



Healthcare as an Investment

Report of the Healthcare Committee of the American
Chamber of Commerce in Romania

November 2022
Prepared by IQVIA Romania



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Project Background and Methodology



The report aimed to assess the current state of the Healthcare system in Romania and generate insights for its optimization

Background and methodology

Report background & objective

Investment in Healthcare needs to be on the **strategic agenda** of every government to put necessary **focus on people's health** and has become an absolute necessity to ensure long-term and sustainable economic growth

The impact of delayed or insufficient investment in healthcare results in indirect increases in Healthcare costs, as well as **long-term decrease in labor productivity and GDP output**



The aims to generate insights on gaps and recommendations for Healthcare system optimization

Methodology

Policy Efficiency



- 1 Understand Romanian current state vs EU countries
- 2 Outline EU best practices for healthcare ecosystem
- 3 Identify use cases in Romania and developed countries
- 4 Assess gaps and generate calls of actions and strategies for Healthcare system optimization

Cost Optimization



Funding Options



Call to Actions and Key Takeaways



We have identified 11 calls to action focusing on policy efficiency, cost optimization & funding options..

Summary of Calls to Action

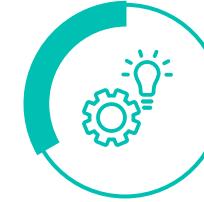
Policy Efficiency



Cost Optimization



Funding Options



- 1 Invest in Prevention & Screening:** Make effective public health interventions to reduce risk factors and mortality rate from preventable and treatable causes
- 2 Stabilize Workforce Dynamics:** Set-up programs to motivate young doctors to remain in Romania and to address regional disparities
- 3 Focus on Outcomes:** Move to payment models that reward outcomes over volumes – Value Base Healthcare
- 4 Improve Patient Adherence:** Support development of Patient Adherence Programs and introduce guidelines to improve adherence

- 5 Advance Outpatient Care:** Strengthen provision of outpatient and ambulatory care
- 6 Reallocate Savings from Loss of Exclusivity:** Reinvest savings from loss of exclusivity and reduce time to availability for innovative therapies
- 7 Implement Digital Health:** Set up a Digital Health Roadmap with clear vision, priorities and milestones until 2025
- 8 Support Better Access to Medical Devices:** Continue to implement initiatives to increase patients' access to medical devices

- 9 Channel EU Funds in Healthcare:** Prioritize and channel investments in Healthcare as part of EU Funding: Recovery and Resilience funds and EU4Health funds
- 10 Establish Dedicated Innovation Fund:** Launch a dedicated Innovation Fund to drive early access to innovative medicines and therapies to patients
- 11 Support Additional Funding Options:** Support and encourage additional funding options

.. which can tackle key problems and inefficiencies across the patients' journey and unlock some critical Healthcare enablers

Selected Calls to Action to be detailed further



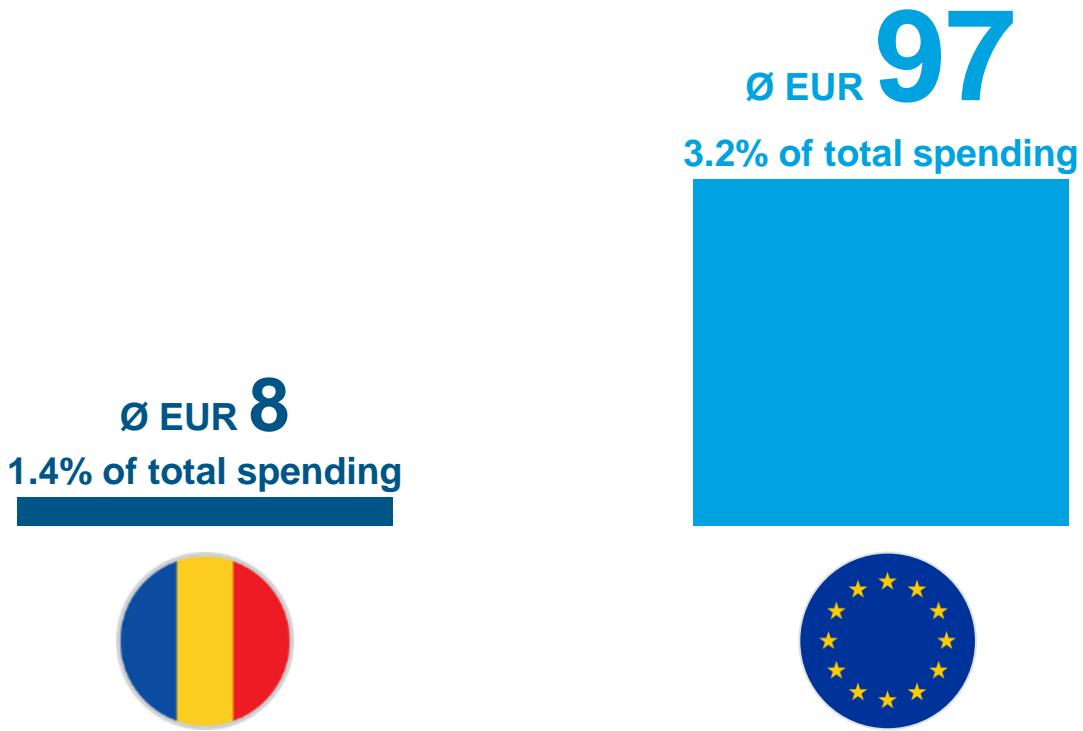
While prevention plays a major role, it remains underdeveloped within the local healthcare system and investment strategy

Spending on prevention in RO vs EU

A substantial proportion of **deaths could be prevented** by tackling behavioral risk factors and strengthening primary prevention

- Improvements in cardiovascular diseases (CVD) prevention and treatment are possible and could have a large impact on population health
- In 2018, new screening programs were introduced for cancer, CVD and tuberculosis, but the frequency of preventive check-ups remains low

Average yearly spending on prevention per capita, 2020



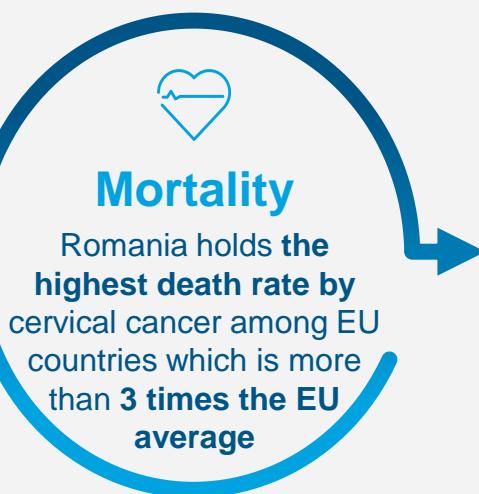
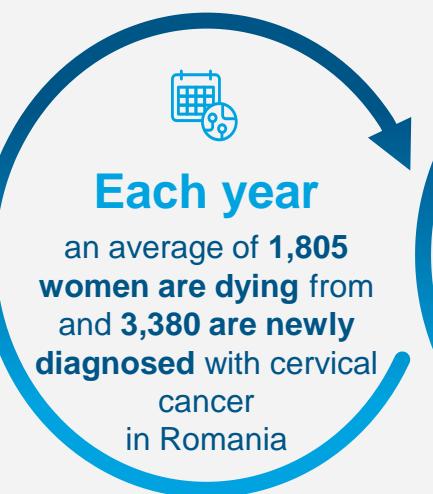
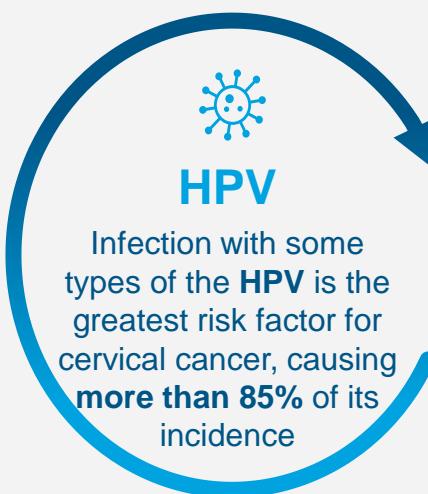
The most cost-effective way of achieving good health is often to prevent the onset of the disease as early as possible

