



About Digital Health in Moldova

Summary

At Technovator, we are dedicated to nurturing an ecosystem of innovators and fostering tech-related fields. This commitment extends to the realm of digital health, a rapidly evolving and important sector in modern healthcare.

Following preparations and discussions during the Digital Health Forum 2024 we have managed together with Startup Moldova, we identified many insights and content we've decided to compile in this white paper to spotlight why Moldova needs to accelerate this field now.

The paper details the current state of digital health in Moldova, identifies where our country aligns with or diverges from **global trends**, discusses ongoing initiatives, presents **healthcare entities & digital infrastructure**, and highlights digital health **private initiatives** and the rise of **health tech startups** in Moldova.

In this paper, we benchmark Moldovan performance with Estonia, a global startup nation, advancing the digital health sector and serving as an example by the similarities of countries' geo-political indicators.

The paper concludes with actionable recommendations for Moldova to advance its digital health agenda.

This white paper provides a holistic view of the state of digital health in Moldova, placing it within the global context and offering insights for policymakers, healthtech startups and healthcare stakeholders.

Key terms:

Artificial Intelligence (AI) in Healthcare - Utilizing machine learning algorithms and software to analyze, diagnose, and predict medical outcomes from diverse data sources, enhancing healthcare delivery and patient care.

Digital Health - Integration of digital technologies within healthcare services to enhance efficiency, improve patient outcomes, and enable personalized healthcare experiences.

Digital Infrastructure - Essential digital technologies supporting the operation and delivery of digital health services, including broadband internet and mobile technologies.

Digital Transformation - A holistic reimagining of healthcare through digital technologies, changing how healthcare services are designed, delivered, and experienced.

Digitalization - Implementing digital technologies and digitized data to transform business processes, customer interactions, and create new digital revenue streams in healthcare.

Digitization - Converting physical information into digital formats, such as creating digital versions of patient records for electronic storage and access.

Electronic Health Records (EHRs) - Digital records of patient health information, enabling real-time access by authorized users and more coordinated, efficient healthcare.

HealthTech Startups - Emerging technology companies focused on developing innovative health solutions to improve healthcare delivery and patient care.

Patient-Centered Technologies - Digital tools designed to meet specific patient needs and preferences, aiming to enhance care quality and patient satisfaction.

Telehealth Services - Healthcare services provided remotely via digital and telecommunication technologies, facilitating long-distance patient and clinician interaction.

World Health Organization (WHO) - The United Nations Agency focused on international public health, supporting countries in adopting digital technologies for improved health systems and outcomes.

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Introduction & Global context of Digital Health



Digital Health, also known as eHealth, represents the integration of digital technologies with health, healthcare, living, and society to enhance the efficiency of healthcare delivery and make medicine more personalized and precise. Rapid advancements in fields such as wearable technology, health informatics, mobile technologies, telehealth/telemedicine services, and personalized medicine have fueled the rise of digital health.

The World Health Organization (WHO) emphasizes digital health as a means to advance the health-related Sustainable Development Goals (SDGs) and achieve universal health coverage (UHC). Recognizing its potential, WHO adopted the Global Strategy on Digital Health 2020-2025, aiming to improve health for all through the best use of digital technologies.

Recent trends in digital health were highlighted at the 4YFN conference in Barcelona and The Digital Health & Wellness Summit:

1. Access to health data is on the verge of significant changes for researchers and companies, whether startups or global businesses. The European Health Data Space is in the final stages of the legislative process, paving the way for a future where accessing health data from various Member States for secondary use, such as research and innovation, becomes a reality.

2. AI has evolved rapidly, with advancements in **large language models and generative AI**. While there is always excitement surrounding new technologies, AI in healthcare has been in use for some time, particularly in radiology.

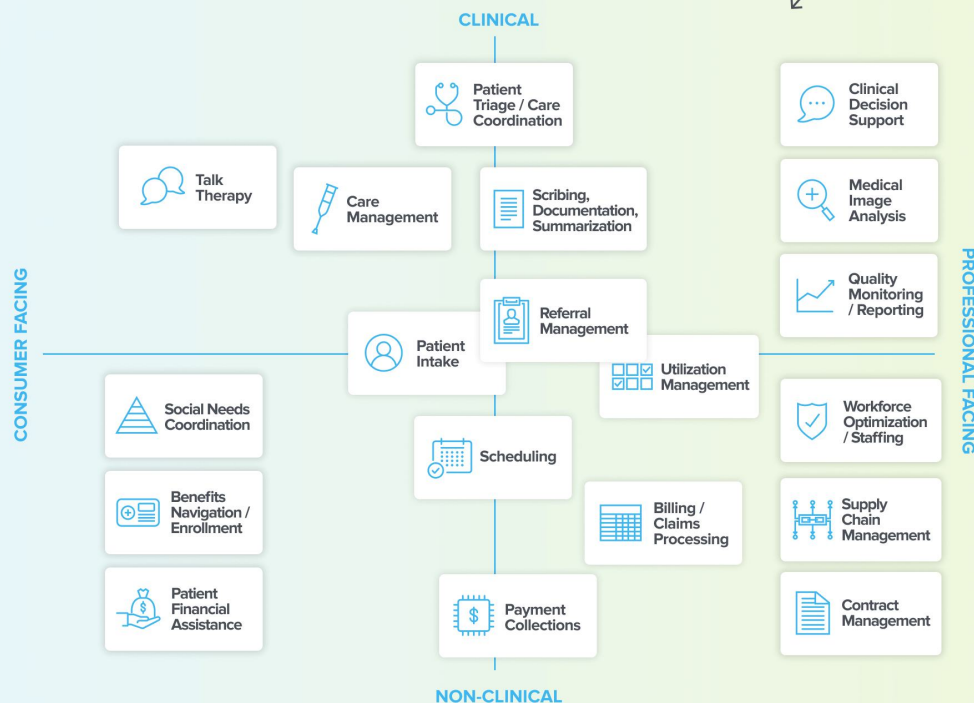
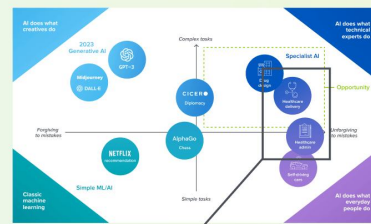
3. Collaborations across borders and sectors continue to gain momentum. For a decade, we've been advocates for making more connections, breaking down silos within healthcare, and fostering collaboration with other sectors, such as pharma, life sciences, telecommunications, and technology.

