

Financial Support for the Digital Transformation of Healthcare Systems in the Leading Countries of the World

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Abstract

The article examines the features of financial support for the digital transformation of healthcare systems in the leading countries of the world. It is substantiated that the digitalization of healthcare is not only a technological direction of modernization, but also an important component of financial and managerial policy that requires proper resource provision, long-term planning, and effective coordination between public and private actors. It is shown that the models of financing digital change in healthcare are shaped by the institutional characteristics of national systems, the level of socio-economic development, the structure of funding sources, and the degree of the state's digital maturity.

The paper summarizes the dynamics of total digital health funding worldwide, characterizes regional features of investment distribution, and identifies the leading countries in terms of financing the digital transformation of healthcare systems in the Asia-Pacific region and Europe. Particular attention is paid to venture capital as an important mechanism for supporting innovative, technologically complex, and scalable solutions in digital health. It is proved that venture financing performs not only a resource function, but also a selective one, concentrating capital in the most promising segments, particularly in managerial solutions, research, and medical diagnostics.

It is established that the current architecture of financial support for the digital transformation of healthcare systems has a distinctly differentiated character and is marked by significant interregional and intraregional disparities. It is substantiated that the effectiveness of public governance in this area largely depends on the ability to integrate budgetary, insurance, and private investment instruments into a coherent and strategically aligned model of sectoral development. It is concluded that the financial support of digital transformation in healthcare systems of the leading countries is formed through a combination of financial stability, institutional coherence, innovation orientation, and the capacity to scale digital solutions.

Keywords: digital transformation; healthcare; financial support; public governance; digital health; venture capital financing; investments; digital maturity; telemedicine; digital platforms.

1. Introduction

Models of financial support for the digital transformation of healthcare systems are shaped by the institutional characteristics of national systems, the level of socio-economic development, the structure of funding sources, and the degree of a state's digital maturity. Under contemporary conditions, the digitalization of healthcare serves not only as a technological

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direction of sectoral modernization, but also as an important component of financial and managerial policy that requires adequate resource provision, long-term planning, and effective coordination between public and private actors.

In international practice, different approaches to the financial support of healthcare digital transformation have emerged, reflecting the specific features of the organization of national healthcare financing systems. In particular, in countries with a predominantly budget-based healthcare model, digitalization is financed through public investment and targeted programs, whereas in insurance-based systems, mechanisms of mandatory health insurance and the contracting of digital services play a significant role. At the same time, in mixed financing models, public-private partnership instruments, grant funding, and private sector investment are widely used, making it possible to diversify the sources of resource support for digital innovation.

2. Structure of the paper

The paper is structured as follows. The introduction outlines the relevance of the study and substantiates the importance of examining financial support for the digital transformation of healthcare systems. The next section reviews recent research and publications on digital health financing, digital maturity, and investment mechanisms in healthcare. The main part of the paper presents an analysis of global, regional, and country-specific trends in financing digital healthcare transformation, with particular attention to venture capital as a key instrument for supporting innovation in the sector. The final section summarizes the main findings, highlights the identified patterns and disparities, and outlines prospects for further research in the field of public governance and financial support for healthcare digitalization.

3. Literature review

In recent years, the issue of financial support for the digital transformation of healthcare systems has been at the center of attention of both international organizations and scholars examining the intersection of digitalization, financing, and public governance. In the strategic dimension, the contributions of the World Health Organization and the OECD are of particular importance, as they view digital health as a component of healthcare system modernization that requires the integration of financial, organizational, human, and technological resources. WHO documents place special emphasis on the impact of digital technologies on health financing functions, universal health coverage, as well as on the development of financial mechanisms for the implementation of digital technologies in the countries of the European Region [1]. OECD analytical materials focus on the digital maturity of healthcare systems, the governance of medical data, and the scaling of artificial intelligence in healthcare [2].

Among the scholarly works directly devoted to the financial dimension of digital health, particular attention should be paid to the studies of N.Kotenko and V.Bohnhardt, who examine the challenges and opportunities of financing digital medicine projects and analyze the role of public funding, public-private partnership models, and global experience in supporting digital solutions in healthcare [3]. I.Mathauer and M.Oranje investigate the impact of digital technologies on health financing functions, as well as the benefits, risks, and regulatory needs associated with the use of machine learning in this field [4, 5]. A significant contribution to understanding the role of private capital and venture mechanisms was made by P.Lehoux, F.Miller, and G.Daudelin, who revealed the logic of venture capital functioning in medical innovation, as well as by K.Safavi, A.Cohen, D.Ting, S.Chaguturu, and J. Rowe, who demonstrated the growing role of healthcare systems as venture investors in digital health [6, 7].

Despite the considerable body of research, the modern literature still lacks a sufficiently systematized comparative analysis of models of financial support for the digital transformation of healthcare systems in the leading countries of the world, especially from the perspective of combining budgetary, insurance, and venture-investment mechanisms. Further study is also required on the issues of interregional differentiation of financial resources, the influence of institutional maturity on the scale of digital investment, and the role of public governance in shaping a coherent architecture for financing digital health.