Example: the case of HPV in Romania

- A **rising challenge**, both globally, and in Romania, is the increasing **cancer mortality**
- **Cancer is a leading contributor** to Romania's high amendable mortality rates

- **Cervical cancer is among the few malignancies** that could be globally eliminated by gender-neutral **immunization** against oncogenic strains of HPV, the sexually transmitted infectious agent causing most cancers with this topography*
- Romania has started its second HPV vaccination campaign in 2020 but the **number of doses available are still insufficient** for the entire target population of teenage girls (and potentially boys)
- Program's further success hinges on authorities' commitment, **GPs involvement and the deployment of effective communication to foster diffusion of positive behavior at population level**

EXAMPLE: CERVICAL CANCER



Compared with passive behavior, HPV vaccination could lead to **€37mn** in savings to the healthcare system



€48mn



€11mn



Vaccination
Passive behavior

*Cervical cancer as well as other cancers caused by HPV, including some mouth and throat (head and neck) cancers and some cancers of the anal and genital areas

Source: Eurostat, National Cancer Plan, CancerWorld Press Article

Healthcare as an Investment

Investment in effective prevention programs will help reduce risk factors and mortality rate from preventable causes

Call to Action: Invest in Prevention

Spending on prevention per capita is low compared to European average

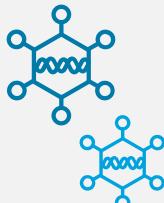


While the most cost-effective way of achieving good health is through early prevention methods

Among which vaccination is one of the most cost-effective

Strategies

↑ Develop prevention programs and increase the level of knowledge regarding the main risk factors, involving all relevant stakeholders



Develop and strengthen vaccination programs and interventions aimed at combating types of cancer that can be prevented by vaccination (HPV and hepatitis B), e.g. adequate stock supply process, improved program management, extended access to eligible groups (boys, adult women))

With no effective nation-wide screening program, the screening rates in Romania fall far below the EU average

Cancer Inequality

BREAST CANCER: Women that have self-reported to have never had breast examination by X-Ray (%, 2019)



COLORECTAL CANCER: People that have self-reported to have never had colorectal screening test (%, 2019)



CERVICAL CANCER: Women that have self-reported to have never had cervical smear test (%, 2019)



The lack of nation-wide screening programs run at scale as well as the limited awareness on screening across the population has created a huge gap between Romania and the EU when it comes to breast, colorectal and cervical cancer

Meanwhile, a successful screening with a 72% participation rate, generated nearly EUR 100m savings and -16% in cancer incidence

Case Study : Colorectal cancer screening SP



CASE: SPAIN, BASQUE COUNTRY COLORECTAL CANCER SCREENING PROGRAMME



The Basque Country has a population of **2.2 million**



Target for the screening were **586,700** residents



72% achieved participation rate

-16% in cancer incidence

-26% in cancer mortality

EUR 93 Million

net savings through saved costs on treatment and prevented economic losses through saved lives

The Screening Program

- Specific software was linked to medical records and cancer registries
- Invitations sent by post together with a kit with an FIT* test and individualized identification code
- Primary Health Centers reinforces information, collects kits and organizes colonoscopy for positive cases

* FIT is Faecal Immunochemical Test used for bowel cancer screening

Investment in population-wide screening programs is essential for healthy population and can reduce disease incidence & mortality