4. Women's Health is taking centre stage. In September, the Global Health Connector event at the United Nations Science Summit featured a panel of women from Africa, India, and the US discussing challenges and solutions to enhance women's health.

5. Health Ageing emerges as a significant B2C market. At the UN Science Summit, SAGA, the UK financial services company serving the needs of those over 50, presented intriguing research on the varying attitudes of generations as they age. Up to age 75, most adults feel younger than their actual age, but beyond that, the gap narrows, and activity decreases. SAGA highlights the importance of "full-span" living for a longer, healthier, and more fulfilled older life. Digital tools and solutions play a crucial role in keeping people active, well, and fulfilled, especially in the B2C market.

6. Green Health is a growing concern. Few are aware that if healthcare were a country, it would be the fifth-largest polluter, surpassing Japan or Brazil. The environmental impact of healthcare facilities, services, and the supply chain is evolving from an emerging to a trending issue, and it is undoubtedly here to stay.

The AI “Jobs to be Done” in Healthcare



Source: Commercializing AI in Healthcare: <https://a16z.com/commercializing-ai-in-healthcare-the-jobs-to-be-done/> , September 18, 2023

Beyond AI, the rapid advancements in digital health are converging with emerging technologies such as **genomics, biomedical sensors, robotics, 3D printing, virtual/augmented reality, and blockchain**. This convergence is poised to bring about revolutionary changes in various aspects of healthcare. Specifically, preventive care, precision medicine, robotic surgery, and secure health data management are expected to undergo radical transformations.

The potential benefits of embracing digital health solutions are vast. They include improved access to healthcare services, enhanced disease monitoring and management, more efficient healthcare delivery processes, better health data collection and analysis for research, and increased patient engagement in their own care. Recognizing these advantages, the global healthcare landscape is undergoing a significant digital transformation.

The potential of digital health to reshape healthcare systems has been further amplified by the COVID-19 pandemic. After the pandemic, only 57% of physicians said they would choose the field of medicine again. The implications are devastating and will affect patient care. Health systems face growing staffing shortages, with 59% of clinicians believing their care teams are not adequately staffed. Over half of hospitals are already operating at a financial loss.

This crisis necessitated the rapid adoption of technologies like telemedicine to ensure continuity of care while minimizing infection risks. It underscores the urgency of building resilient and responsive digital health infrastructures.

As countries worldwide recognize digital health as a strategic imperative, comprehensive national policies and actionable roadmaps are being developed to guide the systematic integration of technologies within healthcare ecosystems. This paradigm shift represents a monumental opportunity to democratize healthcare access, drive medical innovations, optimize resource utilization, and ultimately elevate standards of public health and patient outcomes globally.



Facts about Digital Health in Moldova

Health 2030: Envisioning Digital Healthcare in Moldova

Internationally, two significant documents frame the context for digital health strategies: the **Global Strategy on Digital Health 2020-2025** by the World Health Organization (WHO) and the **Regional Digital Health Action Plan for the WHO European Region 2023–2030** by the WHO Regional Committee for Europe.

The purpose of Global Strategy on Digital Health 2020-2025 is to strengthen health systems through the application of digital health technologies for consumers, health professionals, health care providers and industry towards empowering patients and achieving the vision of health for all. The strategy is designed to be fit for purpose and for use by all Member States including those with limited access to digital technologies, goods and services.

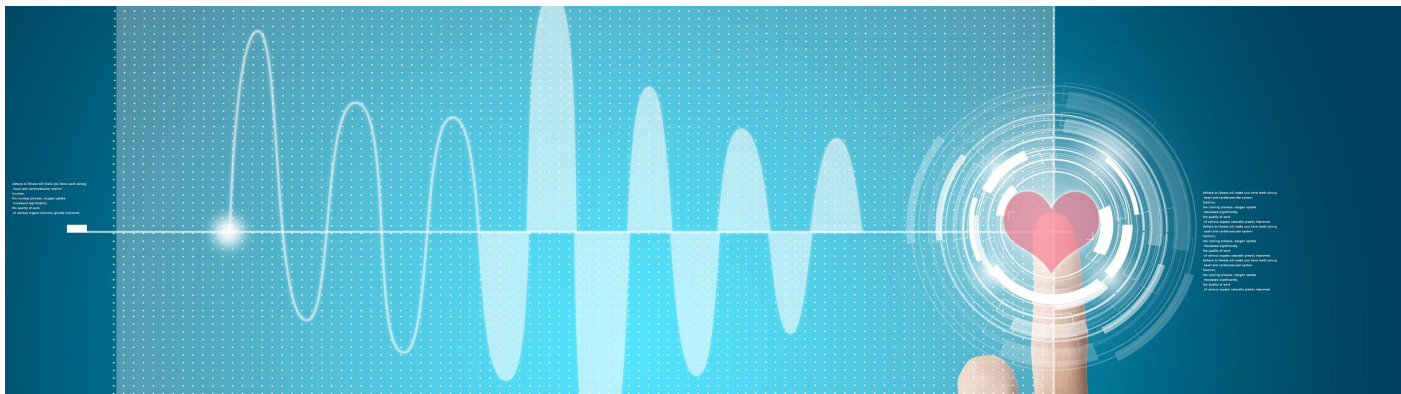
Increased attention in the Global Strategy is given to the field of health data. According to Global Strategy, an interoperable digital health ecosystem should enable the seamless and secure exchange of health data by and between users, health care providers, health systems managers, and health data services.



Health data are predominantly generated by and processed between health care providers and the health care community. Sharing health data in the context of a **person-centric** digital health ecosystem and for the purpose of public interest should be encouraged with the patient's consent, when undertaken in a manner that is built on trust, protects patient privacy, secures digital systems, and protects against malign or inappropriate use.

