional level as well as at the healthcare provider level (e.g. hospitals).

1D Professionalise patient organisations by supporting them in a structural way and funding them better.

1E Strengthen the ‘One health’ and ‘Health in All Policies’ approaches, with mechanisms in place for non-health authorities (e.g. employment, education) to share what they are concretely doing for health.

1F Build more capacity at local levels (e.g. municipalities or primary care zones) to implement health policy measures.

**Resilience**

1G Adapt health emergency preparedness plans to a wide variety of situations and define the type of expertise required in decision-making, the role of all care providers, priority populations/services and critical resources required (ongoing).

1H Clarify the allocation of health competences and develop clear and efficient schemes for coordination, cooperation, and lines of command between federated entities, between the federal and federated levels and across sectors in crisis management policies.

1I Evaluate more systematically the impact of crisis measures on all dimensions of health, including physical, mental, and social.
**Domain 2: Financing**

**Sustainability**

2A Further increase the share of progressive receipts (income tax) compared to the share of proportional (social security) and regressive (VAT) receipts in the financing of the compulsory health insurance

2B Increase cost-effective investments in primary and community care and monitor the results of these investments

2C Increase the share of health resources/budgets devoted to prevention and early detection, in order to match the level of Scandinavian countries (e.g. 0.36% of GDP in Sweden vs 0.17% in Belgium)

2D Reform the healthcare payment system (from mainly FFS to a larger weight for episode based payments, i.e. per patient per episode of care) to provide appropriate incentives for quality, efficiency and responsiveness of care (ongoing)

2E Clarify and monitor the trajectory of the reform of clinician fees (the ‘nomenclature’) and the supplements on these fees, and evaluate the consequences of this ongoing reform

2F Revise how budgets are allocated between different government levels by accounting for new policies, demographic and epidemiological trends, and social determinants of health, and increase flexibility and transversal thinking in budget pots (ongoing)

2G Awaiting further reforms, promote and develop co-financing projects between federal and federated entities, especially for prevention initiatives (e.g. fall prevention)

2H Increase the involvement and alignment of government, sickness funds (health funds) and patient organisations in informing patients about their rights, the use of healthcare facilities and their personal assistance budgets

2I Centralise patients’ access to different benefits (i.e. sickness, unemployment and disability), automatize access to some benefits (preferential reimbursement, maximum co-payments) and improve and harmonise benefits (e.g. reimbursement of transport costs, access to psychologists) across different diseases

2J Review decision-making processes on the financing of hospital infrastructures, with more focus on improving quality of care and integration of care, and with more flexibility in investment decisions

**Resilience**

2K Perform prognoses of needed budgets based on the risk of exposure to health shocks, work out different scenarios and adapt budget planning accordingly, thereby ensuring sufficient financial reserves
DOMAIN 3: WORKFORCE

Sustainability

3A Protect better the physical and mental wellbeing of health and social care workers, by systematically and regularly collecting and monitoring data on their wellbeing, improving working environments to reduce stress and sustain engagement, and increasing access to psychological support services.

3B Continue the efforts made to increase the number of medical students who specialise as GPs by making the GP profession more attractive (e.g. by lowering the administrative burden), and value better the GPs’ central role in the network of healthcare professionals.

3C Revalue/upgrade the nursing profession by lowering the administrative burden, recruiting more administrative support staff, investing in training and research for the nursing profession, and increasing the ratio of nurses per hospital bed.

3D Promote greater task-shifting and task differentiation (‘skill mix’) and increase autonomy through greater flexibility in description of competences and work schedules, and by including collaboration between different healthcare professions throughout their training.

3E Invest more in new healthcare professions (e.g. patient case manager, physician assistant, oral hygienist), who can take over tasks from other healthcare providers.

3F Promote the greater use of cost-effective and sustainable technology to support healthcare workers and allow them to focus more on patients.

Resilience

3G Invest in continuous practical training, including prevention and control of infections, of workers in nursing homes and create mobile care teams that can be deployed quickly when help is requested from nursing homes.

3H Increase the number of community health workers and build on the community work that has been developed during the COVID-19 pandemic.

3I Invest in more internal medicine specialists, as well as in ICU expertise for healthcare workers usually not working in ICUs.

3J Develop a real-time data portal to match the demand for healthcare staff with staff availabilities.

DOMAIN 4: MEDICINES AND TECHNOLOGY

Sustainability

4A Develop an ambitious system for country wide data integration and better regulate the interoperability of Electronic Health Records (EHRs) across healthcare providers (including nursing homes) and government systems (ongoing) and invest in IT support specialists and data scientists.