Call to Action: Invest in Screening

The lack of
nation-wide
screening programs
run at scale



As well as the **limited awareness on screening** across the population



Has created a **huge gap** between Romania and the EU



Strategies



Optimize the capacity to manage and implement **EXISTING SCREENING PROGRAMS**

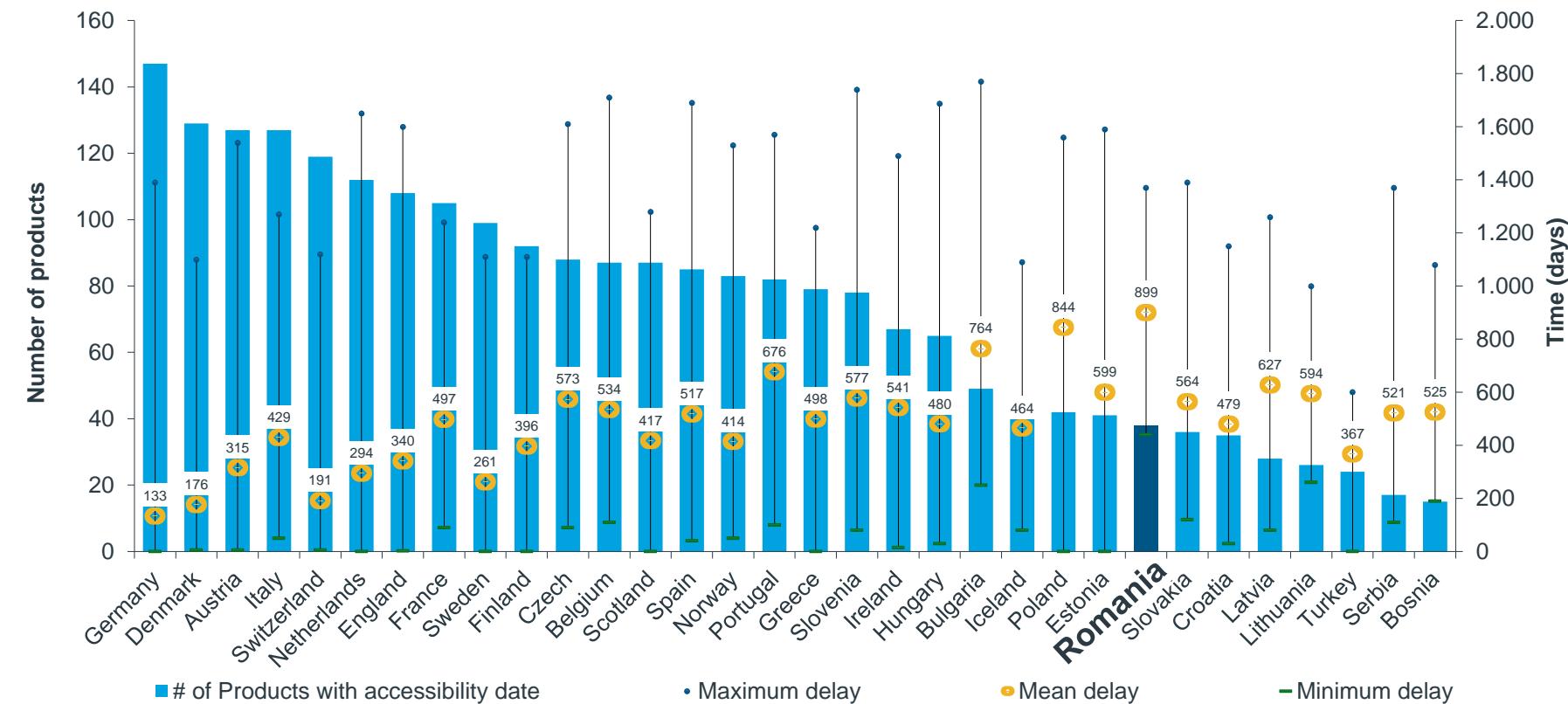


Develop and implement comprehensive NEW SCREENING PROGRAMS ensuring access to proper diagnostic tests, incentives for screening performance and measurement of outcomes

Romania has a low rate of availability of innovative medications, as well as the longest time to availability

Access to innovative medicine

Time to availability (2021) of innovative medications



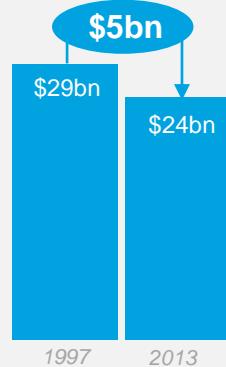
- Romania still has a low **rate of availability** of medications, as well as the longest **time to availability** of 899 days on average
- Time to availability -The number of days between EMA market authorization of a medicine and the date it becomes available to patients which, for most countries, is the point at which it gains access to the reimbursement list

Several countries across Europe serve as an example of successfully introduced innovation funds in the last years

Innovative funds in place

Innovation has the potential to bring substantial cost savings & better patient outcomes

New cancer drugs in the US between 1997-2013 reduced the amount of days spent in hospital and thus the **cost of treatment by \$5bn**



The development of **statins to treat high cholesterol** was estimated to reduce 28k deaths and 41k heart attacks in 2008 across Europe

+\$433bn
net gain
(overall social value
from extra years of life
minus the cost of
treatment)

And innovative funds can unlock those by speeding access to newly approved innovative therapies



Wales

Wales has the **New Treatment Fund** in place, to speed access to newly approved medicines

Purpose



Italy

Italy has established funds to speed up patient access and to support the reimbursement of innovative products

Drugs covered



Scotland

Scotland created the **New Medicines Fund** to improve access to orphan, ultra-orphan and end of life medicines

Time

All new therapies

Mainly dedicated to **HCV products and oncology** products

Licensed **orphan, ultra-orphan and end-of-life medicines**

Funding

£80M over the course of 5 years, **on top of the provisional budget** for the NHS Wales

€500M initially powered by a state contribution and a portion of the resources of the National Health Plan and another **€500M** as portion of National Healthcare spend

Funded through a portion of the rebate to the Scottish Government made by the Pharma Companies. Allocated funding was **£138M**

Note: HCV - Hepatitis C virus; AIFA - Italian Medicines Agency

Source: IQVIA; Lichtenberg - How cost-effective are new cancer drugs in the U.S.?; Grabowski- The large social value resulting from use of statins warrants steps to improve adherence and broaden treatment Healthcare as an Investment

Introduction of a dedicated fund for innovation in healthcare could ensure faster and easier market access

Call to Action: Increase Access to Innovative Therapies by Establishing Dedicated Innovation Fund

Innovation funds have a proven record of speeding up access to innovative therapies



Hence, we **welcome the plan** to have **an innovation fund in 2023-2026**, as per the National Cancer Plan



To ensure **quick access to the latest therapies** for Romanian patients

Strategies



Analyze potential sources of non-reimbursable external funds, especially from the EU, which can be directed to establishing an innovation fund



Determine the unmet needs and prioritize the initiatives regarding the **access to innovative treatment** and technologies, e.g. identify selected therapies, patient groups, innovative technologies

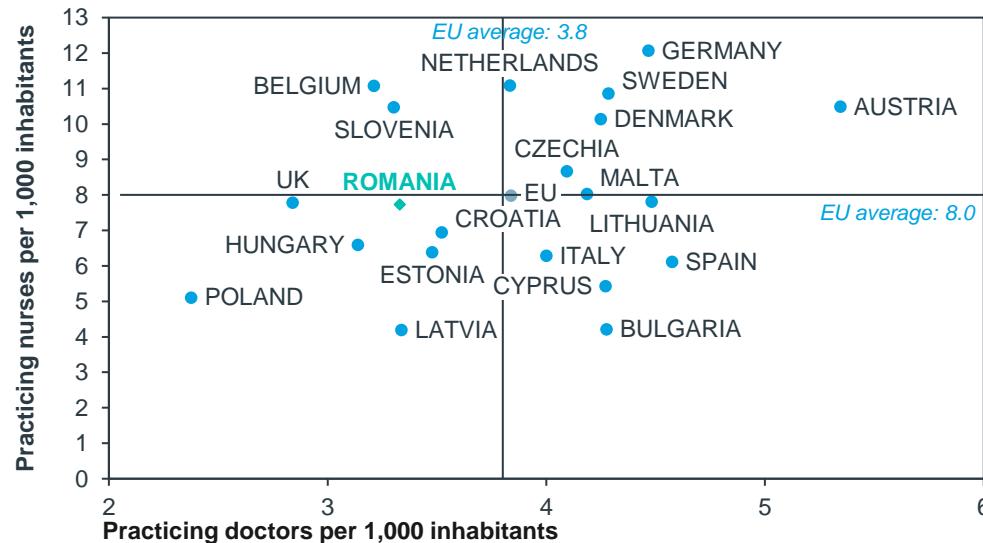


Set up an **innovation fund** to finance prioritized initiatives for faster **access of patients to innovative treatment**

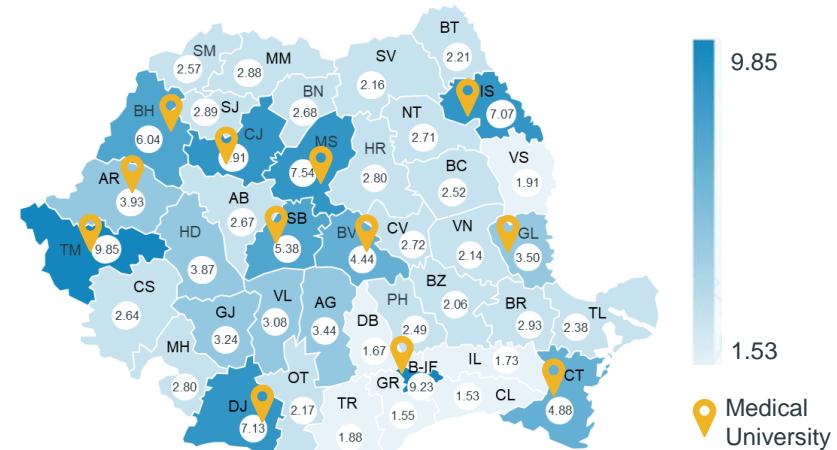
Understanding the healthcare workforce structure and availability in Romania is essential