As for the principles of the Regional Digital Health Action Plan for the WHO European Region 2023–2030 by the WHO Regional Committee for Europe, they include:

- Place the individual at the center of trustworthy care delivered digitally.
- Understand health system challenges, including health needs and trends, and acknowledge the needs and expectations of citizens and health workers.
- Recognize the need for policy decision-making based on data, evidence and lessons learned while allowing for continuous learning, adaptation and innovation.
- Leverage digital transformation to reimagine the future of health systems.
- Recognize that institutionalization of digital health requires a long-term commitment and an integrated care approach.



The Regional Digital Health Action Plan identifies four **strategic priorities** for the achievement of the vision:

Strategic Priority 1

setting norms, developing evidence-based technical guidance and formulating direction to support decision-making in digital health.

Strategic Priority 2

enhancing country capacities to better govern digital transformation in the health sector and advance digital health literacy.

Strategic Priority 3

building networks and promoting dialogue and knowledge exchange to facilitate interaction between partners, stakeholders and the wider public to steer the agenda for innovation in digital health.

Strategic Priority 4

conducting horizon-scanning and landscape analysis to identify solutions that are patient-centered and can be scaled up at country or regional level to help shape public health and health systems in the digital era.

These frameworks aim to fortify health systems through digital health technologies, empowering patients, health professionals, and health care providers, and ultimately achieving health for all. They advocate for a shared understanding of digital health's importance and a move towards creating an interoperable digital health ecosystem to enable seamless and secure exchange of health data among all stakeholders.



In alignment with these international directives, Moldova is sculpting its path through the **"Health 2030" National Health Strategy**, aiming at the system's modernization and long-term development with a focus on digital health as a national priority.

According to "Health 2030" National Health Strategy the digitization of the health system will ensure citizens have secure access to their personal health data and will offer patients digital tools to care for their health, prevent diseases, and communicate and interact with healthcare providers.

The implementation of sustainable digital solutions in health and medical care is anticipated to improve access to quality healthcare and also contribute to increasing the overall efficiency of the health sector. Strategy highlights the context of the COVID-19 pandemic, perhaps more than other circumstances, the advantages of adopting e-Health means in medical practice, both in the current crisis conditions and in the future, through the perspectives it opens.

The "Health 2030" National Health Strategy focuses on the following objectives and directions in terms of Digital Health:

General Objective 1. Digital transformation of the healthcare system and the application of digital solutions to improve quality, efficiency, transparency, and access to healthcare services.

Priority Directions for Actions

- Creating the infrastructure for digital services to implement the electronic patient record, electronic prescription, electronic patient appointments, reference functions and notifications for doctor visits, tests, immunizations, etc.
- Establishing the strategic framework and developing the digital infrastructure for telemedicine with the integration of telemedicine services into the health system.
- Developing automated information systems for the surveillance of communicable and non-communicable diseases (electronic registries for chronic diseases – cardiovascular, diabetes, cancer, renal dialysis, and transplant, etc.)
- Developing and ensuring access to the e-library in the health sector, for professionals which will include information on prevention, diagnosis, treatment, and cure of diseases, medications, studies, reports.
- Digitizing and publishing medical information of public interest and implementing the Medical Encyclopedia portal (general information about diseases, treatments, medications, health-related behaviors, etc.)

General Objective 2. Application of digital solutions to improve the management and governance of the health sector.

Priority Directions for Actions

- Establishing the Health Data System with the development of governance models and technical frameworks.
- Expanding the functionality of existing DRG (Diagnosis Related Group) systems and National Health Accounts internationally harmonized.

General Objective 3. Ensuring reliable and scalable infrastructure for an efficient e-Health system.

Priority Directions for Actions

- Establishing the conceptual framework and creating the infrastructure for e-health.
- Integrated development of e-health solutions ensuring interoperability among all informational systems in the health sector.
- Strengthening health data security by implementing an appropriate legal framework.
- Providing all health sector actors, including private ones, with access to the health sector's communication infrastructure and standardizing information exchange procedures at the medical units level.



In terms of impact, "Health 2030" National Health Strategy emphasizes that the impact will be reflected through numerous advantages for the patient journey within the healthcare system and their interaction experience with various providers, the flexibility, and the system's capacity to provide complex care to a larger number of patients. By developing the digital infrastructure in the health system, procedures and informational flows will be simplified, which will also improve data and resource management within the system. Additionally, the potential of new technologies to significantly enhance the professional experience of medical workers and increase the desirability of jobs in the healthcare system will be leveraged.

As **indicators**, in the field of health system digitalization, this refers to:

1. The number of beneficiaries of the electronic prescription
2. The proportion of SIA AMP institutions that ensure online patient scheduling

The [World Health Organization provides a roadmap for Moldova's "Health 2030" National Health Strategy](#), categorizing recommendations into short-term and medium to long-term actions.

WHO was founded in 1948 to work for the attainment of the highest possible level of health by all peoples. The WHO Country Office, Republic of Moldova, was established in 1995, in Chisinau, to provide continuous support to health authorities and partners in improving population health through evidence-based, sustainable public health and health care interventions as well as to advise on health in all policies.



The World Health Organization pointed out the following things in relation to "Health 2030" National Health Strategy. These recommendations encompass both immediate and strategic actions designed to accelerate the adoption of digital health solutions, highlighting a phased approach towards digitization that balances short-term achievements with long-term goals.

However, as of now, ["Health 2030" National Health Strategy](#) remains in draft form, pending government approval. The Strategy stands at the confluence of opportunity and necessity.

This foundational step will catalyze the transition towards a digital health ecosystem, setting a clear roadmap for stakeholders at all levels.

As the country moves towards implementing this Strategy, it is imperative to maintain momentum, foster innovation, and prioritize the needs and rights of patients. The successful realization of a digital health ecosystem in Moldova will serve as a model for digital transformation in healthcare, with the potential to significantly impact the well-being of its citizens and the resilience of its health system in the face of future challenges.