4. Research Questions

Prior to commencing the core phase of the study, the author formulated the central research questions (Table 1), focusing on the financial support of the digital transformation of healthcare systems in the leading countries of the world.

Table 1
Research design of the study

№	Topic definition	Content
<i>1</i>	<i>2</i>	<i>3</i>
1	Define research questions	RQ1: What are the main global, regional, and country-specific patterns in the financial support of healthcare digital transformation? RQ2: How do public, insurance-based, and private investment mechanisms differ in shaping national models of digital health financing? RQ3: What role does venture capital play in supporting innovation and determining priority areas of digital transformation in healthcare systems?
2	Determine search keywords	Digital health, healthcare digital transformation, health financing, digital health funding, venture capital, healthcare innovation

End of the of table 1

1	2	3
3	Identify databases and sources	WHO, OECD, Statista, Galen Growth, academic publications indexed in international databases
4	Data selection	International analytical and statistical sources published in English and directly related to digital health financing, regional investment distribution, and venture funding
5	Data synthesis	Comparative assessment of global, regional, and country-level trends in financial support for healthcare digital transformation
6	Publicize findings	The findings are derived from the analysis of international statistical and analytical sources and provide a generalized view of the modern architecture of financing healthcare digital transformation

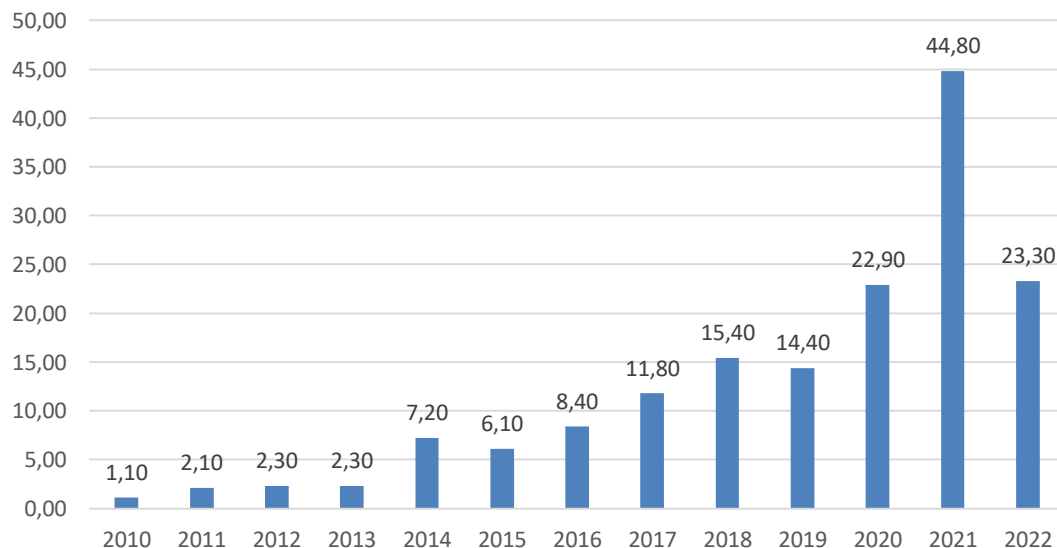
The purpose of the article is to identify the specific features of financial support for the digital transformation of healthcare systems in the leading countries of the world, to summarize regional and country-specific trends in financing digital change, and to substantiate the role of venture capital and other financial instruments in shaping the modern model of digital modernization of the healthcare sector.

5. Methodology

This study adopts a comparative-analytical methodology based on the use of secondary international statistical and analytical sources. The methodological framework combines comparative analysis, descriptive analysis, structural analysis, and the generalization of international experience in order to identify the specific features of financial support for the digital transformation of healthcare systems across countries and regions. The empirical basis of the study includes data from WHO, OECD, Statista, Galen Growth, and relevant academic publications addressing digital health financing and venture investment in healthcare. Such an approach ensures consistency, analytical rigor, and the possibility of identifying both general trends and regional disparities in the financial support of healthcare digitalization.

6. Results

In order to assess the scale of development of the digital health industry, it is important to analyze the dynamics of its total financing at the global level. Such an approach makes it possible to trace changes in investment activity, identify periods of acceleration or slowdown in the financial support of the sector, and assess the general trends in the formation of the global digital health market. The relevant data on the dynamics of the total volume of financing for the digital health industry worldwide in 2010–2022 are presented in Fig. 1.