Healthcare personnel in Romania

Doctors and nurses per 1,000 inhabitants, 2020*



Medical doctors per 1,000 inhabitants, 2021



**1,500- 2,000
doctors**

on average leave Romania yearly due to low recognition and low pay, which accelerates the shortage of medical personnel

- Romania has a **lower than the EU average number of practicing doctors per 1,000 inhabitants**, 3.3 in Romania vs 3.8 EU average with **notable fragmentation in their distribution across the country**
- The shortage of medical personnel is accelerated by the migration of medical professionals in the last years
- To successfully tackle the persisting problems and negative trends, it is essential to take necessary action

* Or latest data available

Uneven distribution of physicians per specialty and age group creates pressure and challenges to the healthcare system

Healthcare personnel per specialty: RO vs EU

Medical group of specialists*

per 100,000 inhabitants, 2020

BG	184
LT	160
CZ	158
IT	149
DE	146
RO	138
CR	137
PT	128
EE	125
AT	124
HU	122
ES	113
SI	111
ME	109
LV	106
NL	95
BE	91
MT	91
NO	89
LI	80
FR	78
RS	78
IE	68
TR	58

Surgical group of specialists**

per 100,000 inhabitants, 2020

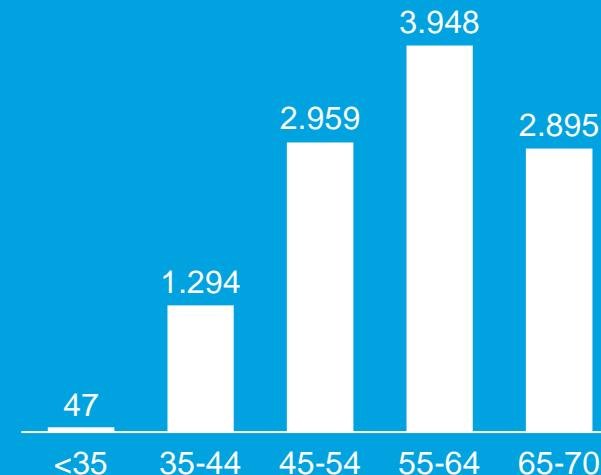
DE	124
BG	120
LT	113
AT	111
CZ	110
ES	101
IT	99
MT	95
EE	85
LI	80
PT	79
CR	77
SI	73
LV	72
RO	70
HU	67
BE	63
NO	59
ME	56
RS	54
IE	49
FR	48
TR	48
NL	43

GPs

per 100,000 inhabitants, 2020

PT	// 274
BE	119
ES	91
NL	91
LT	89
NO	87
IE	87
FR	85
MT	81
AT	75
LV	75
DE	72
EE	71
IT	70
TR	67
CZ	66
RS	65
RO	64
LI	62
SI	62
BG	58
CR	57
ME	51
HU	39

GPs, by age***, 2020



Romania also has ageing healthcare workforce; e.g. Romania is expected to lose ~18% of its current family doctors in the following 10 years due to the retirement of those currently aged over 55 and has insufficient younger workforce to replace them

* Medical group of specialists includes doctors who specialize in the diagnosis and non-surgical treatment of physical disorders and diseases, for example specialists in internal medicine, cardiology, oncology and radiology

** Surgical group of specialists includes doctors who specialize in the use of surgical techniques to treat disorders and diseases, i.e., specialists in general surgery, neurological surgery, anaesthesiology or accident and emergency medicine

***Analysis covers 90% of the GP population in Romania

Programs to motivate young doctors to remain in Romania and to address regional disparities need to be implemented

Call to Action: Stabilize Workforce Dynamics

Regional disparities and uneven distribution of physicians per specialty and age group



 **Creates pressure and challenges to the healthcare system**



Such as Romania losing 18% of its current GPs in the following 10 years

Strategies



Provide **comprehensive doctor incentives programs** to practice in the under-served regions to **address regional disparities**



Set-up shared resources centers to address regional disparities



Support public/private partnerships to invest in medical education

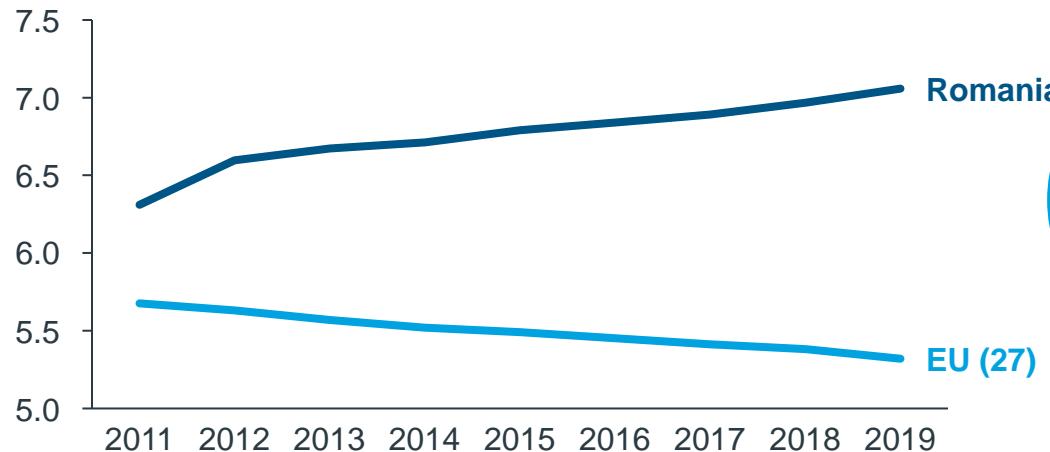


Reassess the staff organization chart at hospital level to create new positions and **attract medical workforce**

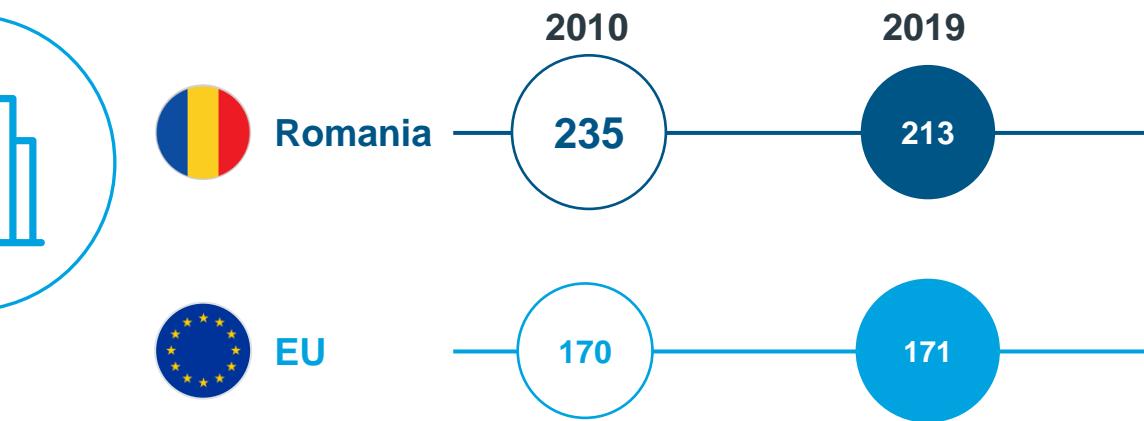
Hospitalizations are often the result of patients bypassing primary care