● Healthcare entities & digital infrastructure

In Moldova, the healthcare and digital infrastructure landscape is shaped by several key entities and initiatives aimed at modernizing and digitizing healthcare services:

Physical Infrastructure

- At the forefront is the **Ministry of Health**, the central specialized body responsible for implementing the government's healthcare policies. This institution is instrumental in analyzing healthcare issues, developing effective public policies, and proposing state interventions to ensure efficient solutions in healthcare, with a focus on achieving the best outcomes at the lowest possible costs.
- The state control in healthcare is streamlined through the **National Agency for Public Health**, a single authority under the Ministry of Health, with responsibilities spanning state surveillance, public health promotion and protection, state control (inspection) in health, population health status monitoring, and accreditation of medical and pharmaceutical service providers. This consolidation aims to reduce bureaucratic pressure on the healthcare sector and support entrepreneurs in the health domain.
- Moldova's digital healthcare infrastructure is further supported by the **Nicolae Testemițanu State University of Medicine and Pharmacy (USMF)**, which plays a crucial role in training medical personnel. Over its 75 years, USMF has produced more than 45,000 doctors and pharmacists, of which approximately 7,000 are working abroad contributing significantly to both local and global healthcare workforces. At the university's departments and courses, located in 35 modern clinics and polyclinics, 7000+ young people from Moldova and 34 foreign countries are pursuing their studies.
- Another pillar in Moldova's healthcare landscape is the **National Company of Medical Insurance (CNAM)**, an autonomous state organization that manages the health information systems and oversees non-profit activities in mandatory medical assistance.

- The **National House of Social Insurance is a central administrative authority under the Government**, with legal personality, that administers and manages the public social insurance system. CNAS ensures the implementation of the state policy in the following areas of activity: management, establishment, and recording of the Public State Insurance Budget (the second state budget by volume of financial means managed).
- Alongside, the **Drug and Medical Devices Agency (AMDM)** holds regulatory and supervisory roles in the field of medicine, pharmaceutical activities, and medical devices.



In 2019, AMS had 85 hospitals, including 68 public hospitals and 17 private hospitals, with 18,042 beds, of which 2,724 were for children. Depending on the specificity of the pathology, institutions are divided into general hospitals, emergency hospitals, specialized hospitals, and hospitals for patients with chronic conditions. Based on legal status and funding method, hospitals are public, private, and mixed. Depending on the content of the activity, there are clinical hospitals, sanatoriums, and preventoriums.

- A particular achievement of local medicine is the **Republican Clinical Hospital**, intended for training and educating medical personnel, which provides numerous specialized services, including care for patients with rare and atypical conditions. The hospital staff consists of 1,541 employees, including 374 doctors, about 1,000 nurses, technical and auxiliary staff. Annually, over 28,000 patients are treated at the Republican Clinical Hospital, most coming from rural areas (85%).

This category also includes other republican medical institutions that provide high-quality medical assistance: **the Institute of Emergency Medicine, the Mother and Child Institute, the Oncology Institute, the Institute of Cardiology, the Heart Surgery Center, the Institute of Neurology and Neurosurgery, the "Chiril Draganiuc" Phthisiopneumology Institute, and the "Nicolae Testemițanu" USMF Primary Medical Assistance University Clinic.**

- The Institute of **Neurology and Neurosurgery** (INN) provides curative-preventive, emergency and specialized hospital consultation.
- Another medical institution tasked with addressing specific public health issues is the **Institute of Cardiology**, established in 1976 and subsequently reorganized into the Scientific Research Institute in the field of Cardiology. In 1985, an outpatient consulting department was organized within the institute.
- **Cardiology Clinic** operates on a broad theme of etiopathogenesis, diagnosis, and treatment of cardiovascular pathologies.
- The blood transfusion service is represented by the **National Blood Transfusion Center (CNTS)**, the blood transfusion centers in Bălți and Cahul, the sections (20) and offices (23) of transfusion of the republican, municipal, and district hospitals. CNTS was established in 1940, within the Surgical Hospital No. 2 in Chișinău.
- The **Republican Dental Polyclinic**, founded in 1966 as a clinical base of the State Institute of Medicine and Pharmacy, is the consultative center of the country's dental service.

Private clinics in Chișinău have made significant advancements recently, offering a broad range of medical services based on professional experiences and teams of qualified specialists.

Currently, 50+ private hospitals and private clinics serve patients, with a large portion in Chişinău, for example: **"SANCOS" Clinic, "EXCELLENCE" Medical Center, "Novamed" Private Hospital, "TerraMed" Clinic, Medpark, Repromed, German Diagnostic Center, American Medical Center, "Tony Hawks" Medico-Social Center, "Lacteia" Medical Consultative Center.**

Based on the data from the Pharmacy licensing register, in 2024, Moldova had **1,704** licensed pharmacies, with over 500, or approximately **30%**, located in the capital city of Chisinau. Among the most well-known pharmacies are **Hipocrates, Farmacia Felicia, Farmacia Familia, Dyta, Elody, and Farmacia Salut.**

Private medical laboratories have also seen significant growth in recent years in Moldova. Among the largest are **Invitro Diagnostics, Synevo, Clinica Sante, MedExpert, Alfa Diagnostica, and Genesys.** These laboratories provide a broad range of diagnostic services, including blood tests, genetic testing, and specialized diagnostics.

Digital Infrastructure

Over the past decade and a half, Moldova has been developing a new health system concept, focusing on managerial aspects and prioritizing primary medical care, emergency services, inpatient and outpatient care, and mother and child health protection, among others. A key reform has been the establishment of mandatory medical assistance insurance, the management of medical informational systems, and the accreditation of public health units as quality management objectives.

Digital infrastructure in healthcare is marked by the creation of informational systems like the **Primary Medical Assistance System (SIA AMP)** and the **Hospital Medical Assistance System (SIA AMS)**, introduced to facilitate medical workers' activities and ensure accurate and sustainable medical data recording. However, challenges remain, such as outdated systems and the lack of digitization in many healthcare facilities.

Despite these challenges, the **Ministry of Health** aims to create an EHR system that will operationalize the existing systems for primary and hospital care by 2030. This initiative is part of a broader strategy to develop an interconnected system through an electronic medical record, electronic prescription, telemedicine, and electronic registries for chronic diseases, ensuring interoperability across all healthcare informational systems.

