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Unlocking Innovation to Build More Resilient and Sustainable Healthcare Systems in Europe

This EIT Health Think Tank Report helps to define the potential for innovation in health in building resilient and sustainable healthcare systems for a forward-looking Europe. It identifies gaps and opportunities, lessons learned from the COVID-19 pandemic, and provides recommendations for policy action.

Innovation benefits health systems

Some examples:



Improved disease prevention through early detection.



Precision medicine through the development of new diagnostics.



Better access to health and care through lowering of financial, cultural and other barriers.



Improvements in organisation and delivery of care.



Learnings from the COVID-19 pandemic

COVID-19 prompted a fundamental rethinking of healthcare system policy and planning and several coordinated initiatives across the EU.

Examples of innovation contributions to health systems during the pandemic

- **Regulatory flexibility:** EMA rolling review of vaccines with accelerated approval process; Medical Device Regulation (MDR) implementation postponed
- Rapid, needs-driven innovation: stepped up production, rapidly adapted devices, Al applications for triage of patients
- Novel service delivery: teleconsultations and remote monitoring, home testing
- Changes in the conduct of clinical trials: clinical trial models with remote data collection
- Workforce capabilities: task-shifting and upskilling of health workers
- Increased data sharing: hospitals and research teams to rapidly share and collate data

The report gathers insights from research and interviews of experts across all stages, sectors and actors of the health innovation pathway, and was conducted between August 2021 and January 2022.





The research recommends a whole-of-society approach with active patient and citizen involvement in health governance improves quality and cost effectiveness of care, helps to ensure care 'that matters' to patients and that contributes to their life goals, avoid unnecessary interventions and help generate new business and finance models that focus on value.

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HEALTH SYSTEM ORGANISATION AND GOVERNANCE



Main barriers

- Lack of strong leadership to drive necessary changes
- Fragmentation



What needs to change to unlock innovation?

- Build robust governance models with government oversight to break resistance to change and siloed approaches
- Leverage EU and Member State tools and funding streams to finance strategic investments in workforce capacity and skills, including digital health education to allow for the digital transformation of health
- On the model of the European Medicines Agency (EMA),
 facilitate co-creation models with the early involvement of patients
- Foster inter-sectorial/public-private collaboration e.g. Public Private Partnerships (PPPs)
- Implement national plans for the adoption of innovation in healthcare systems, prioritising prevention, addressing lifestyle-related causes of disease and the social determinants of health

- Adopt reforms for the integration of the healthcare and social care sectors, leveraging digital solutions and invest in strengthening primary care and the link with home care settings
- Better planning for multiple scenarios and more coordinated epidemiological surveillance and earlywarning systems for future preparedness, leveraging the coordination and funding opportunities provided by HERA
- Expand European networks and learning communities for knowledge exchange and technical assistance (e.g. European Reference Networks (ERNs) and Living Labs) and to support the creation of a disruptive ecosystems of healthcare providers
- Carry out simulations which 'stress-test' health systems in different scenarios to identify potential vulnerabilities as well as preparedness plans and 'resilience testing' of health systems



DIGITALISATION, DATA AND TECHNOLOGY



Main barriers

- Access, sharing and reuse of health data
- Data protection and governance
- Interoperability



What needs to change to unlock innovation?

- Accelerate and streamline market access pathways for innovative digital solutions and support the development of start-ups and scale-ups for innovative products
- Invest in IT infrastructure and know-how of end-users, research and development that helps to accelerate digitalisation in health, focusing on technologies that could be transferable across diseases
- Invest in new clinical processes, new skills, retraining and as needed new professions
- Use technology and innovation, including AI, to improve health literacy
- Adopt patient-centred and goal-oriented Electronic Health Records and data repositories, using the power of AI to make the data held in Electronic Health Records readily usable
- Ensure a European Health Data Space that provides a system for sharing and reuse of health data

- Set data governance addressing data access, sharing and security
- Utilise real world data and other 'big data' to optimise the use of scarce healthcare resources
- Extract the full value of diagnostic information to improve pathways



POLICY AND FUNDING



Main barriers

- Fragmentation of assessment approaches
- Regulatory rigidity
- Limited incentives for innovation



What needs to change to unlock innovation?

- Adopt robust policy and legislative frameworks that facilitate a dynamic innovation ecosystem
- Enable greater cross-border collaboration through EU funded Joint Actions, joint procurement, and funding of EU agencies to develop new approaches including to reduce social disparities in health
- Provide adequate funding for innovation in health systems and a balance of resources between social, primary, secondary and tertiary care
- Drive wide adoption of value-based healthcare (VBHC)
 models and innovative procurement models
- Leverage EU funding to strengthen health systems and prepare them for future crises, ensuring horizon scanning for potential needs
- Using EU4Health programmes and other funding structures to include civil society organisations in EU policy making and EU funding projects



Key takeaways

- Innovation must be seen as a legitimate means to achieve resilience and sustainability
- Innovation should be used not only to recover from the pandemic, but also as a long-lasting, forward-looking measure with key learnings from the crisis translated into positive action
- Successful examples of innovation implementation may inform the generation of a positive innovation ecosystem, with greater investment and accelerated access pathways for innovative solutions



EIT Health and its role

Act as a catalyst of change and implement this report's recommendations across its three pillars: innovation, business creation, and education.

- Fostering a positive innovation ecosystem, by studying and suggesting adequate regulatory frameworks and access pathways, reimbursement and procurement schemes, and promoting innovative models of care
- Supporting research and development and helping to accelerate the adoption of technology and digitalisation
- Supporting innovation by facilitating sharing and scaling up of best practices, as well as education on innovation in health system transformation
- Organising learning communities, collection and sharing of best practices between Member States and regions