Hospital infrastructure: Number of beds and hospital discharges

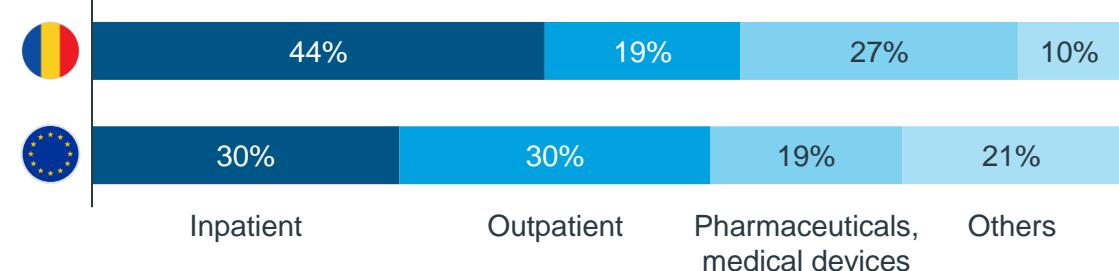
Number of hospital beds per 1,000 inhabitants



Yearly hospital discharges per 1,000 inhabitants



Healthcare spending per care area, 2019



- Romania takes the 4th place in the EU when it comes to hospital beds, as well as **2nd place in terms of hospital discharges** per capita in 2019
- Compared to outpatient care costs the inpatient care costs takes up **twice as much** from the total spending (44% vs 19%). In contrast, on average in the EU, those are equal
- Hospitalizations are often the result of patients bypassing primary care

Stronger primary care can reduce the burden on hospitals and generate cost savings for the healthcare system

Call to Action: Advance Outpatient Care

The efforts to **strengthen the outpatient and ambulatory care** should remain in focus



As there is **still improvement to be made** in advancing primary care



To **close the gap with the EU** and balance out inpatient and outpatient spending

Strategies



Continue to reduce **hospitalizations** and reallocate inefficiently spent resources from **inpatient care** to **outpatient care**



Access **patient level costing and benchmark** at national level, hospital level, etc.

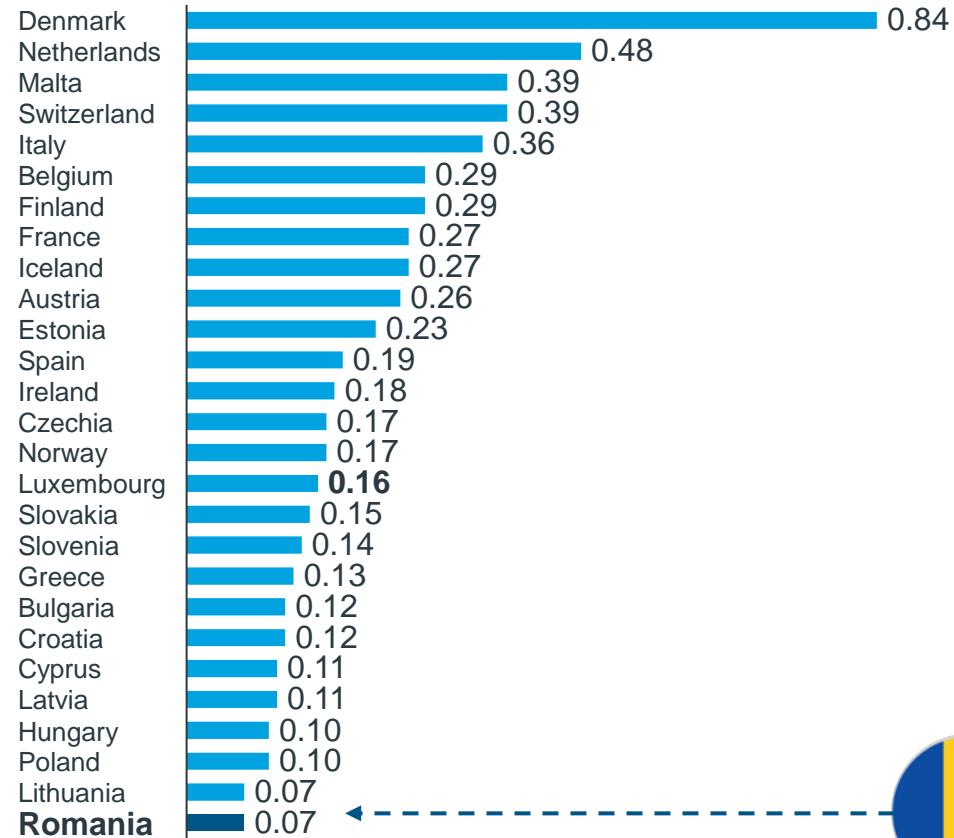


Introduce **transparent cost tracking and benchmarking** among hospitals

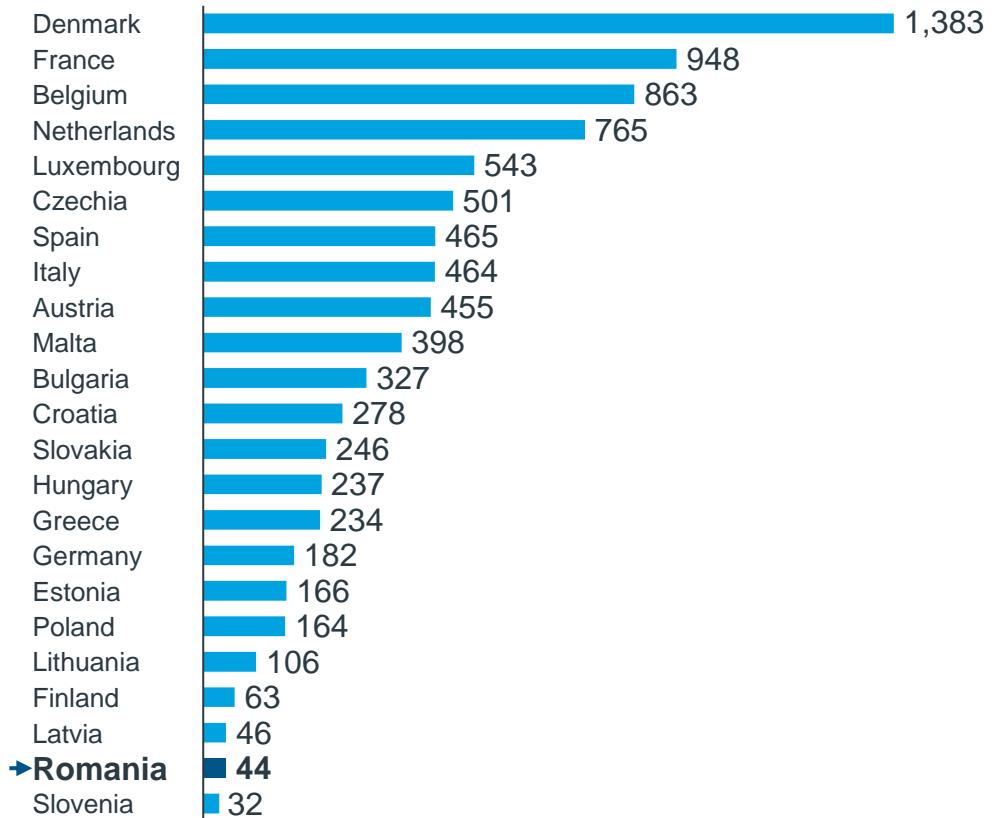
Romania has the lowest rate of PET units along with the second-lowest utilization per unit within the EU