The implementation of the **e-prescription system (e-rețeta)** from April 1, 2024, marks a significant milestone in Moldova's journey towards digitalizing its healthcare services. By transitioning to this system for prescribing and dispensing compensated medications and medical devices, Moldova is set to enhance the efficiency, accuracy, and accessibility of pharmaceutical care.

Moldova's healthcare entities and digital infrastructure are at a pivotal point, with ongoing efforts to digitize and modernize the healthcare system.

● Best practices in digital health from private medicine

[INVITRO.md](#): **Innovation and Digitalization for Global Access to Medical Data**

Invitro Diagnostics Health Network is the largest private medical institution in the Republic of Moldova, specializing in laboratory diagnostics, instrumental investigations and medical consultations.

Today, **Invitro Diagnostics** successfully serves clients in more than 40 medical centers in cities such as Chișinău, Hîncești, Bălți, Soroca, Edineț, Sîngerei, Florești, Fălești, Briceni, Drochia, Rîșcani, Călărași, Orhei, Strășeni, Ungheni, Ocnița, Cimișlia, Anenii Noi, Cahul, Ceadâr-Lunga, and Comrat. The network of clinics aims for further development to provide quality services and the widest possible range of tests and investigations.

In today's world, digitalization and innovation play a crucial role in improving the quality and accessibility of medical services.



Therefore, **Invitro Diagnostics**, through the website www.INVITRO.md, has created a platform that exemplifies the integration of advanced technologies in medicine, providing doctors with convenient access to patient data through a personal account from anywhere in the world.

The personal account gives full control over patient information, including medical history, test results and data on performed procedures. Regardless of the doctor's location, they can always access the necessary data, significantly speeding up the medical decision-making process.

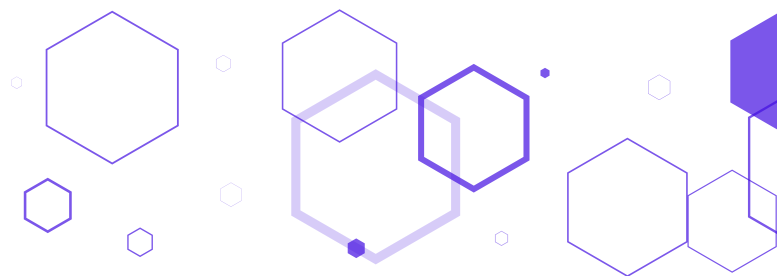
Moreover, the personal account provides test and examination results in real time. As soon as the laboratory completes the analysis, the results are instantly uploaded to the doctor's personal account, eliminating delays and allowing for prompt responses to changes in the patient's health status. The results are presented in a convenient format, facilitating their interpretation and enabling comparisons of current data with previous ones.

The website www.INVITRO.md allows doctors to prescribe necessary tests, research, and procedures for patients directly through their personal account. This enables doctors to quickly and easily order the necessary examinations and procedures, and patients receive notifications and can visit the nearest laboratory branch to fulfill the orders. This simplifies the interaction process, saves time, and enhances the efficiency of medical services.

Ensuring the security and confidentiality of medical data is a key aspect of www.INVITRO.md. Through the platform, all personal data is collected, processed, and stored in accordance with the GDPR Regulation and the personal data protection laws of the Republic of Moldova. Also, the platform employs advanced encryption and data protection technologies, that guarantees a high level of data protection and user trust in the platform.

In the context of rapid digital technology and innovation development, medical services must evolve. The www.INVITRO.md platform is a prime example of how modern technologies can improve the quality and accessibility of medical services.

Convenient access to patient data, real-time test results, the ability to order examinations online, high security levels, and the use of advanced technologies make this platform an indispensable tool for modern medical professionals.



● Healthtech startups

The HealthTech ecosystem is a key indicator of a country's capacity for innovation in healthcare. In Moldova, the HealthTech ecosystem has shown remarkable development since 2020, marked by a strategic alliance between the Moldovan Association of ICT Companies (ATIC) and Nicolae Testemițanu State University of Medicine and Pharmacy.

This collaboration was further strengthened by the involvement of Technovator and Startup Moldova, which have been instrumental in organizing the Digital Health Forum and promoting HealthTech as a vital ecosystem.

The inclusion of Moldova's HealthTech sector on the ECHALLIANCE Platform signifies its growing recognition on a global scale.

Key initiatives which blooms the connection between tech and medicine:

High-Level Memorandum	HealthTech Hackathon
<ul style="list-style-type: none">• An important moment in Moldova's HealthTech journey was the signing of a High-Level Memorandum between ATIC and Nicolae Testemițanu State University on June 25-27, 2021. This agreement laid the groundwork for a collaborative approach to fostering innovation in HealthTech.	<ul style="list-style-type: none">• The HealthTech Hackathon emerged as a cornerstone event, attracting over 70 mentors from diverse backgrounds, including academia, the private sector, and the international community. This event sparked the generation of innovative ideas and solutions within the HealthTech sphere.
HealthTech Accelerator	Education and Training
<ul style="list-style-type: none">• Following the hackathon, the HealthTech Accelerator supported the growth of promising startups, such as Baby Medy, HeroDoc, and Parkinson. These ventures exemplify the breadth of innovation cultivated within the Moldovan HealthTech ecosystem.	<ul style="list-style-type: none">• Acknowledging the importance of specialized knowledge, initiatives like the Training for Teachers on Bioinformatics and Computational Medicine were introduced. The certification of 23 participants underscores the commitment to nurturing expertise in HealthTech.
HealthTech Forum 2022	HealthTech Forum 2023
<ul style="list-style-type: none">• This forum convened over 150 stakeholders from various sectors, facilitating knowledge exchange and collaboration. It laid the foundations for advancing HealthTech in Moldova, aligning with the vision established in the Memorandum of Understanding.	<ul style="list-style-type: none">• With over 200 participants, the Digital Health Forum 2024 provided a dynamic platform for stakeholders to connect, share insights, and pave the way for the future of HealthTech in Moldova. Currently, our country needs a platform to support the integration of technology in medicine, and the Digital Health Forum 2024 is an event that presents a wide range of innovations that transform the way health is practiced and understood.
HealthTech Startups	
<ul style="list-style-type: none">• At this stage in Moldova, 9.9% of the number of startups are in the field of Digital Health.• The statistic indicates a strong foundation for innovation and the potential for significant impact on healthcare delivery, patient management, and health outcomes.• Furthermore, this proportion reflects a clear response to the global trend towards digitalization in healthcare and Moldova's commitment to aligning with international standards and practices. It suggests a fertile ground for further growth and development within the sector, promising opportunities for startups to contribute to the digital transformation of healthcare, improve accessibility and quality of care, and enhance the efficiency of health services.• As Moldova continues to foster a supportive ecosystem for HealthTech startups, this figure is expected to rise, leading to increased collaboration between tech entrepreneurs, healthcare professionals, and policymakers.	