Source: compiled by the author based on [8]

Fig. 1. Dynamics of the total volume of financing for the digital transformation of healthcare systems worldwide in 2010–2022, billion U.S. dollars

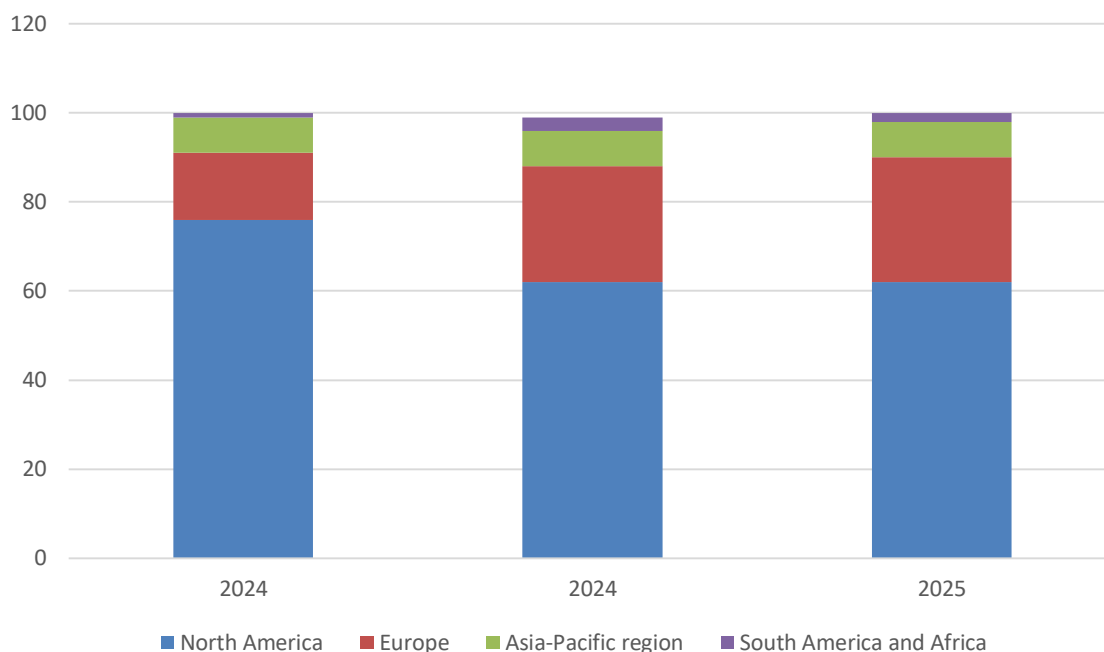
The presented data indicate that during 2010–2022, the field of digital health worldwide was characterized by an overall positive financing trend, although the development of this process was uneven. In 2010, the total amount of financing was only USD 1.1 billion, while by 2022 it had reached USD 23.3 billion. Over the analyzed period, the financing volume increased by more than twenty times, reflecting the substantial strengthening of the role of digital technologies in the transformation of

healthcare systems. At the initial stage, in 2010–2013, the development of financing was relatively slow. In 2011, the volume of investment increased to USD 2.1 billion, while in 2012–2013 it stabilized at USD 2.3 billion. This dynamic reflects the market formation stage, when digital health had not yet acquired the scale of an independent global investment segment.

Beginning in 2014, a significant acceleration of financing was observed: its volume increased to USD 7.2 billion, which was more than three times higher than the previous year's level. In 2015, there was a certain decline to USD 6.1 billion; however, this did not alter the overall upward trend. Already in 2016–2018, the industry once again demonstrated confident growth, from USD 8.4 billion in 2016 to USD 15.4 billion in 2018, which is evidence of the active expansion of the market, growing interest in digital medical solutions, and the gradual formation of a stable investment base for the sector.

In 2019, a slight correction of the indicator to USD 14.4 billion was recorded; however, already in 2020 the financing volume increased to USD 22.9 billion. The highest value for the entire period under study was reached in 2021, at USD 44.8 billion. In 2022, a significant decline in financing occurred, to USD 23.3 billion, that is, almost half the 2021 level. At the same time, even after such a decrease, the financing volume remained substantially higher than in the pre-crisis years for the sector, particularly in 2018–2019. In general, the dynamics of financing for digital health systems worldwide in 2010–2022 are characterized by a long-term upward trend accompanied by certain periods of correction. The most intensive expansion of financial support occurred in 2020–2021, whereas 2022 was marked by a decline in investment activity after the peak had been reached. Overall, these data provide grounds to conclude that digital health has turned into a significant and capital-intensive segment of the global market, and the financial dynamics of the sector reflect its growing importance for the modernization of healthcare systems.

It is worth noting that the analysis of the regional distribution of financing for digital transformations in healthcare makes it possible to identify territorial investment priorities, as well as to assess changes in the role of individual countries within the global structure of the digital transformation of the medical sphere (Fig. 2).



Source: compiled by the author based on [9]

Fig. 2. Distribution of financing for the digital transformation of healthcare systems worldwide in 2024–2025, by region, %

As the presented data show, North America occupies dominant positions in the structure of financing needs for the digital transformation of healthcare systems. In the first half of 2024, countries of this region accounted for 76% of global expenditures on financing the sector. However, already in the second half of 2024 and the first half of 2025, this figure declined to 62%. These trends indicate a certain weakening of the monopolistic leadership of North American countries in global financing of the needs of healthcare digital transformation, although their positions remain unquestionably leading.