MedTech landscape in hospitals: PET in EU vs Romania

PET Units per 100tsd inhabitants, 2020*



PET Scans per machine, 2020*



Source: Eurostat – Units in hospital and ambulatory providers

* Or latest data available; PET-CT - Positron Emission Tomography - Computed Tomography



Initiatives for better access to medical devices should be further implemented

Call to Action: Support Better Access to Medical Devices

Number of
medical
devices
across hospitals in
Romania is low compared to EU



And they remain **vastly**
underutilized



While
leveraging
them more
frequently can **activate better**
diagnosis and treatments



Strategies



Continue the interventions that enable
patients to have **better access to**
investigations supported by
medical devices

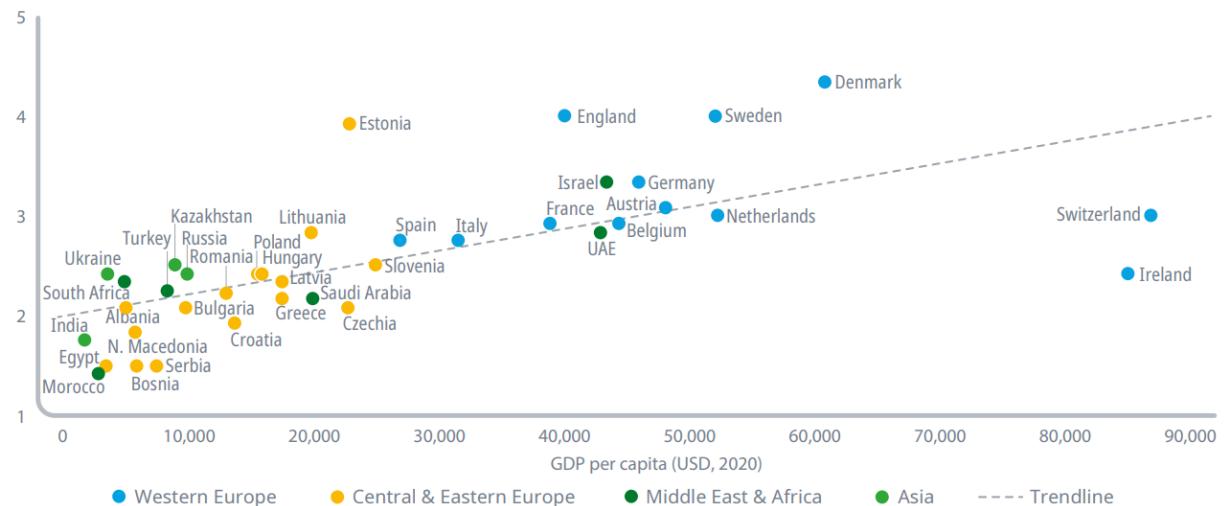


Optimize patient
pathway from diagnosis
to monitoring by
increasing use of medical
devices

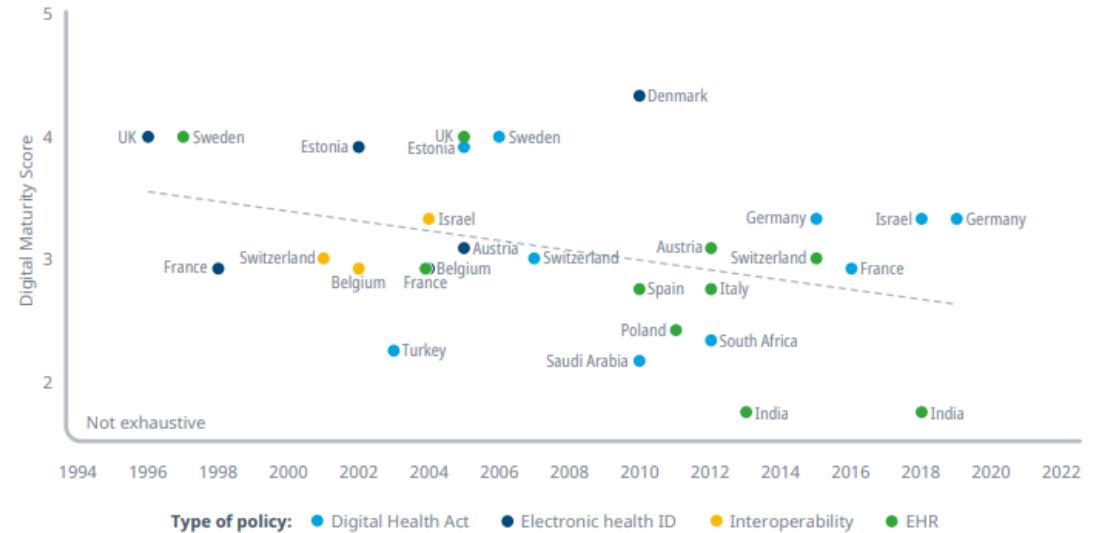
Romanian digital health system seen as “underdeveloped and challenged”, falling behind Western Europe

Romania digital health system maturity score

Digital health system maturity scores*, 2020



Introduction of notable digital health policies, 2020



- Romania has a digital **maturity score of 2.1 out of 5** and falls behind Western Europe
- There is a higher proportion of dedicated laws on Digital Health being passed across Europe in recent years, but **NO policies around digital health act, electronic health ID, interoperability or electronic health records (EHRs)** have been passed in Romania
- Large scale digitization requires strong cultural, political, economic and regulatory environments to establish well-funded and trusted frameworks