Community size

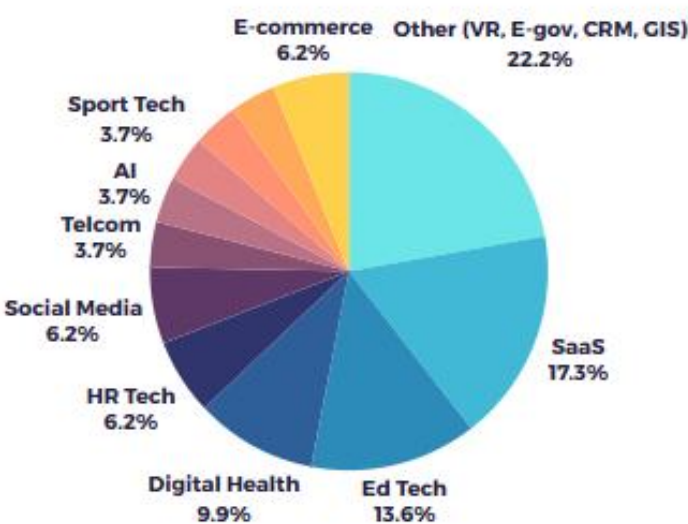
+200

Startup Ideas & Teams

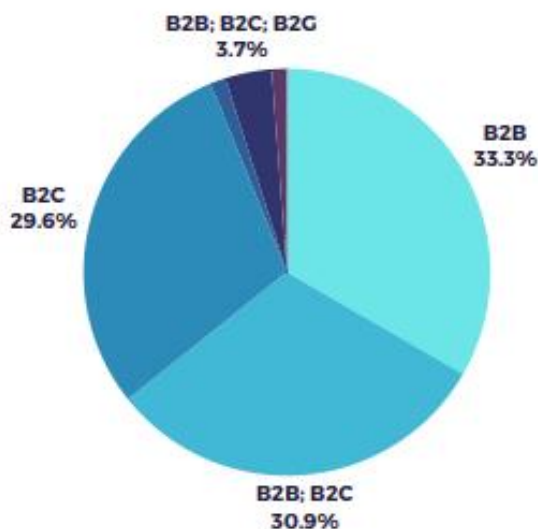
80+

Investable Tech Startups

Business Verticals:



Business Model:





Hugs & Kisses by Babymoon

Sector	Digital Health	Description	Web
B2B/B2C	B2C	Hugs & Kisses by Babymoon are the building blocks that put together the bond between the baby and the world.	facebook.com/xobabycarriers
Funds Raised	700,000 EUR		
Year	2016		
CEO	Geta Rasciuc		

Selftalk

Sector	Digital Health	Description	Web
B2B/B2C	B2B	Selftalk is a behavioural health app that helps tech employees deal with anxiety, stress, depression, and negative inner conversation to become more productive through Selftalk audios that teach them to talk to themselves like a therapist would do.	selftalk.space
Funds Raised	150,000 EUR		
Year	2021		
CEO	Elena Oprea		



Respiro

Sector	Digital Health	Description	Web
B2B/B2C	B2C	Market place for psychological support.	respiro.md
Funds Raised	-		
Year	2020		
CEO	Ana Nicolăeș		



Sector	Digital Health	Description	Web
B2B/B2C	B2B	SAAS solution for dental clinics.	easyplan.pro
Funds Raised	190,000 EUR		
Year	2019		
CEO	Octavian Valcov		



Sector	Digital Health	Description	Web
B2B/B2C	B2C	Platform where you can get the consultancy of general practitioner with the list of recommended testings and the specialist to visit.	herodoc.md
Funds Raised	-		
Year	2021		
CEO	Sorin Gamureac		



Sector	Digital Health	Description	Web
B2B/B2C	B2B, B2C	We help patients find treatments abroad - and get in touch with international hospitals and clinics.	medicaltourism.review
Funds Raised	-		
Year	2016		
CEO	Nicoleta Nagailic		



Baby Medy

Sector	Digital Health	Description	Web
B2B/B2C	B2C	Baby Medy inspire hope and contribute to the health and well-being of parents and their kids by providing the best care through medicine and modern technology.	babymedy.com
Funds Raised	24,000 USD		
Year	2021		
CEO	Mihai Dascal		



Doctor Chat

Sector	Digital Health	Description	Web
B2B/B2C	B2C	Doctorchat is an online clinic platform connecting doctors and patients	doctorchat.md
Funds Raised	50,000 EUR		
Year	2022		
CEO	Culev Veaceslav		

Benchmark of Moldova's digital health landscape with Estonia



In the journey towards digital healthcare transformation, Moldova looks towards Estonia, a country celebrated for its digital health innovations - as an exemplar.

This chapter delves into a comparative analysis between Moldova and Estonia, considering similarities in size, geopolitical, and historical trajectories, and differ significantly in their healthcare development, particularly in the digital health ecosystem. Estonia is renowned for its advanced digital health ecosystem, making it an ideal benchmark for Moldova's ongoing efforts in this domain.

This analysis focuses on three key indicators: e-Prescription, Number of healthtech startups and e-Health story.