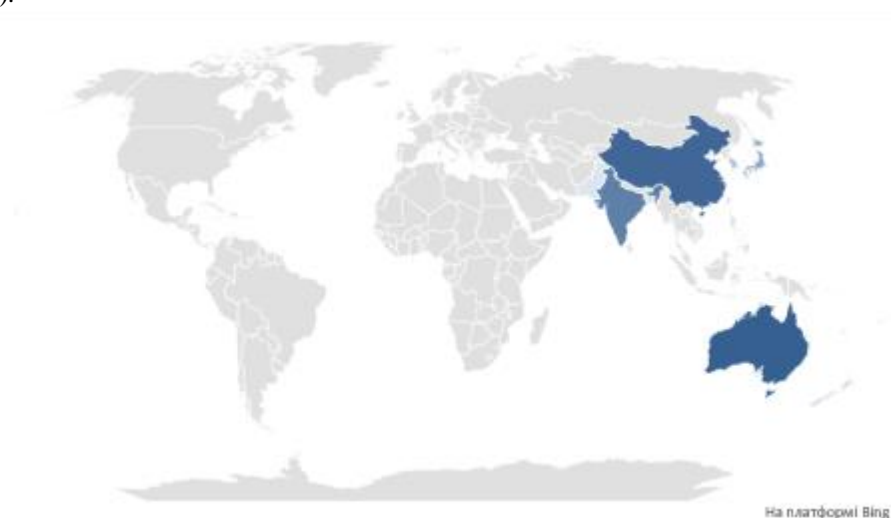
Unlike North America, Europe demonstrates a steady tendency toward increasing financing for the needs of digital transformation in healthcare systems. If in the first half of 2024 the countries of the European continent accounted for 15% of global financing, in the second half of 2024 this share increased to 26%, and in the first half of 2025 to 28%. Such dynamics indicate the intensification of investment activity in the European region and the strengthening of its position in the processes of digital modernization of healthcare systems.

The Asia-Pacific region maintained a stable share in global financing of the digital transformation of the medical sector at the level of 8% throughout 2024–2025. On the one hand, such dynamics may indicate the relative stability of investment flows in the region; on the other hand, they may reflect the absence of substantial progress in increasing financial support for the needs of healthcare digital transformation. Despite the considerable potential of the countries of the Asia-Pacific region, their share during the period under study remained significantly lower than that of North America and Europe.

South America and Africa are characterized by the smallest volumes of financing for the digital transformation of healthcare systems. Their combined share in global financing amounted to 1% in the first half of 2024, 3% in the second half of 2024, and 2% in the first half of 2025. Despite a slight increase in the indicator in the second half of 2024, overall these regions continue to occupy peripheral positions in the global financing structure of digital health, which may be a consequence of limited investment resources, weaker institutional capacity, and insufficient integration of digital solutions into the functioning of national healthcare systems.

The distribution of financing for the needs of healthcare digital transformation indicates that the main volume of resources is concentrated in North America and Europe. During the period under study, a tendency toward a certain redistribution of financing from North America in favor of Europe was observed. The Asia-Pacific region maintains a stable but moderate position, whereas South America and Africa remain the least financially provided in the context of implementing the needs of healthcare digital transformation. In general, this situation indicates the unevenness of the global digital transformation of healthcare and the persistence of significant interregional disparities in access to the financial resources necessary for its implementation.

Although the Asia-Pacific region maintains a moderate share in the global structure of financing for healthcare digital transformation, this very region attracts attention due to its significant innovation potential, the dynamics of digital health development, and pronounced intraregional differentiation of financial resources. Within the region, a clear concentration of financing is observed in a limited number of countries that form the basis of the digital modernization of the medical sector (Fig. 3).



Source: compiled by the author based on [10]

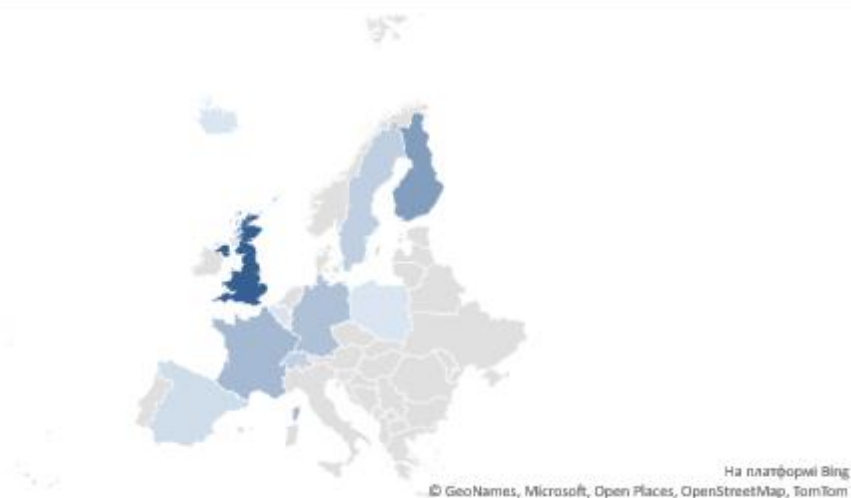
Fig. 3. Top 10 countries of the Asia-Pacific region by volume of financing for the needs of healthcare digital transformation in 2025, million U.S. dollar

As the presented data show, the leader in terms of the volume of digital health financing in the Asia-Pacific region in 2025 is Australia, which accounted for USD 548 million in expenditures in this field. China demonstrates a practically equal financing volume of USD 520 million, which indicates its strong position in the development of digital solutions in healthcare. India ranks third with an indicator of USD 416 million, reflecting the intensification of investment in digital medical infrastructure amid the large-scale transformation of the healthcare system.