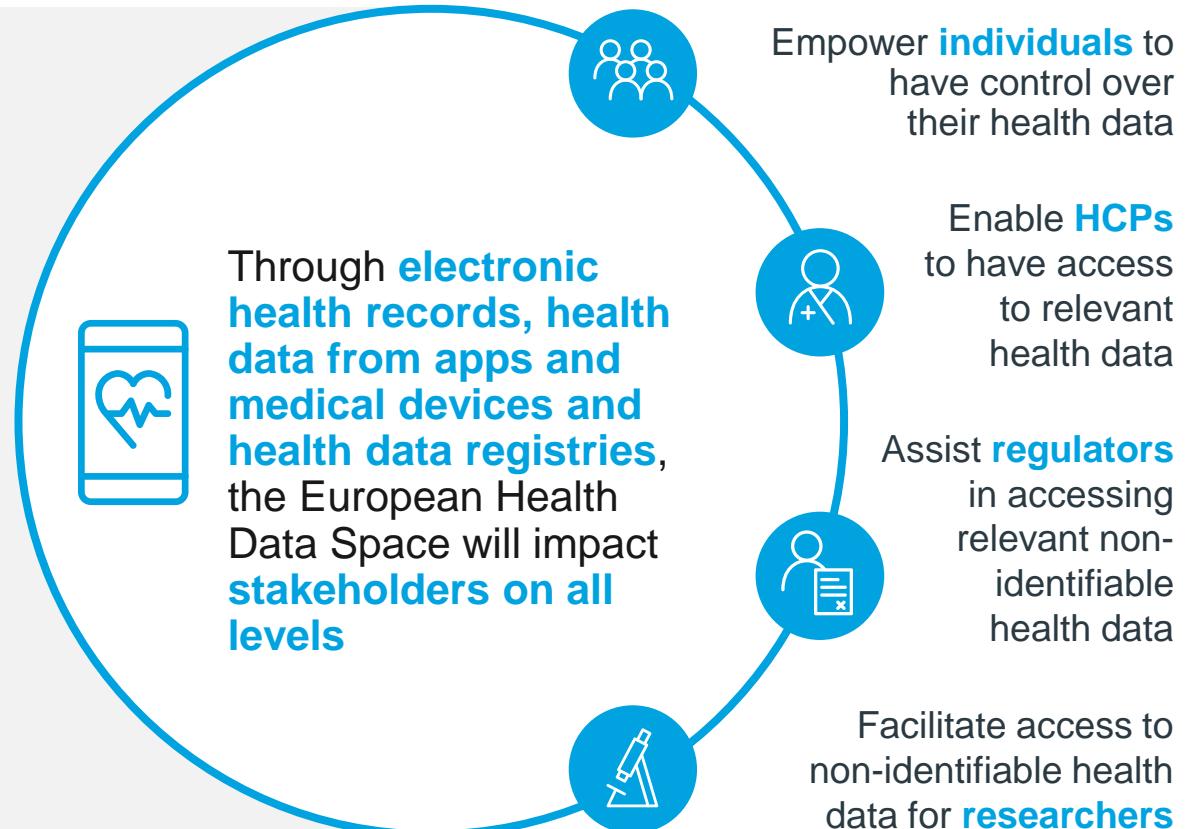
IQVIA uses a maturity framework that considers the wide-ranging nature of health systems, from a country's Initiatives through to its Infrastructure and Implementation. Scoring methodology: Internal IQVIA experts were interviewed and surveyed on a quantitative and qualitative basis on 12 elements of a digital health system (policy, funding, data governance, institutions, EHR, data standards, interoperability, omics, telehealth, artificial intelligence, information use, virtual studies). The average of all 12 elements constitutes the country's overall Digital Health System Maturity Score.

Source: IQVIA Consulting, IQVIA 2021 White Paper "Switching on the Lights"

Healthcare as an Investment

European initiatives facilitating sharing of health data and providing guidelines for healthcare system design can help close the gap

European Health Data Space initiative



€5.5bn in savings for the EU over 10 years from better access and exchange of health data in healthcare

€5.4bn in savings for the EU over 10 years from better use of health data for research, innovation and policy making

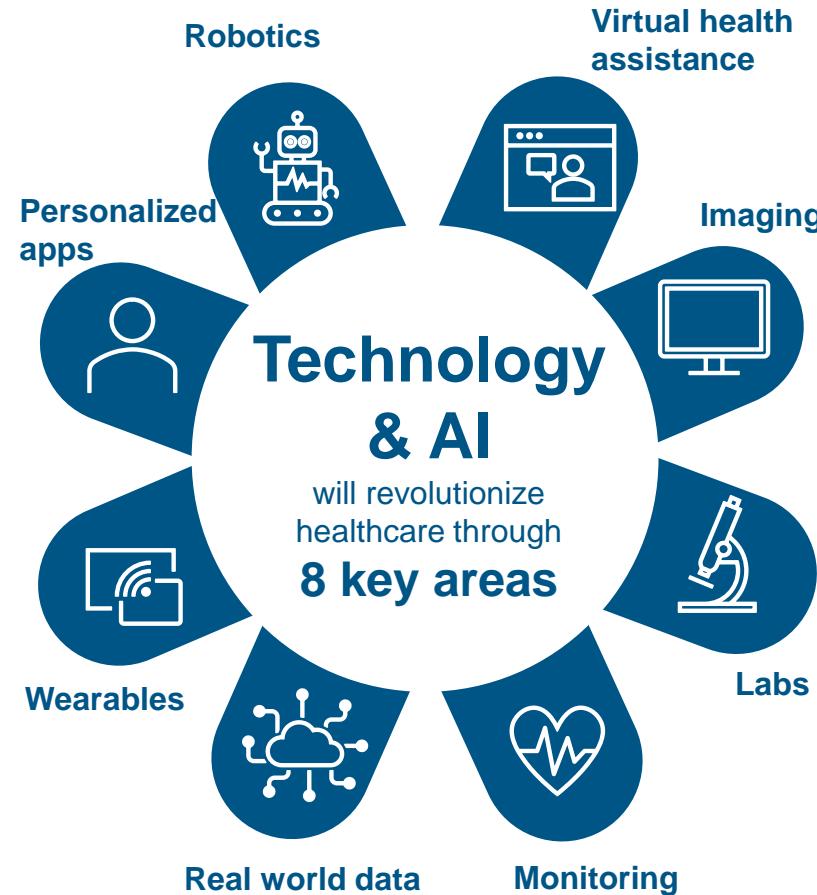
20-30% additional growth of the digital health market



As an EU Member State, Romania can more closely align with the European Health Data Space initiative to strengthen its health data ecosystem and accelerate interconnectivity with other Member States and unlock the growth and savings potential

Enabled by technology and AI, savings could also be realized through improved efficiency and HCP capacity

Technology and AI impact in EU



Potential impact of Technology and AI in European health systems



€171- € 212bn
in annual savings*

380k-403k lives can
be potentially saved annually

1.7-1.9mn hours
could be freed up every year

To unlock the full potential of technology and AI, European health systems need to make improvements in a number of areas:

- **Data** – improve data quality, privacy and interoperability to enable technology
- **Legal and regulatory** – guidance on applying and interpreting existing regulation to include technology considerations and novel approaches to meet requirements
- **Organizational and financial** – substantial investment for infrastructure, digitalization adoption, technologies, training, etc.