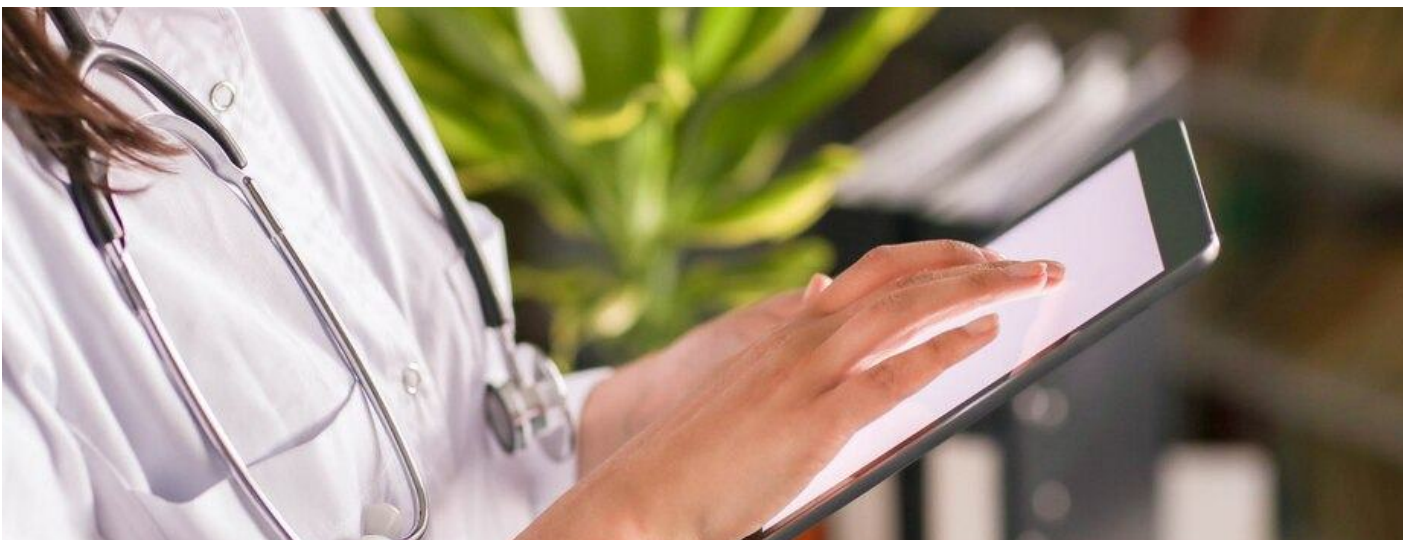
e-Prescription

In **Estonia**, **e-Prescription** is a centralized paperless system for issuing and handling medical prescriptions – **99,9%** of all medicine is issued to Estonian patients using a digital prescription.

This connects every hospital and pharmacy in Estonia, cutting down on paperwork as well as doctor visits, and saving untold amounts of time and effort. Doctors can prescribe medicine electronically, and all a patient needs to do at the pharmacy is present their ID card. The pharmacist then retrieves the patient's information from the system and issues the medicine.

In Moldova, the **e-Prescription system (e-Rețeta)** was created in 2021 and the National Company of Medical Insurance worked with the information system developer, doctors, pharmacists, and other stakeholders for a very long time to make improvements to the e-Prescription system.

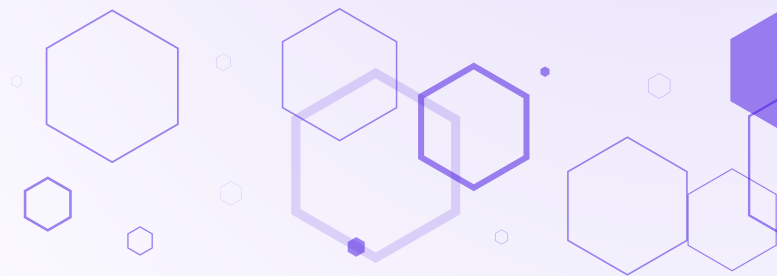
Starting by April 1, 2024 compensated medications and medical devices will be prescribed and dispensed in the e-Prescription system. This move streamline the prescription process for healthcare providers and offer patients a more convenient and safer way to receive their medications, reflecting a significant advancement in the nation's healthcare infrastructure.



The number of healthtech startups

Estonia hosts **87 HealthTech** startups out of a total of 1,460 startups. This represents approximately 5.95% of the country's overall startup environment. Estonia's robust digital infrastructure, supportive governmental policies, and a culture of innovation have contributed to a thriving HealthTech sector.

In Moldova, the digital health sector is emerging, with **10 HealthTech startups making up 10%** of the overall startup count of 100. Though smaller in number compared to Estonia, the proportion of HealthTech startups within the total startup ecosystem in Moldova is slightly higher. This indicates a focused interest and potential growth area within Moldova's digital health sector.



e-Health story

Each person in Estonia who has visited a doctor has his/her own online e-Health story that can be tracked. Around 1,3 million people have documents in the central database. **HIS** integrates data from Estonia's different healthcare providers, creating a common record for each patient (since 2015, 99% of health data has been digitised, 97% of hospital discharge letters are sent to the central database).

This gives the doctors easy access to the patient's electronic records (test results, X-ray images etc.). Patients have access to their own and to their underaged children's records, and the records of persons who have given authorization to them for seeing their medical data. By logging into the patient portal (ID-card/m-ID), they can review past visits to the doctor, current prescriptions, and receive general health advice.

In Moldova, at the national level, the Ministry of Economic Development and Digitization, together with the Electronic Governance Agency, is developing the government application EVO - to bring electronic services closer to citizens.

EVO includes an eHealth module – providing information regarding insured status, family doctor, vaccination details, etc. Additionally, information from the ePrescription system will be integrated, allowing citizens to access information about the medications and compensated devices prescribed to them. Authentication in the application will be possible through electronic signatures and the MPass portal.

INDICATOR	ESTONIA	MOLDOVA
e-Prescription	99.9% prescriptions are prescribed digitally	re-launched by April 1, 2024
Number of healthtech startups	87 healthtech startups	10 healthtech startups
e-Health story	1,3 million people have documents in the central database	in development mode

Benchmarking Moldova’s digital health landscape with Estonia provides a comparative perspective on the progress and challenges faced by these countries in integrating digital solutions into their healthcare systems.



What must Moldova do to develop digital health?