The group of countries and territories with high financing volumes also includes Hong Kong, with USD 393 million, and Japan, with USD 255 million. Significantly lower financing volumes are observed in South Korea, with USD 142 million, and Singapore, with USD 95 million. Although these countries are traditionally associated with a high level of technological development, in the issue under study they lag not only behind Australia, China, and India, but also behind Hong Kong and Japan. This may indicate different market scales of digital health, differences in financing structure, or the specific features of national approaches to investment in this area. The smallest financing volumes in the digital sphere are characteristic of New Zealand, with USD 26 million, Taiwan, with USD 21 million, and Pakistan, with USD 6 million. Overall, the Asia-Pacific region is heterogeneous in terms of the level of financial support for the digital transformation of healthcare systems. Its leaders—Australia, China, India, Hong Kong, and Japan—accumulate the main volume of regional resources, while other countries and territories are characterized by significantly smaller indicators.

A deeper analysis of the regional structure of digital health financing requires consideration of the internal differentiation of the European region, which has strengthened its position in the global distribution of financial resources during the period under study. In this context, it is advisable to identify the leading countries that form the basis of the European digital health market and provide the largest volumes of financing for the relevant transformation processes. The undisputed leader in Europe in terms of digital health financing volume in 2025 is the United Kingdom, which accounts for USD 2,110 million in expenditures in this field, significantly exceeding the indicators of other European countries and testifying to the country's dominant position in financing the digital transformation of the medical sector. Finland ranks second with a financing volume

of USD 1,160 million, which also indicates the high priority of digital health in the public and investment policy of this country (Fig. 4).



Source: compiled by the author based on [11]

Fig. 4. Leading countries by volume of financing for the needs of healthcare digital transformation in Europe in 2025, million U.S. dollar

The second group of countries in terms of financing scale includes France and Germany, where investment volumes amounted to USD 731 million and USD 612 million, respectively. Although these states are among the largest economies in Europe, their indicators are significantly lower compared with the United Kingdom and Finland. This may point to differences in the pace of digital transformation of the sector, the structure of investments, or the specific features of financing digital medical solutions. Sweden (USD 418 million) and Switzerland (USD 381 million) demonstrate a medium level of financing. These countries form a group of states with significant, though not dominant, volumes of investment in digital health. Their positions reflect steady participation in the development of digital medical technologies, but without the pronounced financial leadership characteristic of the first group of countries.

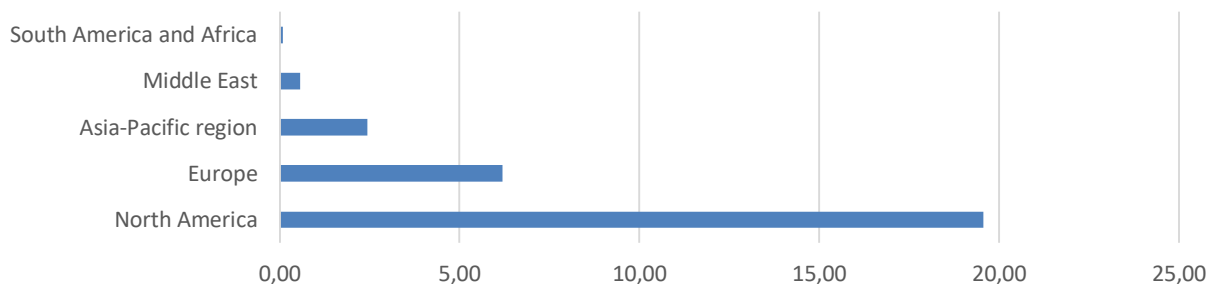
Lower indicators were recorded in Spain (USD 211 million), Belgium (USD 104 million), Poland (USD 73 million), and Iceland (USD 68 million). Despite being among the top ten leaders of the region, these countries substantially lag behind the leading European states in terms of digital health financing volumes. This situation reflects the existence of significant intraregional differences, under which financial resources are concentrated in a relatively small group of states. The existing distribution of financial resources highlights the need for a deeper analysis of the sources of investment in the digital transformation of healthcare systems, in particular the role of private capital in this process. In this context, venture financing deserves particular attention as one of the key mechanisms for supporting innovative solutions in the digital transformation of the sector.

Venture financing in healthcare should be considered a form of equity risk investment in innovative companies, primarily young firms and startups with high growth potential, but which do not yet possess an established business model, sufficient collateral for bank lending, or access to public capital markets [6]. According to the OECD approach, venture capital is a type of equity capital. In the field of medical innovation, this capital not only provides financial resources, but also significantly influences the selection and implementation of technologies in the healthcare system [11].