*including the opportunity costs of HCP time
AI – Artificial intelligence

Digital Health Roadmap with clear vision, priorities and milestones until 2025 should be set up

Call to Action: Implement Digital Health

Romania
is falling
behind EU
in digital maturity
and it is essential to adapt



As digitalization has huge savings potential through improved efficiency and HCP capacity



And leveraging data transparency, Romania can increase evidence-based policy

Strategies

 **Implement electronic records faster to support patient & health policy decisions** aligned with the principles of evidence-based decision-making and outcome-based medicine

 **Implement patient registries** to enable data access and transparency



Develop sets of **common standards** that allow the **interoperability of digital systems** to make health data transparent & encourage exchange of data



 **Modernize & operationalize the underlying systems** to enable "value-based healthcare"

 Regulate and promote the use of tele-medicine and related services

Multiple EU funds are available for Romania in the next 5 years..

EU funding packages

EU Centralized Funding Sources

EU4Health

 **Timeline:** 2021-2027

 **Budget:** €5.1bn

Focus areas:

- Strengthening preparedness and response capabilities
- Prevention & health promotion in an ageing population
- Digital transformation
- Vulnerable groups access to care

Allocated Funding Sources for Romania

Recovery and Resilience Plan

 **Timeline:** 2020-2026

 **Budget:** €2.5bn for Health

Focus areas:

- Investing in modern hospital infrastructure to ensure patient safety (Economic and Social Resilience pillar; 2bn)
- Cover the development of an integrated e-Health system (Digital Transition pillar; 470mn)



Health Operational Program

 **Timeline:** 2021-2027

 **Budget:** €4.1bn

Focus areas:

- Regional hospitals
- Cancer treatment
- Population screening
- Critical patients with acute cerebrovascular pathology
- Neonatal critical patient
- Cantacuzino Institute
- Genomics
- Early diagnosis & treatment
- Rare pediatric neuro diseases
- Measures for early diagnosis /treatment antenatal neonatal postnatal
- National Observatory for Health Data
- Resizing and standardizing CNAS IT system

Horizon Europe – Health Cluster

 **Timeline:** 2021-2027

 **Budget:** €8.2bn

Focus areas:

- Innovative Health initiative
- Global health partnership
- Chemical risk assessment
- ERA for Health
- Rare diseases
- One-Health anti microbial resistance
- Personalized medicine
- Pandemic preparedness

.. and need to be leveraged to unlock funding for innovation and structural reforms in Healthcare

Call to Action: Channel EU Funds in Healthcare

EU funding creates great opportunities to move healthcare forward



The **EU4Health** alone is providing a stimulus package of **€5.1bn** for all members between 2021 and 2027



To successfully **access the funds** in the coming years, **capabilities need to be improved**

Strategies



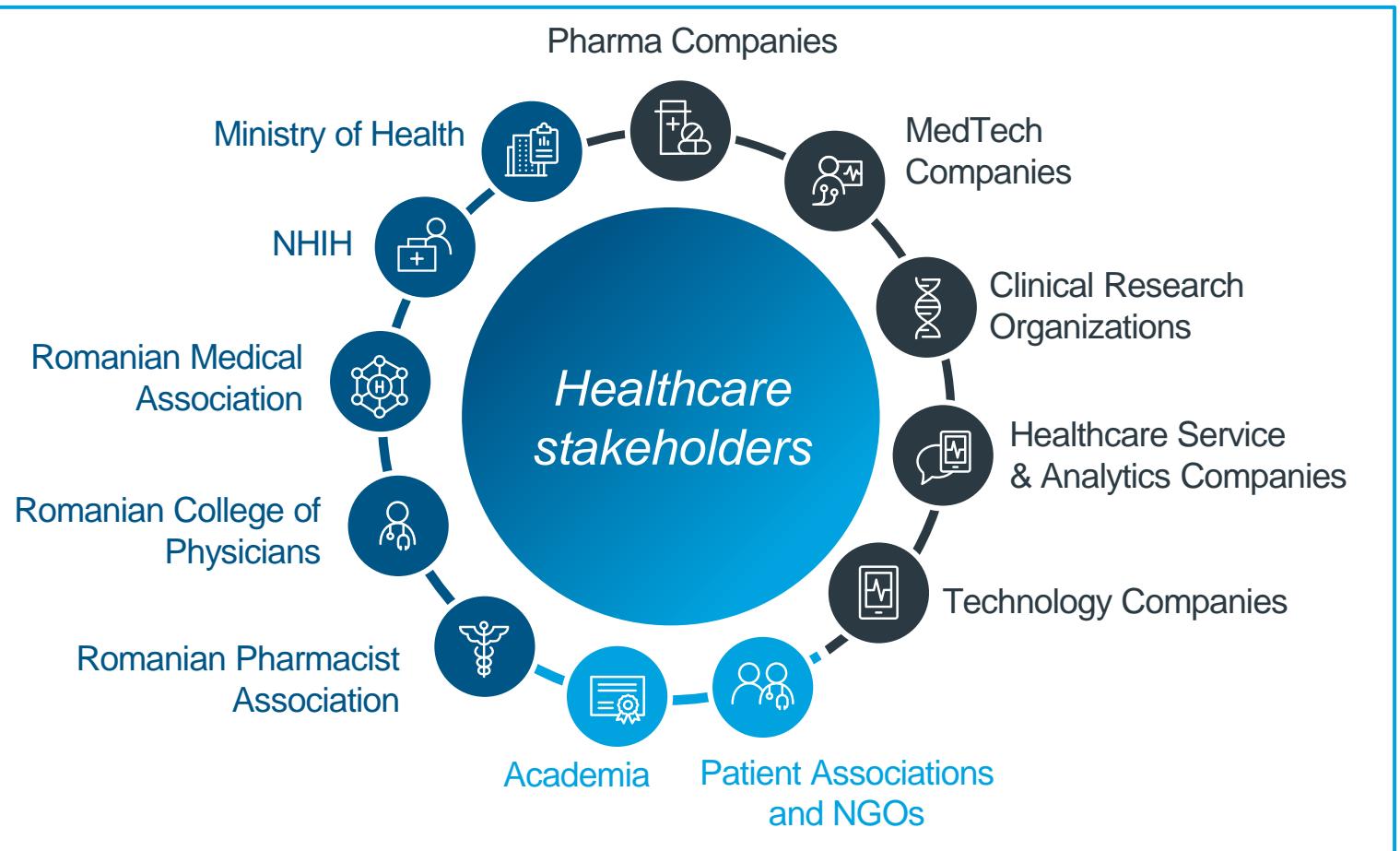
Train and ensure resources to increase the absorption of EU funds, e.g., EU experts, financial and technical experts, at both central and local level



Set-up key performance indicators (KPI) for the management authority and **develop incentives in line with KPIs**

These strategic initiatives can be successfully implemented by combined efforts of all key actors in Healthcare

Public-Private partnership to drive Healthcare forward



Healthcare is a complex topic that requires a holistic approach and various capabilities. By combining efforts of different experts – innovative projects and strategic initiatives can be successfully implemented.



*This report has been commissioned by the American Chamber of Commerce in Romania,
funded by AstraZeneca, Bristol Meyers Squibb, CEBIS, Janssen Pharmaceutical Companies of Johnson & Johnson, MSD,
Medtronic, Pfizer and Sofmedica
and represents an independent research work carried out by IQVIA.*



Thank you!