Challenges and Opportunities

As Moldova positions itself on the global stage of digital health transformation, its commitment to enhancing healthcare delivery through digital technologies is both ambitious and timely. By strategically aligning with international standards established by organizations such as the [World Health Organization \(WHO\)](#) and the European Union, Moldova is paving the way toward a digitally empowered healthcare ecosystem that promises improved patient outcomes and system-wide efficiencies.

The Digital Health Transformation Maturity Framework

Moldova's digital health journey can be visualized within a maturity framework, offering a clear roadmap from the initial adoption of digital technologies to the eventual realization of a comprehensive digital healthcare system.



Level	Stage	Description	Technologies & Initiatives	Prerequisites & Considerations	Actors Involved	Actions to Be Taken	Potential Impact
0	Paper-Based Systems	Healthcare processes and records are manually handled.	None.	Establish basic digital infrastructure.	Healthcare facilities, government.	Assess needs, promote literacy.	Groundwork for digital transformation.
1	Initial Digitization	Basic digital records and systems introduced.	Electronic patient files, standalone systems.	Basic IT infrastructure, initial policies.	Healthcare providers, IT, policy-makers.	Digitize records, implement systems.	Improved data accessibility, efficiency gains.
2	Connectivity and Access	Beginning of digital system connectivity and patient access.	Telehealth beginnings, online appointments.	Enhanced broadband, privacy policies.	Healthcare providers, patients, IT services.	Expand infrastructure, implement telehealth.	Increased convenience, expanded access to care.
3	Integrated Care	Seamless data exchange and integrated care processes.	Fully interoperable EHRs, integrated care pathways.	Comprehensive data standards, cybersecurity.	Healthcare providers, government, private sector.	Standardize data exchange, integrated care models	Coordinated care, efficient resource use.
4	Personalized and Predictive Care	Advanced analytics for personalized, predictive care.	AI in diagnostics, genomics, wearable devices.	Advanced AI capabilities, ethical data use.	Research institutions, tech companies.	Develop AI tools, integrate wearables.	Personalized care, early intervention.
5	Autonomous Health Ecosystem	Fully integrated digital health with autonomous systems.	Autonomous AI, blockchain, advanced self-management tools.	Robust legal framework, digital literacy.	Policymakers, innovators, healthcare providers.	Implement autonomous systems, blockchain.	Enhanced efficiency, proactive patient health management.

Currently, Moldova is transitioning from Stage 1 (Initial Digitization), which focuses on digitizing core medical records and implementing e-prescription services, to Stage 2 (Developing Digitalization). This crucial phase marks the beginning of enhanced Electronic Health Records (EHRs) and the development of patient portals, indicating significant strides in making healthcare more accessible and integrated.

Moldova's digital health initiatives are firmly supported by a comprehensive national strategy, the Digital Transformation Strategy of the Republic of Moldova for the years 2023–2030.

This strategy, closely aligned with the frameworks established by the **World Health Organization (WHO)** and the European Union (EU), not only positions Moldova in line with global digital health ambitions but also underscores the nation's proactive approach to embracing, implementing, and tailoring digital solutions to its unique healthcare landscape.

Furthermore, the insights from the White Book on Data Governance and Artificial Intelligence serve as a valuable guide, outlining a vision for responsibly leveraging AI to accelerate Moldova's progress through the digital health maturity framework. This comprehensive approach lays the groundwork for Moldova to align its digital health initiatives with global best practices, positioning the nation to create a more future-ready healthcare system.



While progress is evident, several **challenges** need to be addressed to fully harness the potential of digital health

- Enhancing Digital Infrastructure for widespread digital health adoption. Strategic investments and partnerships are crucial for expanding broadband access and developing a health data ecosystem that supports interoperability and security.
- Adapting and updating regulations to support digital health innovations, including telehealth and data privacy, will provide clarity and encourage further development in this sector.
- Catalyzing financial support that support health tech innovation and infrastructure development are needed to drive the digital transformation forward. This includes exploring public-private partnerships and leveraging international funding opportunities.
- Developing the digital literacy of healthcare providers through targeted training programs will ensure that the workforce is equipped to adopt and utilize digital health technologies effectively.
- Engaging the public through awareness campaigns about the benefits and security of digital health services is vital for building trust and encouraging the utilization of digital health solutions.
- Prioritize the importance of health data and the accessibility thereof to both the public and private sectors.

In relation to "Health 2030" National Health Strategy, we have some **recommendations** like:

Short-Term

- Initiate discussions with key stakeholders and coordinate with external partners to ensure understanding and achieve consensus
- Publishing the Digitization Strategy
- Validate the governmental process for consulting, approving, and publishing the Digitization Strategy

Medium to long-term

- Implementation of the Digitization Strategy and Implementation Plan
- Develop a roadmap with action steps aligned with the key priorities of the Digitization Strategy, infrastructure requirements, and legal framework
- Health education and capacity building
- Assess capacity and build education plans
- Communication and awareness campaigns



In context of benchmark with Estonia, we can highlight some **recommendations for Moldova**, such as:

Accelerate the implementation of e-Prescriptions to improve efficiency and patient care.

Encourage the growth of HealthTech startups through funding, mentorship, and partnerships. This includes creating a supportive policy environment that mirrors Estonia's approach to innovation.

Moldova should prioritize the development of an integrated e-Health record system akin to Estonia's. This involves enhancing EVO's capabilities to include comprehensive health data accessible to both healthcare providers and patients.

Building a robust digital infrastructure and improving digital literacy among healthcare providers and citizens are essential for the success of digital health initiatives.

Moldova stands at a critical juncture in its digital health transformation journey. With a firm grasp of its current position within the maturity framework and the strong groundwork established by national and international strategies, Moldova is ready to propel its digital health initiatives forward. By addressing the outlined challenges with targeted actions and seizing the opportunities for innovation and collaboration, Moldova can achieve its vision of a modern, efficient, and patient-centered healthcare system.

The path forward is marked by optimism, guided by strategic planning and the collective effort of all stakeholders to realize the transformative potential of digital health in Moldova.

This white paper is elaborated by Technovator.

Should you have any questions, we welcome your thoughts, feedback, and inquiries.

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