In the digital healthcare system, the importance of venture financing is especially significant, since the corresponding solutions require substantial initial investments in product development, software, data processing, clinical validation, cybersecurity, and integration with medical information systems of other countries [7]. According to WHO estimates, digital technologies are capable of increasing efficiency, transparency, and the speed of data processing, as well as contributing to a more equitable distribution of resources [12]. At the same time, the OECD emphasizes their role in overcoming workforce shortages, the consequences of population aging, and the growing complexity of medical care, all of which are accompanied by the need for considerable investment and proper management of implementation costs [11].

The importance of venture financing for digital health is also обусловлено by its function as a market indicator of the prospects of technologies and a catalyst for their commercialization. Investment decisions of venture funds effectively shape the development trajectories of the sector, determining the directions that receive the greatest support [13]. In digital medicine, it is venture capital that provides the most dynamic channels of financing for startups and technological solutions. At the same time, healthcare providers and healthcare systems themselves are increasingly acting as investors, focusing on solutions for workflow optimization, the development of on-demand services, and the improvement of data infrastructure and interoperability [3]. This indicates that venture capital in the digital transformation of the medical sector performs not only a financial function, but also a selective and institutional one, contributing to the selection, testing, and scaling of technologies with proven potential for practical application.

The analysis of venture financing makes it possible to assess the significance of private investment for the digital transformation of healthcare systems. Unlike budgetary and insurance sources, venture capital reflects the willingness of private investors to allocate resources to scalable, technologically complex, and potentially high-yield solutions. In 2025, the digital health sector demonstrated a recovery in financing volumes; however, at the same time, the concentration and selectivity of investments intensified, which led to a further deepening of the unevenness of their distribution (Fig. 5).



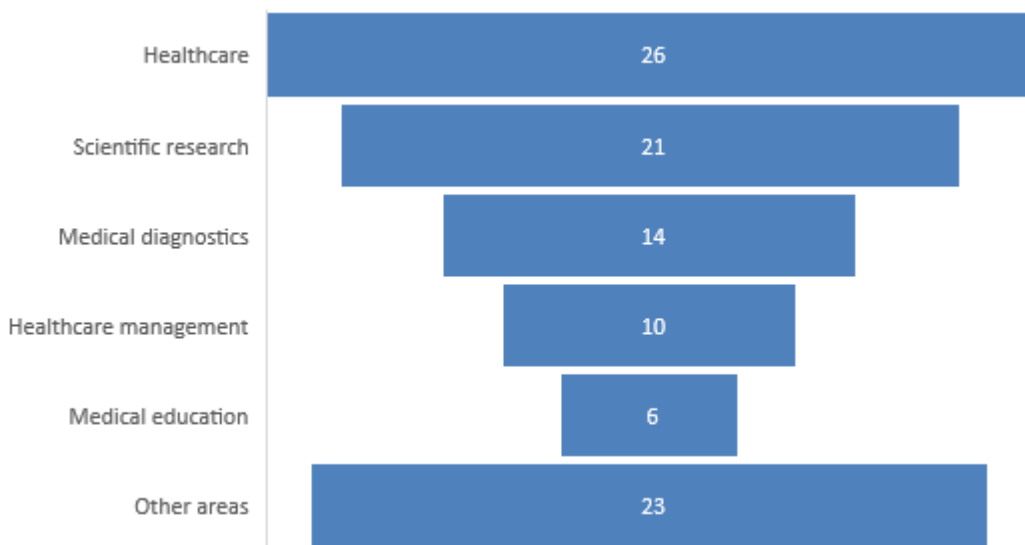
Source: compiled by the author based on [14]

Fig. 5. Regional distribution of venture financing of projects in the field of healthcare digital transformation, 2025, million U.S. dollars

As the presented data indicate, the absolute leader in terms of venture financing volume for digital health in 2025 is North America, which accounts for USD 19.56 billion, representing about 67.8% of the total financing volume in this field. Such concentration of resources is due to the high level of maturity of the venture market, particularly in the United States, the large number of innovative companies in the region, developed infrastructure, and the active participation of technology investors. Europe ranks second in terms of venture financing volume, with USD 6.19 billion, or about 21.5% of total financing. Although this indicator is substantially lower than the North American one, it confirms the strengthening role of the European region in the global digital health market. Taken together, North America and Europe accumulate about 89.3% of all venture financing, which indicates an extremely high concentration of private capital in the world’s two key innovation centers.

The Asia-Pacific region, with an indicator of USD 2.43 billion, forms the third most important center of venture financing in digital health. Its share amounts to about 8.4%, which indicates the presence of a significant, though still considerably smaller in scale, market compared with North America and Europe. This provides grounds to state that the region has substantial development potential which, however, has not yet been transformed into comparable volumes of venture capital at the global level. Considerably lower indicators are characteristic of the Middle East, where the volume of venture financing amounted to USD 0.57 billion, as well as South America and Africa, which accounted for only USD 0.09 billion. In relative terms, this amounts to approximately 2.0% and 0.3% of total financing, respectively. Overall, this indicates that the scale of healthcare digital transformation largely depends on the concentration of private capital and, accordingly, on the development of financial markets and the region’s capacity to implement digital medical solutions.