4B Automate and harmonize the extraction of data from medical records and hospital systems (e.g. number of available ICU beds) for quality improvement and research purposes.
4C Invest in digital skills for patients and healthcare workers to increase the use of cost-effective eHealth services and ensure that the digitalisation of health system remains inclusive by keeping a physical/in-person support option

4D Maintain the high-quality research and medical and biopharmaceutical ecosystem to encourage valuable innovation in healthcare

4E Improve the pricing and reimbursement process of new medicines and health technologies (transparent processes and criteria) and adopt a value-based approach

4F Monitor better the appropriate use of innovative medicines and health technologies and their effect on patient outcomes in the real world using dashboards

**Resilience**

4G Develop or increase the stock of essential medicines and medical supplies, based on a list of those that should always be available (according to a risk-based approach)

4H Develop a resilience plan in the face of a large-scale blackout or hacking of hospitals’ IT system, invest in hospital cyber-security and raise awareness of cyber-security among healthcare providers

**Domain 5: Service Delivery**

**Sustainability**

5A Strengthen the care coordinating role of primary care by expanding current incentives and further encouraging the choice of a unique reference GP to whom other professionals should systematically feed back

5B Strengthen healthcare provision in nursing homes, by increasing the number of nurses per bed, by upgrading the role of the coordinating GP and by creating stronger formal and automated links with other healthcare providers

5C Increase investment in integrated care networks and better connect each hospital network with a cluster of 1st line care providers (clusters can overlap) to facilitate the management of chronic conditions and improve continuity of care

5D Make it mandatory for hospitals to measure, monitor and publish indicators on quality of care and medical consumption, and create a central registry where patients can report their health outcomes after treatments

5E Limit overconsumption of treatments and examinations by continuously educating healthcare professionals about best practices, training them in expertise centres, and increasing regulation and peer-review

5F Push for more specialisation of hospitals within and across networks and for 3rd line care to provide complex care through appropriate incentives and a stronger referral system

5G Train healthcare professionals to discuss life goals and to have a holistic and humanistic approach to patients instead of focusing only on reducing symptoms

5H Leverage the created possibilities for telemedicine, and install financial incentives to support its quality, while respecting the need for in-person care
Resilience

5I Establish clear (but with a degree of flexibility) roles for different clinicians and other care workers during health crises

5J Provide GPs with guidelines on the prevention and early treatment of infectious diseases

5K Ensure that all essential care and screening continues during a crisis by developing preparation plans with the actors and informing health professionals and the general public

5L Have clinical pharmacologists and infectious disease specialists in each hospital with a mandate to also support primary care facilities

DOMAIN 6: POPULATION HEALTH AND SOCIAL DETERMINANTS

Sustainability

6A Strengthen the public health component in the continuous education of healthcare workers and increase their exposure to community health and prevention

6B Develop a comprehensive plan that acts on a societal level to reduce exposure to risk factors and unhealthy lifestyles, and increases health literacy throughout the life course

6C Implement stricter measures in all schools (not only primary schools) to ban the consumption of sugar-sweetened beverages and food

6D Invest in data collection for cohort studies and data linkage across data sources, including exome and genome sequencing data and environmental data, to better understand risk factors for health

6E Increase the uptake of secondary prevention programmes, such as improved and broadened (i.e. more types of) cancer screenings (by implementing the latest scientific insights and recommendations)

6F Routinely perform health impact assessments of policies outside of health and measure their effect on socioeconomic inequalities

6G Increase collaboration between hospitals, health funds and patient organisations and improve referral of patients to disease-specific patient organisations to better guide them in taking care of their health

6H Make the ‘health in all policies’ concept more concrete and invest in physical, social and mental health promotion in schools, at the workplace and in the community

Resilience

6I Encourage physical activity even during an infectious disease outbreak, for instance by keeping fitness centres open, while respecting rules for ventilation and disinfection of air

6J Create vigilance rather than anxiety among the population during health crises, by collaborating with healthcare professionals and the media

6K Provide extra support for mental health promotion during crisis times
**Sustainability**

7A Establish a long-term climate-resilience action plan across the country for healthcare infrastructure, with targets and indicators to be monitored

7B Create incentives for healthcare facilities to sort and recycle their waste, reduce single-use items and increase re-usable ones, reduce the use of chemicals, reintroduce sterilisation and invest in low carbon buildings

7C Explore options to extend medications’ shelf-life, choose the most sustainable storage conditions, adjust package sizes, optimise stock management, and raise awareness of medication waste

7D Invest in alternatives to incineration of hazardous healthcare waste, such as the use of disinfection treatment, to increase the circularity of waste-resources

7E Optimise health care effectiveness/efficiency and rational use of healthcare to reduce energy consumption of the health system

7F Raise awareness among the healthcare workforce about risks related to healthcare waste, train them on best practices to reduce waste and resource consumption, and facilitate exchanges of best practices across healthcare facilities

7G Raise public awareness on environmental risk factors for health, through information campaigns

7H Develop a methodology that takes into account the environmental and societal impacts of a health intervention or technology in addition to its health effect and cost when assessing its value

**Resilience**

7I Update hospital emergency plans to better respond to severe and more prolonged climate or environment related crises
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Dr Else Tambuyzer, Director, Vlaams Patiëntenplatform
Herman Van Eeckhout, Senior Director Drug Policy, Pharma.be
Luc Van Gorp, President, National Association of Christian Mutuality
Dr Pieter Van Herck, Advisor Cabinet Minister Van Quickenborne
Pascal Vanmeenen, President, Flemish professional association for head nurses and paramedical managers (VBVK)
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