Given that Europe ranked second in the world in 2025 in terms of venture financing volume for digital health, it is advisable to deepen the analysis not only regionally, but also by directions of investment distribution within the European market of digital healthcare services (Fig. 6).



Source: compiled by the author based on [15]

Fig. 6. Directions of distribution of venture financing for digital healthcare needs in Europe in 2025, %

As the presented data demonstrate, the largest share of venture financing in Europe in 2025 was directed to the «Healthcare» cluster—26%. Such a distribution reflects the priority of investment in solutions directly related to the provision of medical services, the organization of treatment, and the practical implementation of digital tools in the functioning of the healthcare system. At the same time, a significant share of financing was directed to scientific research—21%. This indicator provides grounds to conclude that the European venture capital market maintains a pronounced orientation toward the innovative component of digital health development, supporting the creation of new technological solutions, the formation of an evidence base for their effectiveness, and the development of the research foundation for digital transformations.

A notable place in the financing structure is occupied by the «Medical Diagnostics» cluster, whose share amounted to 14%. This indicator reflects considerable investor interest in digital solutions in the field of diagnostics, including analytical systems, technologies for the early detection of diseases, medical data processing, and clinical decision-support tools. Such a distribution confirms the importance of the diagnostic direction as one of the key segments of digital health development in Europe. The «Healthcare Management» direction accumulated 10% of venture financing. Such a share reflects interest in digital solutions aimed at increasing the efficiency of management processes, coordination of medical services, data administration, and the functioning of medical organizations. Although this direction lags behind more applied and research segments in financing volumes, it remains an important component of the digital modernization of the sector.

A comparatively smaller share of financing was received by medical education—only 6%, which is the lowest indicator among the identified directions. This result may be interpreted as reflecting the lower investment attractiveness of this direction for venture capital or its smaller commercial appeal compared with other segments of digital health. Particular attention should be paid to the category «Other directions», which accounted for 23% of financing. Such a significant share indicates a rather wide diversification of the European digital health market and the presence of substantial investment in additional directions. These may include adjacent digital solutions, new market niches, and innovative models that are in the stage of active formation within healthcare digital transformation.

The structure of venture financing for digital health in Europe in 2025 is sufficiently diversified; however, the largest volumes of resources are directed toward practice-oriented segments related to healthcare, scientific research, and medical diagnostics. Such a distribution reflects the combination in the European model of investment support of two interrelated priorities: the development of applied digital solutions for medical practice and the support of the innovation and research base of the digital transformation of healthcare systems.

The global structure of venture financing for digital health is characterized by the concentration of investment in several key directions, primarily in healthcare management, scientific research, and medical diagnostics. The leading positions of venture capital expenditures on healthcare management indicate growing demand for digital solutions related to the administration of medical services, the coordination of treatment processes, the management of patient flows, data, costs, and the organizational efficiency of medical institutions. This means that private capital is oriented not only toward narrowly technological products, but also toward systemic solutions capable of increasing the overall performance of healthcare systems.

Significant expenditures in the field of scientific research indicate the continued interest of investors in the innovative component of digital healthcare systems. Financing in this direction is associated with the development of new digital platforms, algorithms, analytical tools, research services, and solutions that form the technological basis for the further digital transformation of the sector. Thus, venture capital in this case performs not only a resource support function, but also a function of supporting innovative potential in healthcare.

Medical diagnostics occupies an important place in the financing structure, which confirms the high investment interest in digital diagnostic solutions, clinical decision-support systems, medical data analytics, early disease detection tools, and instruments integrated with artificial intelligence technologies. Increased attention to this direction is due to the fact that diagnostics is one of the most commercially promising and practically significant directions of digital health. Special attention should also be given to population health management, which reflects the growing role of the preventive approach, data analytics, risk monitoring, and digital tools for managing the health of different population groups. It encompasses solutions related to disease prevention, the maintenance of an appropriate level of public health and well-being, changes in behavioral practices, and user-oriented digital services. Although this direction usually lags behind management and diagnostic directions, its presence in the structure of leading directions financed by venture capital indicates the growing importance of preventive measures in digital health systems.

The global structure of venture financing for digital health in the first half of 2025 was oriented primarily toward management, research, and diagnostic segments. Such a distribution reflects the priority of those directions that combine high innovativeness, practical significance for healthcare systems, and development potential. Overall, this indicates that private risk capital tends to support solutions capable of ensuring both the technological renewal of the sector and the improvement of management efficiency, diagnostic quality, and the effectiveness of medical services.

7. Conclusion

Financial support for the digital transformation of healthcare systems in the leading countries of the world has a clearly differentiated character and is shaped by the institutional characteristics of national systems, the structure of funding sources, the level of digital maturity of the state, as well as the capacity of public and private actors to coordinate investment processes. It has been established that, in the global dimension, the main financial flows are concentrated in North America and Europe, while the Asia-Pacific region maintains relatively stable but moderate positions. At the same time, South America and Africa remain less integrated into global processes of financing digital change in healthcare. On this basis, it is substantiated that the

current architecture of financial support for the digitalization of the medical sector is characterized not only by interregional disparities, but also by differences in the pace of the transition of national systems to new models of functioning.

The uneven distribution of financial resources is also evident within individual regions. It has been proved that in the Asia-Pacific region investments are concentrated mainly in Australia, China, India, Hong Kong, and Japan, whereas in Europe the leading positions are occupied by the United Kingdom, Finland, France, and Germany. Such a concentration of resources indicates that financing volumes are determined not only by the level of economic development, but also by the place of digital health within the system of state priorities, the degree of formation of institutional infrastructure, the availability of innovation support instruments, and the capacity to integrate digital solutions into medical service practice. In this regard, it is substantiated that leadership in this sphere is formed on the basis of a combination of financial stability, institutional coherence, and a long-term orientation toward the development and scaling of innovations.

An important component of financial support for the digital transformation of healthcare systems is venture capital, which ensures support for technologically complex and scalable solutions. It has been established that in 2025 its distribution was also uneven: North America retained dominant positions, while the role of Europe increased. The sectoral structure of such investments was concentrated primarily in the segments of management solutions, research, and diagnostics. It has been proved that venture financing performs not only a resource function, but also a selective one, ensuring the concentration of capital in the most promising development directions oriented toward a combination of innovativeness, practical significance, and possibilities for large-scale implementation. Therefore, it is substantiated that the effectiveness of public governance mechanisms in the financial support of healthcare digital transformation largely depends on the ability to integrate budgetary, insurance, and private investment instruments into a coherent and strategically aligned model of sectoral development.

Prospects for further research are aimed at the formation of a comprehensive financial and economic mechanism of public governance of the financial support of healthcare systems.

References:

1. World Health Organization (2025), «Global strategy on digital health 2020–2027», Geneva, 60 p.
2. OECD, «Digital health», [Online], available at: <https://www.oecd.org/en/topics/digital-health.html>
3. Kotenko, N. and Bohnhardt, V. (2021), «Digital Health Projects Financing: Challenges and Opportunities», *Health Economics and Management Review*, Vol. 2, Iss.1, pp. 100–107, doi: 10.21272/hem.2021.1-10.
4. Mathauer, I. and Oranje, M. (2024), «Machine learning in health financing: benefits, risks and regulatory needs», *Bulletin of the World Health Organization*, Vol. 102, No. 3, pp. 216–224, [Online], available at: <https://pubmed.ncbi.nlm.nih.gov/38420574/>
5. Oranje, M. and Mathauer, I. (2024), «Exploring the effects of digital technologies in health financing for universal health coverage: a synthesis of country experiences and lessons», *Oxford Open Digital Health*, Vol. 2, [Online], available at: <https://academic.oup.com/oodh/article/doi/10.1093/oodh/oqae016/7699447>
6. Lehoux, P., Miller, F.A. and Daudelin, G. (2016), «How does venture capital operate in medical innovation?», *BMJ Innovations*, Vol. 2, No. 3, pp. 111–117, [Online], available at: <https://innovations.bmj.com/content/2/3/111>
7. Safavi, K.C., Cohen, A.B., Ting, D.Y., Chaguturu, S. and Rowe, J.S. (2020), «Health systems as venture capital investors in digital health: 2011–2019», *npj Digital Medicine*, Vol. 3, Art. 103, [Online], available at: <https://www.nature.com/articles/s41746-020-00311-5>
8. «Total digital health industry funding worldwide from 2010 to 2022 (in billion U.S. dollars)», *Statista*, [Online], available at: <https://www.statista.com/statistics/388858/investor-funding-in-digital-health-industry/>
9. «Distribution of digital health funding worldwide in 2024 and 2025, by region», *Statista*, [Online], available at: <https://www.statista.com/statistics/1549441/digital-health-funding-worldwide-by-region/>
10. «Leading 10 countries and territories in terms of digital health funding in Asia Pacific in 2025(in million U.S. dollars)», *Statista*, [Online], available at: <https://www.statista.com/statistics/1623221/leading-countries-for-digital-health-funding-asia-pacific/>
11. OECD, «Venture capital investments (market statistics)», [Online], available at: https://data-explorer.oecd.org/vis?df%5Bdg%5D=OECD.SDD.TPS&df%5Bds%5D=DisseminateFinalDMZ&df%5Bid%5D=DSD_VC%40DF_VC_INV
12. World Health Organization, «Digital technologies in health financing», [Online], available at: <https://www.who.int/teams/health-financing-and-economics/health-financing/health-financing-policy/digital-technologies>
13. Galen Growth, «Digital Health Funding 2025: the year capital stopped believing the hype», [Online], available at: <https://www.galengrowth.com/digital-health-funding-2025-the-year-capital-stopped-believing-the-hype/>
14. «Digital health venture funding worldwide in 2025, by region (in million U.S. dollars)», *Statista*, [Online], available at: <https://www.statista.com/statistics/1623120/digital-health-funding-worldwide-by-region/>
15. «Leading clusters in the digital health industry based on venture funding worldwide in H1 2025», *Statista*, [Online], available at: <https://www.statista.com/statistics/1623152/digital-health-funding-value-worldwide-2025-by-cluster>

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